Exploring the curriculum implementation challenges faced by Early Childhood Education teachers in Ethiopia in ensuring the holistic development of young children.

Alemu Asresu Fentaw

Student number: 3774834

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

University of the Western Cape

Faculty of Education

Supervisor: Dr Lucinda Du Plooy

November 2023

ABSTRACT

Globally, there is a growing interest in enhancing Early Childhood Care and Education (ECCE) to ensure quality education in this sector. The reason for this is the realisation that ECCE is a sensitive period marked by rapid changes in the physical, cognitive and socio-emotional development of the child; the child's holistic development (Hedges & Cooper, 2014; Vargaz-Lopez et al, 2016; Wood & Hedges, 2016), working from the premise that what happens in the early years of schooling can have a lasting effect on the educational trajectory of the child. Despite the growing evidence showing the importance of ECCE, it remains an underdeveloped, under-researched sector in Africa, more specifically in Ethiopia where this research study will be based. The aim of this study, is, therefore, to explain and explore curriculum implementation challenges faced by early childhood education teachers in Ethiopia in ensuring the holistic development of young children.

The main research question, I raised to address this problem is, *what are the curriculum implementation challenges faced by ECCE teachers in Ethiopia in ensuring the holistic development of young children*? My conceptual focus is on the appropriateness of curriculum, alignment of curriculum, assessment and pedagogic practices, the appropriateness of the physical environment, as well as the role of different stakeholders in ensuring the holistic development of young children. This study was built on the theoretical insights drawn from Vygotsky's sociocultural learning theory. Vygotsky's theoretical project falls within sociocultural learning theories and highlights his theoretical construct of the Zone of Proximal Development (ZPD). In addition, Vygotsky's notion of scaffolding and mediation tools were used to frame the research questions and to explain the relationship between learning and development in the current study. It is especially useful when thinking about the appropriateness of curriculum, alignment of curriculum, pedagogical and assessment practices, and the physical environment, as well as teacher training and the role they play.

Methodologically, this study was built upon the philosophical insight gained from the pragmatism assumption, as well as mixed methods research. The pragmatic paradigm was used to inform the design of data collection instruments and analysis used in this study. Thus, the study employed a concurrent mixed methods research design in which both quantitative and qualitative data were collected concurrently, and analysed separately. Then the results were integrated and triangulated

into the discussion for a better understanding of the phenomenon under study. A closed-ended questionnaire was used to collect quantitative data from 379 ECCE teachers, who were chosen using multistage random sampling. For structured observation 25 preschools were selected based on their accessibility. The qualitative data were gathered through a semi-structured interview with four ECC teachers and two ECCE experts (one from the Ministry of Education and one from the Regional Education Bureau) and documentary sources. Interview participants were purposefully selected based on availability, work experience and educational level. The quantitative data were analysed using descriptive statistics such as frequencies and percentages, whereas the qualitative data were analysed thematically based on the research questions.

In relation to contextual or out-of-school factors, the findings reveal a significant gap in actual programme implementation and government commitment, particularly in terms of funding and financing ECCE; access and participation remain a challenging issue in Ethiopia; it is still disadvantageous to rural children and economically disadvantaged parents. There is also misalignment in the national policy intention and planned and implemented curriculum. The lack of a coordinated or single management system is a major problem among different departments and Ministers. In addition, parental and community partnership is not supported and led in a way that will bring changes and programme improvements. It was found that teachers, parents, and community representatives do not have direct communication and joint decision-making in planning and implementing programs or activities.

Furthermore, the findings reveal that curriculum content and learning experiences are inadequate and lack integration and comprehensiveness to provide opportunities for children to develop and learn holistically. Pertinent to in-school factors (pedagogical findings), I found that preschool teachers lack pedagogical content knowledge; necessary competency and skills and adequate preparation and motivation to implement and deliver the curriculum. As the analysis shows, this is related to the inadequacy of preservice training programs. Furthermore, the findings reveal a lack of instructional alignment and curriculum content; teachers' pedagogical approaches and assessment practices are not mutually interrelated to ensure young children's holistic development. Indoor and outdoor learning environments are inadequate to provide children with a stimulating social and emotional learning environment and support children's needs; almost all the preschools

iii

are under-resourced and lack a variety of equipment, aesthetic and sensory characteristics, which are necessary for the holistic development of young children.

Key Words/Phrases

Early Childhood Care and Education; Early Childhood Care and Education curriculum, curriculum integration, early childhood education policy, mixed methods approach; quantitative research; sociocultural theory; holistic development

iv

DECLARATION

I hereby declare that the explanation and exploration of the curriculum implementation challenges faced by Childhood Care and Education teachers in Amhara National Regional State of Ethiopia in ensuring the holistic development of young children is my own work that has not been submitted previously at any higher degree institution. All the sources I have used or quoted are clearly attributed and I have acknowledged all of the sources as a complete reference.

Signed: _____

Alemu Asresu Fentaw   March 2023

DEDICATION

This thesis is dedicated to my beloved wife Embet Wudu, and my children Tekleab, Soliyana, Yostina, and Etsepatos Alemu, for their unconditional love, constant support and moral encouragement, which made this long and difficult journey worthwhile. To my mother Almaz Mengiste.

ACKNOWLEDGEMENT

After a long and memorable journey, this moment marks the end of my PhD research. However, my research journey will not be complete without acknowledging a range of people who support me along the way. First of all, all glory and honour belong to Almighty God and Saint Mary for her perpetual help. I wholeheartedly thank my supervisor, Doctor Lucinda Du Plooy, for her diligent advice, encouragement, constant support, indefinite patience and invaluable critical guidance from the inception to the completion of this research. I would like to express my sincere thanks to my sponsors, Woldia University and the Ethiopian Ministry of Education, for providing me with this incredible opportunity.

I extend my sincere thanks to the teachers and educational experts who participated in the data collection for the research. I would like to acknowledge the collaboration of primary school supervisors, principals and district education experts who helped me to get access to preschools and valuable data for the study. My warmest gratitude is also extended to Embet Wudu my beloved wife, and my children, Tekleab, Soliyana, Yostina and Etsepatos Alemu for their incredible love and moral support and comfort in many ways, which are too numerous to mention here. I also owe it to my friends Hailu Kebede, Lulseged Derbe, and Haimanot Manie for their constant support and words of encouragement. Last but not least, thank you to all staff in the Department of Educational Studies, UWC, who assisted me in different ways. Finally, but most importantly, I am proud of my country, Ethiopia, which is ancient, rich in history, a source of civilization, and the owner of beautiful nature; and I hope that, despite being in a critical period of uncertainty, political unrest, economic crisis, and unprecedented division among peoples, all of this will pass and Ethiopia will shine brightly. I always love you.

ACRONYMS AND ABBREVIATIONS

DA: Dynamic Assessment

ECCE: Early Childhood Care and Education

EGRA: Early Grade Reading Assessment

ESDP: Education Sector Development Programme

GER: Gross Enrolment Rate

MOE: Ministry of Education

QUAN: Quantitative

QUAL: Qualitative

SPSS: Statistical Package for Social Sciences

UNESCO: United Nations Educational, Scientific and Cultural Organization

ZPD: Zone of proximal development

TABLE OF CONTENTS

x

LIST OF TABLES

LIST OF FIGURES

1.1   Introduction

Globally, there is a growing interest in enhancing the Early Childhood Care and Education (ECCE) sector not only in terms of providing access but also in terms of improving the quality of programmes in this sector. This chapter provides the scope of the study and aims to place this study in context. It starts with the background and rationale of the study, followed by a statement of the problem, research questions and the significance of the study and the delimitation of the study. It also provides a brief overview of the methodological approach adopted and concludes with the structure of this thesis.

1.2   Background and Rationale of the Study

ECCE is one of the key priorities of most nation-states and has been prioritized on the global development agenda and the Sustainable Development Goals (SDGs). The early years (i.e. from birth to age five) are regarded as a sensitive period of a child's life marked by rapid changes in physical, cognitive, language, social and emotional development (Britto et al., 2017; Heckman, 2004; Rao et al., 2014; Shala, 2013). The earliest phase of a child's life constitutes a period of extraordinary developmental growth and promise regarding human potential as well as a time of tremendous opportunity and great vulnerability (Cantor, Osher, Berg, Steyer & Rose, 2019; Tayler, 2015; UNICEF, 2012).

Studies underline that the early years are the period where the brain develops rapidly to build the foundation of cognitive and character skills necessary for success in school, health, career, and life and require a stimulating environment, adequate nutrition, and social interaction with attentive caregivers (Heckman, 2012; Osher, Cantor, Berg, Steyer, & Rose, 2020; Tayler, 2015; UNICEF, 2012). When the early learning environment is stimulating or nurturing and favourable or reinforced by positive socialization, healthy brain development is promoted, and other organ regulatory systems are facilitated (Shonkoff, 2010; Tayler, 2015). This occurs because they develop within a complex system of contexts, interactions and relationships; what happens in one domain influences what happens in others (Cantor et al., 2019; Darling-Hammond, Flook, Cook-

1

Harvey, Barron, & Osher, 2020). Furthermore, Heckman (2006) noted that cognitive, linguistic, social, and emotional competencies are interdependent; all are shaped powerfully by the experiences of the developing child and these complex and dynamic developmental systems do not occur in isolation; they require the layering and integration of prerequisite skills and domain-specific knowledge, as well as the influence of contextual factors (Cantor et al., 2019).

In contrast, when early years experiences are unfavourable or environments do not stimulate children and fail to cultivate these skills at the very start of their educational journey, it places them at an early disadvantage (Heckman, 2006). These early established inequalities contribute to continued lifetime differences with negative implications for adult cognitive and psychological functioning, educational attainment and subsequent income (Walker et al., 2011). It may also result in weakening or disruptions of developing brain neural circuits or architecture, as well as the establishment of a short fuse for subsequent activation of the stress response that leads to greater vulnerability to a host of chronic diseases (Heckman, 2004, 2012; Shonkoff, 2010). This implies that success or failure at an early stage lays the foundation for success or failure in later schooling.

Quality early childhood care and education, therefore, sets a strong foundation for learning and have lasting effects on learning and motivation. In this regard, researchers assert that a good quality preschool experience gives children a more favourable start at school and has a positive impact on children's health and development of basic social and cognitive skills (Burger, 2010; Drange & Telle, 2017; UNICEF, 2019; Yoshikawa et al., 2013). Well-designed early childhood care and education systems make education systems more effective and efficient and can yield substantial long-term and progressive effects on school success (Barnett, 2008; Black et al., 2017; Heckman, 2004; OECD, 2017; UNICEF, 2019; Woodhead, Ames, Vennam, Abebe, & Streuli, 2009).

Equitable, high-quality early childhood care and education is an effective strategy for promoting economic growth and societal outcomes in adolescence and adulthood, such as reduced teenage pregnancy, less criminal activity, and social inequality, and has immense and multidimensional benefits for society at large (Knudsen, Heckman, Cameron, & Shonkoff, 2006; UNESCO, 2015; UNICEF, 2019; Yoshikawa et al., 2013). Children's early experiences can thus either augment or inhibit their overall development and the extent of ECCE benefits heavily depends on the quality of the ECCE services (OECD, 2017a; Tran, 2013). As a true window of opportunity, ECCE should

be fully nurtured and strengthened to ensure long-term benefits, not just for each child's development but also for communities and societies at large. The most fundamental promotive experiences in the early years of life, which have lifelong benefits, come from responsive caregiving and early learning, the nurturing care and protection of parents, family, and community and the supportive environment that enables these interactions (Black et al., 2017; Britto et al., 2017).

Equally importantly, the curriculum framework, along with pedagogy and assessment, can play a pivotal role in ensuring the quality of ECCE services or enhancing young children's holistic development (Hedges & Cooper, 2014; Vargas-López et al., 2016; Wood & Hedges, 2016). Attention, therefore, needs to be devoted to issues such as curriculum, pedagogy, assessment, and teacher's qualification and skills, among others. Policies and programmes are instruments that enable schools to address the spectrum or breadth of practices that cover young children's holistic development for children to develop the intellectual skills, creativity, and well-being required to become healthy and productive adults (Black et al., 2017).

Concurrently, enhancing the quality of young children's lives is now a national and international priority expressed through research and policy initiatives. Examples of fora and policies include the Dakar Education Forum (2000), the Convention on the Rights of the Child, the United Nations Millennium Development Goals (2000), the World Health Organization (WHO), the Commission on Social Determinants of Health (2008), etc. (Vargas-López et al., 2016). Of these, the Dakar Framework of Education for All (EFA) Goal One became the prime driver for ECCE policy planning. It promoted the need for ECCE policy planning in all world areas, and the issue of ECCE has gained considerable international policy attention. As a result, ECCE was included and addressed in the 2030 UN- Sustainable Development Goals; under SGs4.2, stating that "by 2030, all girls and boys should have access to quality early childhood development, care and pre-primary education so that they are ready for primary education"(OECD, 2017, p.16). Similarly, in Africa, early childhood education has received an increasingly continental policy focus; "it deserves special attention in the Continental Education Strategy for Africa (CESA) 16-25" (African Union Commission, 2016, p.14).

3

Following these regional and international declarations and agreements, countries pledged to develop national intersectoral ECCE policies and agreed to expand and improve comprehensive early childhood care and education, with special emphasis on the most vulnerable and disadvantaged children (Vargas-López et al., 2016). However, evidence has shown that the global understanding of the science of early childhood development and its implications for framing policy priorities remains limited (Shonkoff, 2010). The implementation of early childhood development programmes is fragmented and lacks coordination (Black et al., 2017). Furthermore, Yoshikawa et al. (2018) noted that the capacity of policy systems to support ECCE across health, education, social protection, and other sectors is weak. As indicated in tables 1.1 and 1.2, up to mid-2014, only 68 countries have officially developed ECCE policy instruments and of these, only 28 countries have developed integrated ECCE strategic plans and policy instruments (Vargas-López et al., 2016; Yoshikawa et al., 2018). The following table (Table: 1.1), shows the development of the ECCE policy from 2000 to 2014.

Table 1.1: Years when world Nations Adopted ECCE Policy Instruments

Years	Number of nations
1999 and before	5
2000	1
2001	2
2002	--
2003	1
2004	7
2005	3
2006	6
2007	7
2008	7
2009	6
2010	7
2011	11
2012	3
2013	1
2014	1
Total	**68**

Source: Vargas-barón & Vargas-barón (2015)

4

Table 1.2: Indicates the development of ECCE Policy Instruments by National Income Levels of World Countries.

Country income level	No. of countries with policies	% of countries with policies
Low income	18	27
Lower middle income	22	32
Upper middle income	21	21
High income	7	7
Total	68	68

Source: World Bank (2015)

Out of the 49 Sub-Saharan African countries, 29 (59%) have adopted ECCE policy instruments (Vargas-López et al., 2016). In other words, many developing countries fail to fulfil their international obligations to develop integrated multisectoral ECCE policy instruments and strategic plans and the past EFA 2015 agenda failed. The work of Vargas-López et al. (2016) shows that planning multisectoral ECCE is not the top priority of the governments in Africa. Furthermore, in 2016, international education aid for early childhood education has been drastically lower than aid for any other level of education. Globally, 56 of the 147 countries (38%) of countries allocate less than 2% of their education budgets to ECCE education (UNICEF, 2019). Heyneman (2010) asserts that

> As a political strategy, Education-for-All has been a failure, because it was originally designed to attract education investments over other priorities. The portion of donor resources devoted to education has been stagnant and the role of the state in education provision exaggerated by the strategy generated a donor monopoly over client interest (Heyneman, 2010, p.1).

Regarding access to and participation in ECCE, disparities are significant between countries and tend to be higher than for other education levels. At least 50% of preschool-age children or 175 million children around the world are not enrolled in ECCE. (UNICEF, 2019). ECCE is often neglected particularly in poor-resourced countries. In the last decade, the sub-sector (ECCE) in Africa has been far below those in other regions, particularly in sub-Saharan Africa, where enrolment is 20% on average for this age-cohort (African Union, 2014; African Union

5

Commission, 2016; Shawar & Shiffman, 2017). This implies that a large number of children in Sub-Saharan African countries enter primary schools without having experience in pre-primary education. Furthermore, in terms of quality, the ECCE sector in Africa suffers from poor planning, limited allocation of resources, poorly trained teachers and inadequate materials, as well as inequalities of provision between urban and rural, rich and poor, among other things. The Sub-Saharan Africa region appears to be lagging behind other regions (African Union Commission, 2016).

In the Ethiopian context, following the international declaration (EFA goal), the government has recognized the significance of early experiences for children's later development and learning. To improve access to and quality of the services in 2010, the Ministry of Education adopted a new multisectoral ECCE national policy in collaboration with the Ministry of Health and the Ministry of Women's Affairs (MOE, 2010e). Since then, ECCE has received greater attention and has been addressed in different educational development programs, mainly in Education Sector Development Programme-ESDP IV (2010/11 to 2014/15) and ESDP V (15/16 to 19/2020).

In particular, the government set out measurable programme outcomes and key outcome targets in ESDP IV. For instance, in formulating a national curriculum, upgrading teacher training and certification and teacher supervision (MOE, 2010a). Moreover, to support programme implementation, various committees and task forces are established from the national to the district level, with clearly defined roles and responsibilities (MOE, 2010a). Despite developing policy documents, evidence shows that there is still a gap and significant disparities in access and quality among regions and between urban and rural areas. Moreover, ECCE was not a top priority of the government, and provision was mainly left to non-governmental organizations, communities, private institutions and faith-based organizations (Tassew, 2016). The role of the government remains limited to supervision and inspection.

Concerning access and enrolment, the national gross enrolment ratio (GER) increased from 39% in 2014/15 to 45.9% in 2019/20 (MOE, 2020). However, in 2020/21, nationally, 36.7% of children are enrolled in ECCE, a decrease of 6.5% from the previous year's result (MOE, 2021b). Whereas in 2019/20 the gross enrolment ratio (GER) in the Amhara region is below 50%. Furthermore, there is a significant difference among regions of the country. In emerging regions and rural areas,

6

the gross enrolment ratio (GER) is very low. Regionally, Somali and Afar performed the worst, with GER of just 3.2% and 17% respectively (MOE, 2021b). Moreover, low qualification of ECCE teachers, lack of awareness and coordination between the government and stakeholders and insufficient guidance and support to district and Zone/province are the major challenges in Ethiopia (MOE, 2010a). Apart from recognizing the importance of ECCE and the presence of positive statements in different policy documents such as the ESDP IV, ESDP V, and ESDP VI, access to quality preschool education remain very limited in Ethiopia (Janice Kim et al., 2022). According to Tassew (2016), public investment in this area is currently very limited, with the private sector taking the key role, which seems to exacerbate the inequality that exists between more advantaged and disadvantaged children/populations.

Moreover, recent findings show that government commitment is not aligned with the allocation of sufficient financial resources, which are extremely low in Ethiopia (Kim et al., 2022). In light of this, the OECD (2017, p.20) stated that "without sufficient public spending, there is a greater risk that access to ECCE programmes will be restricted to affluent families, and that the quality of programmes will vary". The ECCE is a severely underdeveloped sub-sector in Africa and is also characterized by low-quality teaching and learning, inequalities, and exclusion at all levels (African Union Commission, 2016). Hence, to guide policy actions and to lead the professionalization of the sector, the government should invest in research in early childhood development (African Union, 2014). Similarly, Woodhead and Vennam (2009) suggest that developing strategies to improve access and quality must also be responsive to the situation and aspirations of children, families, and communities.

With this background, it is apparent that ECCE has experienced a surge of attention regionally and globally. However, until recent years, the emphasis was on addressing the issue of equitable access and very little was done in terms of ensuring quality ECCE. According to the Organization for Economic Co-operation and Development (OECD), "equitable access to ECCE is not enough. Positive results for children can only be achieved if the level of quality of this service is high, otherwise, children may be harmed by the low-quality care and education" (OCED, 2017, p.16).

7

1.3   Statement of the Problem

The foundational importance of the early years is increasingly valued across the political spectrum. Globally, there is a growing interest in enhancing the ECCE sector not only in terms of providing access but also in terms of improving the quality of programmes in this sector. For instance, according to the OECD, "ECCE can improve children's cognitive abilities, socio-cultural development, help create a foundation for lifelong learning, and make children's learning more equitable to reduce poverty and improve social mobility from generation to generation" (OECD, 2017, p.11). Furthermore, improvement in ECCE may lead to higher enrolment in primary education, especially for girls. It will also lead to a reduction in drop-out rates and repetition rates in primary grades (Cantor et al., 2019; Knudsen et al., 2006; MOE, 2018a, 2021b; UNICEF, 2019).

As mentioned, progress toward improving the quality of ECCE has been too slow in Africa which suffers from several major drawbacks such as lack of equality, poor management, poor linkages with primary education and the lack of integrated curriculum (African Union, 2014; African Union Commission, 2016). Researchers maintain that the ECCE curriculum and pedagogical practices are not well integrated with the social-cultural context of society and are often not supported by appropriate theories of early childhood education (Pence & Marfo, 2008; Wood, 2014). In addition, ECCE policy implementation in terms of infrastructure, teacher development and materials has been generally very slow (African Union Commission, 2016).

Similarly, UNICEF reports that the most significant factors affecting the quality of ECCE services are "a nurturing and supportive learning environment, an appropriate play-based curriculum, sufficient learning materials, and, most importantly, well-trained and qualified teachers" (UNICEF, 2019). Studies conducted on ECCE in Ethiopia have mainly focused on describing the status, practice and challenges of early childhood care and education (Admassu, 2014; Girma, 2014; Tanga, 2012; Tsegai, 2015; Tsegaye, 2014; Yigzaw & Abdirahman, 2017). Some studies focused on access, the relationship between preschool attendance and academic achievement, the role of leadership, practices and challenges of preschool leadership and management and challenges of preschool children with visual impairment (Amogne, 2015; Rahel, 2014; Selamawit, 2015; Tadesse, 2015; Tassew, 2016; Yigzaw & Bashir, 2017). Other studies focused on the status of ECCE as a profession and caregiver-child interaction, parental perception and social

8

competence of children (Girma, 2014; Tigistu, 2013). Even though such research has been conducted in ECCE, only a few studies have attempted to investigate issues related to curriculum implementation challenges, teacher training and organization of the learning environment (Rahel, 2014; Sosina, 2013; Temesgen, 2016). From this, I note that many of the available studies have not adequately investigated the relevance of curriculum content to the holistic development of young children and the challenges that teachers in this sector face during implementation. Furthermore, as a theoretical framework, many of the previous studies used the developmental theory of Piaget and developmentally appropriate practice. However, this study uses the sociocultural theory of Vygotsky as a theoretical lens.

Methodologically, most of the existing research studies done in Ethiopia are quantitative in orientation and descriptive (Rahel, 2014; Sosina, 2013; Temesgen, 2016) whilst other studies are qualitative (Selamawit, 2015; Tanga, 2012; Tsegai, 2015). Quantitative-oriented approaches are used for measurement and the collection of objective data from a large sample, whereas qualitative investigation provides an opportunity to get detailed views of preschool teachers in their own words (Creswell & Creswell, 2018). In order to analyse ECCE from multiple perspectives and different school contexts, a different method is required, like a mixed methods approach. This approach, which combines both qualitative and quantitative approaches, will enhance internal consistency and validate the findings through triangulation. It also "gives a deeper, broader and more illustrative description of the phenomenon" (Hurmerinta-Peltomäki & Nummela, 2006, p.452).

Moreover, research on this phenomenon in the Amhara National Regional State of Ethiopia appears scant. Studies by (Amogne, 2015; Rahel, 2014; Selamawit, 2015; Tassew, 2015; Tassew, 2016; Yigzaw & Bashir, 2017) appear to focus mainly on individual issues, including inequalities and academic achievement, leadership and management, access, the relation between preschool attendance and academic achievement, challenges of visual impairment, etc. There is limited research on curriculum implementation and the challenges that teachers face in ensuring the holistic development of young children. The purpose of my study is, therefore, to explore and explain curriculum implementation challenges faced by ECCE teachers in Amhara National Regional State of Ethiopia in ensuring the holistic development of young children, using a mixed method approach.

9

1.4 Research Questions

The main research question of the study is, what are the curriculum implementation challenges that ECCE teachers face in the Amhara National Regional State of Ethiopia in ensuring the holistic development of young children?

The following subsequent research questions are raised to address the main question stated above.

- What is the nature of ECCE in the Amhara National Regional State in Ethiopia?
- To what extent does the ECCE curriculum address the holistic development of children?
- What is the nature of teacher training in early childhood education and how does this impact their ability to implement and deliver the curriculum?
- How do the curriculum, pedagogic practices, and assessment align to support the holistic development of children?
- To what extent does the physical environment support the holistic development of children?
- What is the nature of District, Community and Parental support in the implementation and delivery of the curriculum?

1.5 Aim and Objectives

The overall objective of this study is to explain and explore curriculum implementation challenges faced by ECCE teachers in Amhara National Regional State of Ethiopia in ensuring the holistic development of young children. In other words, to explain and explore the appropriateness of curriculum, alignment of curriculum, assessment and pedagogic practices, appropriateness of the physical environment, as well as the role of different stakeholders in ensuring the holistic development of young children.

Based on the above general objectives, the following specific objectives were forwarded:

- To offer a comprehensive analysis of the literature on the nature of ECCE both internationally and nationally.
- To provide an analytical account of the relationship between curriculum implementation and the holistic development of young children by focusing on the following:

10

- The nature of ECCE in Amhara National Regional State;
- Curriculum implementation;
- The alignment between curriculum, pedagogy, and assessment;
- The nature of teacher training;
- The appropriateness of the physical environment; and
- The role of District, community and parental support.

1.6   Significance of the Study

Quality ECCE is an investment for the holistic well-being of young children and subsequent learning and development. A growing body of research shows that the provision of quality early childhood care and education lays a crucial foundation for young children's cognitive and non-cognitive skills development that are important for future learning and sets trajectories of later success in their life. As mentioned above, this study aims to explore curriculum implementation challenges faced by ECCE teachers in Amhara National Regional State of Ethiopia in ensuring the holistic development of young children.

In Ethiopia, studies conducted in this area are scant and mainly focused on individual issues, as alluded to before. In this regard, my study is significant for several reasons. Firstly, the study may provide empirical evidence and practical suggestions to policymakers and teachers, specifically Amhara National Regional Education Bureau education, for informed decisions for allocating resources and improving and enriching the quality of ECCE programmes as well as meeting society's rising demands. Furthermore, it may be significant to identify structural and process challenges to ensure quality ECCE service. Secondly, my focus was on ECCE policy and curriculum theories; alignment of curriculum, pedagogy, and assessment; teacher training and competency; appropriateness of physical environment; and district, parent, and community involvement in ensuring young children's holistic development. Thus, the study may provide theoretical and empirical evidence for policymakers, teacher training colleges, educational experts, teachers, and other concerned bodies about the relevance of the ECCE curriculum in designing curriculum and learning experiences that promote children's learning in all developmental domains. In addition, the information can help to determine teachers' training and competency to

11

implement and deliver the curriculum where they need specific training and professional development.

Thirdly, the conceptual focus of my research was on highlighting alternative theoretical frameworks. As mentioned in the statement of the problem, many of the previous studies conducted in Ethiopia used the developmental theories of Piaget and developmentally appropriate practice as a theoretical framework. This study is framed within the sociocultural theory of Vygotsky and can, therefore, add new knowledge to the existing theory and practice related to the ECCE curriculum theory and approach, particularly in the Ethiopian context. Furthermore, the lessons learned during the pilot phase of my research may be useful for other beginner researchers conducting research in this area and using similar data collection instruments and may serve as a bridge for further research.

1.7   Research Design and Methodology

This study is built upon the philosophical insight gained from the pragmatism assumption and methodologically from a mixed methods research approach, particularly concurrent mixed methods research design. A pragmatic perspective draws on employing "what works," using diverse approaches, giving primacy to the importance of the research problem and question, and valuing both objective and subjective knowledge (Morgan, 2007). It can also be argued that pragmatism is a well-developed and attractive philosophy for integrating perspectives and approaches. It is not committed to any one system of philosophy and reality, it draws inquirers liberally from both quantitative and qualitative assumptions (Creswell, 2003; Johnson, Onwuegbuzie, & Turner, 2007). Mixed methods research is an alternative to strict single-mode designs which mixes or combines elements of qualitative and quantitative research viewpoints, techniques, methods, approaches, concepts, or languages in a single study for the broad purposes of breadth and in-depth understanding and validation i.e. triangulation of the findings (Johnson & Onwuegbuzie, 2004; Johnson et al., 2007). The combination of the databases enables me to further examine and construct at a deeper level, where the quantitative strand reveals what the qualitative strand leaves out and vice versa to validate the findings through triangulation and answer the research questions (Hurmerinta-Peltomäki & Nummela, 2006; Sheperis, Young, & Daniels, 2010).

A pilot study was conducted to refine and check the validity and reliability of the questionnaire, semi-structured interview protocols and structured observation schedule. Following the pilot study, study sites and participants were sampled. The quality of a piece of research stands not only on the appropriateness of methodology and instrumentation but also on the suitability of the sampling design that has been adopted (Cohen, Manion, & Morrison, 2007). Identifying and describing the site for the research in enough detail helps the reader to know exactly where a study will take place (Creswell, 2014).

In mixed methods research, sampling designs may use both probability and nonprobability sampling techniques to identify the relevant characteristics of participants or sites that are more likely representative of the population studied and that are best suited to answer the research questions (Leavy, 2017; Sharp et al., 2012). This study employed a qualitative purposive sampling technique, as well as quantitative multi-stage cluster sampling and simple random sampling techniques. Multistage sampling is appropriate when the population is large and widely dispersed and to minimize administrative problems (Cohen et al., 2007).

A semi-structured interview protocol was used to collect qualitative data. In addition, field notes were taken for clarification and to capture important ideas or issues specific to the case. The semi-structured interview was held face-to-face and individually with four ECCE teachers and two ECCE experts. The quantitative data of this study was collected using a five-point Likert scale questionnaire (1 strongly agree to 5 strongly disagree). A structured questionnaire was used to collect data from a large number of participants. Furthermore, to assess the appropriateness of the physical environment for the holistic development of young children, non-participant structured observation was employed.

In brief, the study used a concurrent mixed methods research design; the qualitative and quantitative data were collected concurrently and analysed separately before being integrated into the analysis and discussion chapter. The qualitative data were thematically analysed, while the quantitative data were descriptively analysed using SPSS version 28 software.

It is noteworthy that researchers have to abide by standards of professionalism and honesty to earn the respect and trust of both research participants and the public at large (Ruane, 2005). This study complied with the ethical requirements of the University of the Western Cape of the Human and

13

Social Sciences Research Ethics Committee (HSSREC) and the Faculty of Education Higher Degrees Committee. As such, I adhered to the proper ethical procedures throughout the research process, so that the confidentiality and anonymity of research participants, as well as research procedures, are assured throughout the research process. I ensured that each participant was informed about the purpose of the study and the intended uses of the data in the writing up of this thesis, as well as their right to privacy, including the right to withdraw from the study at any time. A more comprehensive account of the methodological trajectory of this study is presented in chapter four.

1.8   Delimitation of the Study

Early childhood care and education is an umbrella term that includes many aspects of child development and learning (health, nutrition education, etc.). However, this study's focus was limited to educational aspects and public preschools. In particular, this study aimed to explain and explore curriculum implementation challenges faced by ECCE teachers in the Amhara National Regional State of Ethiopia in ensuring the holistic development of young children. In Ethiopia, there is a dearth of empirical studies in this field, especially in the Amhara National Regional State. This study used a pragmatic paradigm as a meta-theoretical framework and is methodologically delimited to a concurrent mixed methods research design. This study's unit of analysis was limited to ECCE teachers and ECCE experts at the national and regional levels.

1.9   Thesis Outline

This study is organized into eight chapters. Chapter one is the introductory chapter which presents the background and rationale of the study; the statement of the problem; the research questions; the aims and objectives of the study; the significance of the study; the research design delimitation of the study; the outline of the chapter and the limitation of the study. Chapter two offers an overview of the Ethiopian context, where I look at the historical development of early childhood care and education in Ethiopia, and current policy development and practice. Chapter three is divided into three sections. The first section provides the concept and definition of early childhood care education; the second section outlines the theoretical and empirical literature that relates to the learning and development of young children; and the third section focuses on the theoretical framework of this study, where I engage more deeply with the sociocultural theory of Vygotsky

14

and his theoretical constructs such as the Zone of Proximal Development (ZPD), mediation, and scaffolding.

Chapter four presents the methodological trajectory of the study and provides a detailed account of the actual methods used in this study. Chapters 5 and 6 are the findings chapters. Chapter five presents the quantitative findings, and the quantitative data are analysed using descriptive statistics. Chapter six provides the qualitative findings, which are analysed thematically and presented based on the research questions. Chapter seven is the integration and interpretation chapter; it presents the analysis and discussion of the quantitative and qualitative findings that stemmed from Chapters 5 and 6, and then the quantitative and qualitative findings are triangulated and compared in light of the theoretical framework and literature and their contribution to the body of knowledge. The final chapter, Chapter 8, concludes the thesis by providing the overall summary, conclusion, implications for the practice, and recommendations for further research.
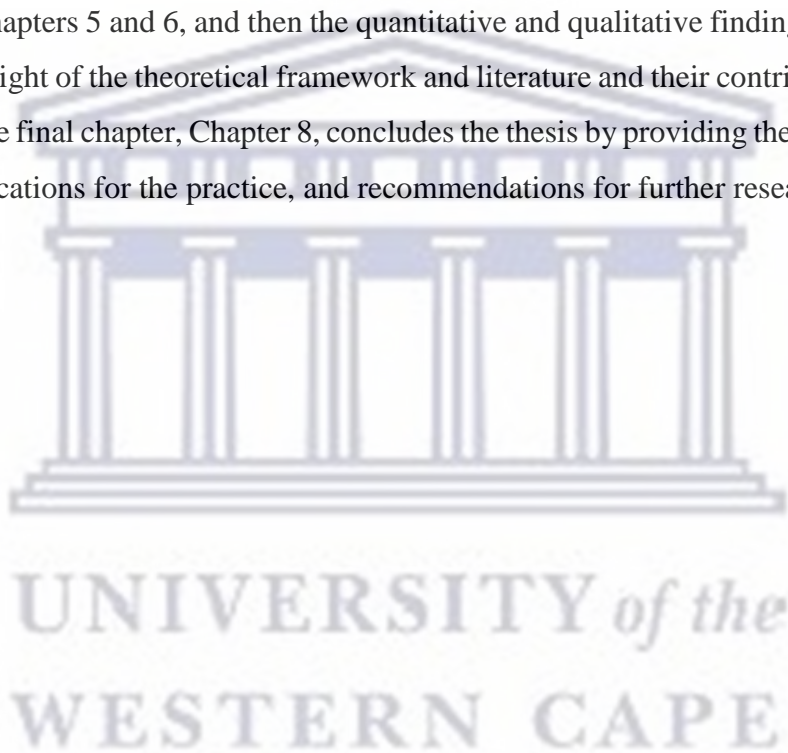
CHAPTER TWO

THE ETHIOPIAN CONTEXT

2.1   Introduction

The previous chapter presented the background of the study, which included the rationale of the study, statement of the problem, research questions, objectives of the study, and the significance of the study. In this chapter, I address the concept of Early Childhood Care and Education (ECCE) in the Ethiopian context. I begin with a brief history of ECCE in Ethiopia and then outline ECCE policy development, objectives of the policy, early childhood curriculum, provision of ECCE in Ethiopia; and access, participation and current practices. The rationale for doing this is to gain a better understanding of the historical development of ECCE in Ethiopia and to situate my study within the broader and historical context of Ethiopia.

2.2   Historical Overview of Early Childhood Care and Education (ECCE) in Ethiopia

Early childhood education has a long history in Ethiopia. Though it is difficult to pinpoint the beginnings of early formal education in Ethiopia, there is little doubt that it can be traced back to the Ethiopian Orthodox Church (Pankhurst, 1955 cited in Demeke, 2006). According to Hoot et al. (2004), the importance of early education was recognized as early as Medieval Ethiopia. During that time, the level of education was almost exclusively provided to male children and they began their first stage of preschool education at around the age of four (MOE, 2007). The traditional education system was deeply rooted in the Ethiopian Orthodox Church and is recognized as one of the oldest educational systems in the world (Hoot et al., 2004).

"As the traditional custodian of the nation's culture, Ethiopian Orthodox Church provided education to Ethiopian children and adults, equivalent to modern elementary to university level education, since its establishment as a national Church in 330 A.D" (Ethiopian Orthodox Church, 2007, cited in Demeke, 2006, p.14). Before the introduction of modern education into Ethiopia in 1908, the Ethiopian Orthodox Church played a pivotal role in spreading literacy to the people; the church taught reading and writing, arithmetic, art, architecture, law, governance, medication, and other skills in these traditional schools (Demeke, 2006). As Hawani Negussie (2014) noted in different pieces of literature church education is considered informal in nature but rich in its

16

approach and has a formal structured curriculum, in which different kinds of studies are offered. In this respect, Demeke (2006) noted that church education in Ethiopia has a system of education with four distinct and successive stages, including Fidel Bet, 'Zema bet-(school of hymn)', 'Qene bet-(school of poetry) and 'Metsahaf bet'-(school of text/books). In the first level, called 'Fidel Bet', children at age of four began to learn the Ethiopian or Ethiopic alphabet, reading and writing, simple arithmetic, and discipline (Demeke, 2006). The Ethiopic alphabet is made up of 26 base characters, each with seven forms indicating the various vowels. Young children in the 'Fidel Bet' firstly learn the first 26 basic letters in the Ge'ez alphabets and then the rest of 156 syllographs (Demeke, 2006). According to Demeke (2006),

> Syllographs are essentially those additional strokes and modifications which are added on to the main forms to indicate a vowel sound associated with it or to make aural adjustments in the basic consonant sound using the Abughida; a simple Ethiopian pedagogical scheme under which children are taught reading and writing more quickly (Demeke, 2006, p.15).

The mastery of the alphabet was followed by reading, writing, and recitation of religious texts that began with the Psalms of David (Hoot et al., 2004). The curriculum and teaching methods of children primarily contained drills and practice of the alphabet and oral memorization and recitation (Hoot et al., 2004). The evaluation was based on checking mastery of orally learned learning material. Until the beginning of the modern education system in Ethiopia, the Ethiopian Orthodox church was the only centre for formal learning (Hoot et al., 2004). It was the church that served as the initial setting for informal or indigenous education to strengthen its roots and develop the vision for education (Hawani Negussie, 2014). The traditional church education system enabled Ethiopia to emerge as the only country in Sub-Saharan Africa to have an ancient written culture and a well-developed numeral system of its own (Demeke, 2006).

2.2.1   Early Childhood Care and Education from 1908 to 1974

The first modern preschool (kindergarten) in Ethiopia was established in Drie Dawa in the 1900s for the children of French consultants who were assisting in the construction of Ethiopia's first railroad (Demeke, 2006; Hoot et al., 2004). After many missionary preschools, including the English School, the German School, and Lycee Gebre Mariam, were opened in Addis Ababa, they served children of affluent families (Demeke, 2006; MOE, 2007). However, preschool for the general community services began much later in 1963 E.C., with few pilot projects established in

17

the major towns of the country under the Ministry of National Community Development and Social Affairs (Demeke, 2006). Even though it had a long history, during the imperial period ECCE has grown very slowly until the 1974 socialist revolution, which ushered in notable changes in Ethiopia's history of early childhood education (Belay, 2018; Demeke, 2006). Until 1974, only 7,573 children aged 3-6 were enrolled in 77 private kindergartens out of 3.5 million children aged from 4 to 6 (Demeke, 2006; MOE, 2007). Moreover, early childhood education had been exclusively limited to urban areas of the country and primarily run by missionaries, private organizations, and the Ministry of Social Affairs and Development (Demeke, 2006; MOE, 2007b). The above empirical and theoretical evidence suggests that during the imperial period, early childhood education did not gain much attention, rather, it has been cornered and marginalized and children of this age have been denied their fundamental rights.

2.2.2   Early Childhood Care and Education from 1974 to 1991

The socialist revolution of 1966 to 1974 was a turning point in the history of early childhood education in Ethiopia and major changes was made to improve the accessibility of ECCE (Demeke, 2006; MOE, 2007). For the first time in the country's history preschool education became part of the National Education Policy, the first national preschool curriculum was developed and Menen Preschool Teacher Training Centre was established in Addis Ababa in 1986 with the support of UNICEF (Belay, 2018; Demeke, 2006; MOE, 2007). The 1974 Ministry of Education introduced three specialized separate departments to support (i) teacher training, (ii) curriculum and textbooks appropriate for very young children, and (iii) supervision and evaluation of preschool programs (Demeke, 2006; MOE, 2007).

In 1979, the National Literacy Campaign was commissioned, aiming to establish pre-natal and post-natal care programs for rural children (Belay, 2018; Demeke, 2006). Following these changes, the number of preschools increased from 77 to 912, and the number of children enrolled increased rapidly from 7,573 to 102,000 in the years from 1975 to 1990 (Demeke, 2006; MOE, 2007). In 1981, an independent commission called the Ethiopian Children's Commission was established with the task of caring for and educating Ethiopian children (Demeke, 2006). This commission is in charge of organizing important seminars and workshops such as the 'Need of children with disability, Ethiopian Children's need, Children's Books, Children's Programs in the Media,

18

Children's Health in Schools, the Role of Play in Children's Holistic Development, and Children's Nutrition' among many others (Belay, 2018; Demeke, 2006). Furthermore, in 1982, a UNICEF-sponsored integrated Family-Life Education (IFLE) project was established to further support rural efforts in early childhood education (Demeke, 2006). This progress, however, was short-lived, and most of the programs and projects initiated in the previous regime were halted following the change in government in 1991 (Demeke, 2006; MOE, 2007).

2.2.3 Early Childhood Care and Education from 1994 to date

The Marxist-Leninist People's Democratic Republic of Ethiopia (PDRE) or the regime of Mengistu Hailemariam was overthrown in 1991 and the Ethiopian People's Revolutionary Democratic Front (EPRDF) seized state power. The new government assessed the inadequacy of the previous education policy and found that it had acute problems with both access and quality, focused on policy development and devised various strategies aimed to expand access and equal distribution of schools, to ensure quality and relevance. In 1994, following the fall of the Socialist Regime, Ethiopia adopted a new Education and Training Policy to address the country's educational objectives from kindergarten to secondary school. This policy states the following:

> Kindergarten education is the pre-school preparatory education for children and can take up to three years. In this programme, children between the ages of four to six years are offered fun-like education that would enable them to express their feelings, to appreciate beauty, and to learn to distinguish and form letters and numbers (MOE, 1994, p.76).

However, the government paid little attention to ECCE as they were of the view that the opening of kindergartens will require massive expenditure and regular universal primary education has yet to be achieved (MOE, 2014). The opening of kindergartens was rather left to communities, private investors, faith-based organizations, and nongovernmental organizations (MOE, 1994). Apart from promoting ECCE, coordinating, supporting, and quality monitoring the participation of other stakeholders, government involvement was limited in providing preschool education (MOE, 2010b). This resulted in increased involvement of the private sector in ECCE with other organisations opening ECCE centres. These centres were largely confined to major urban areas and accessible only to those children whose parents could afford to pay the fees. This excluded rural populations and their children limiting their access to ECCE. Thus far, the government's direct involvement was limited to curriculum development, teachers' training, and providing

19

professional counsel and advice on how to improve the quality and efficiency of ECCE when necessary (MOE, 1994, 2014). The national gross enrolment rate remained at 2.3% in 2004/5 (MOE, 2010c).

To implement the 1994 education policy, the Ministry of Education translated the Education Training Policy into a series of national Education Sector Development Plans (ESDPs) (MOE, 2008). The country is currently in its VI stage of ESDP. However, except for a simple statement of recognition of ECCE, none of the first three ESDPs has given special attention to early childhood care and education. This implies that ECCE continues to be a lesser priority for the government. Due to the lack of concern from the government, a number of preschools were noted to be slowly emerging, particularly in urban areas. However, only younger children were able to access preschools younger children from households that could afford it had access because of payment of tuition fees (Belay, 2018). As evident from the ESDP, I to III, the education statistics annual abstract data, the national gross enrolment rate (GER) of ECCE increased very slowly. For example, the national gross enrolment rate (GER) increased from 2.7% in 2005/06 to 4.2% in 2008/09 (MOE, 2010c). In 2001, "out of the estimated 6.95 million children of the appropriate age group (Age 4-6), only about 294,767 children were reported to have access to pre-primary education in 2904 kindergarten sites all over the country" (MOE, 2010b, p.22).

This slow expansion and progress in enrolment sent a message to the government that its involvement was inevitable, in standardizing, coordinating and regulating ECCE (Belay, 2018). The Ministry of Education acknowledged the problem and designed a mechanism to enable the country to meet the Millennium Development Goals of Universal Primary Education by 2015. Furthermore, the international child rights movements that came along with the United Nations Convention on the Rights of the Child (UNCRC) and Education for All (EFA) campaign also added pressure on the government not to continue marginalizing the early years' education any longer (IBD). Every child has a right to ECCE and it has been considered a bedrock of the Education For All (EFA) movement, and the first step in meeting all the other EFA goals. This in turn contributes to the overarching Sustainable Development Goal (SDG) of reducing poverty and providing education for all (MOE, 2021a). In December 1991, the transitional government of Ethiopia adopted the Convention on the Rights of the Child (MOE, 2008). In addition, the government ratified all international agreements as part of the law of the land under Article 9(4)

20

of the constitution of the country. Subsequently, to address its citizens' long-standing need for early childhood care and education, the ministry of education introduced the ECCE National Policy Framework in 2010 (MOE, 2010f).

2.3   Ethiopia Early Childhood Care and Education Policy Development and its practices

Ethiopia has adopted several international policies and laws. For instance, child protection policies, EFA, and others. In addition, to the education policy, the Ethiopian health policy has also proclaimed the need to facilitate children's and family health care to combat childhood diseases. Due to national and international pressure, there was an awakening call to the government to get involved in the early years of programme service directives, as well as oversee implementations in different ways (Belay, 2018). This change in attitude from the government was noted in ESDP IV (2010/11-2014/15) where goals and strategies were delineated for the first time, which also brought about policy formulation (Belay, 2018).

Subsequently, Ethiopia developed its first comprehensive national early childhood care and education policy framework in 2010 along with its strategic operational plan and guidelines for expanding ECCE opportunities and improving early childhood education. This policy document was developed in collaboration and signed by the Ministry of Education, the Ministry of Health and the Ministry of Women Affairs for children from prenatal to seven years of age (MOE, 2010d). The last year of ESDP IV (2014/15) is also an important period in ECCE because the government has established a national steering committee, regional councils, and Woreda technical committees. This has had an impact on the rapid expansion of access to O-Classes (MOE, 2021a). Over the last two decades, the Ethiopian government has recognized the importance of high-quality and developmentally appropriate early childhood education programs by implementing a National Education Policy.

2.3.1   Purpose of Early Childhood Care and Education in Ethiopia

As part of its education and training policy, the ECCE policy in Ethiopia was originally developed with the ultimate aim to ensure all children have the right to a healthy start in life, to be nurtured in a safe, caring and stimulating environment and to develop to their fullest potential. To ensure this policy objective, three mission statements were also identified, including "i) provide a

21

comprehensive, integrated, quality, developmentally appropriate and culturally responsive service for the holistic development of all children; ii) establish a good foundation for children to develop to their fullest potential while respecting and affirming each child's cultural and linguistic heritage; and iii) ensure and safeguard the rights and welfare of all children, including children with special needs" (MOE, 2010d, p.17). To deliver a holistic ECCE, the National Policy Framework is built on four basic pillars including parental education, health and early stimulation programme (Prenatal-3+ years), community-based pre-schools (4-6+ years) and non-formal school readiness (MOE, 2010f, 2010d). This implies that ECCE service includes dual systems of care and education.

During the prenatal–3+ period, emphasis was placed on health, nutrition, and early stimulation and for children aged 4-6+ years emphasis was placed on promoting early learning. Health and nutrition remained key components of what young children need (MOE, 2010d). Early learning and preschools focus on promoting opportunities and support to acquire and develop a wide variety of skills, including fine motor skills, language, social-emotional and thinking skills; mastery of a variety of skills and concepts such as language development, pre-writing and pre-reading skills (MOE, 2010d). Since the introduction of the ECCE National Policy Framework in 2010, the gross enrolment and uptake of ECCE have increased drastically starting from the year 2004 (2011/12) (MOE, 2013).

2.3.2   Early Childhood Care and Education Curriculum

Even though the ECCE Policy may be a recent development, the ECCE curriculum was in place since 1973 (Belay, 2018). As Belay (2018) stated, to enhance the child's development, the curriculum is comprised of seven subjects: language (mother tongue), mathematics, environmental education, daily life skills, manual work, physical education, and music. This curriculum may have its own strength, however, the education policy during the Dreg Regime was drawn from a socialist philosophy, and the objectives of the curriculum appeared inadequate for the social and cultural value of the society. Belay (2018) also stated that the curriculum emphasized developing social characteristics rather than individualistic ones. The then Ministry of Education evaluated the implementation of the curriculum which was subsequently revised. Despite this, the curriculum was not new, it is a modified version of the previous curriculum (Belay, 2018). Belay (2018) noted

22

that there is inconsistency and dissimilarities in implementing the curricula, particularly in private kindergartens, such that some kindergartens were found using foreign curricula other than the nationally developed curriculum. Initially, the Ministry of Education prepared the ECCE curriculum and the Regional Education Bureaus translated and adapted it into their local context to meet the needs of different age groups and accommodate the diversity that exists in different family structures (MOE, 2010d). It was stated that the curriculum should be designed to meet the holistic needs of child development. The national ECCE policy also encouraged a child-centred approach with age-appropriate materials that the child can use in a variety of ways (MOE, 2010d). It is stated that play is used as the main means of enhancing the child's learning experiences. Furthermore, the mother tongue or the language spoken in the catchment area was used as the medium of instruction or caregiver-child interaction, as it is the best instrument for realizing the full potential of the learner (Ministry of Education, 2010).

2.3.3 Provision of Early Childhood Care and Education (ECCE) in Ethiopia

Previously, ECCE in Ethiopia was not compulsory. Recently, in its ESDP VI (2020/21-2024/25), the government has committed to providing free and compulsory early childhood care and education for rural and disadvantaged children, aiming to meet the SDG goal for 2030 (MOE, 2021a). In ESDP VI, ECCE was legally defined as part of compulsory education. As part of the SDG goal for 2030, the Ministry of Education has set a target to achieve an average GER of 74.1% for both boys and girls by the end of the ESDP VI (2024/25). To achieve this target and in response to access and inequalities, ECCE is provided in four different modalities including kindergarten, child-to-child O-class, and accelerated school readiness. However, all of the modalities differ in terms of structure, approach, age group, and duration. For instance, kindergarten is a three-year programme that is largely run by non-governmental organizations (NGOs), communities, private institutions, and faith-based organizations (MOE, 2016).

Child-to-child or non-formal preschool service is a one-year programme provided by older brothers or sisters or younger facilitators who were Grade 5 or 6 students or the neighbour's children. The O-class was initially intended to be a one-year programme that was annexed to primary schools for children aged six who do not have access to ECCE and is run by the local government (MOE, 2016, 2020). Currently, in its ESDP VI, the Ministry of Education has outlined

23

expanding and improving O-classes from a one to two-year programme (MOE, 2021a). Data drawn from my observations show that in many of the preschools, the O-classes are upgraded to a kindergarten structure. Accelerated school readiness is a two-month programme run by UNICEF that takes place during the summer or before the start of the school year and is aimed at children aged six and seven (MOE, 2016). The implementation of the aforementioned modalities had a significant impact on improving the national gross enrolment ratio, which increased from 5.3% in 2011/12 to 39% (MOE, 2016). Among the implemented modalities, the O-class contributes the most to the overall pre-primary enrolment, with 65% of the national pre-primary gross enrolment during this year only.

2.3.4 Access and Participation in Early Childhood Care and Education

The major challenges in Ethiopian ECCE are access, equity, and quality; this difference is more pronounced between urban and rural areas and from region to region (Woodhead, Ames, Vennam, Abebe, & Streuli, 2009b). According to the annual abstract report, ECCE's national gross enrolment rate growth has been very stagnant, with national gross enrolment increasing from 2.1% in 2000/1 to 5.3% in 2009/10. This is due to the government not financing preschool education and the absence of an independent body at the Ministry of Education responsible for pre-primary education (Tsegai, 2015). ECCE enrolment has increased steadily since 2010. MOE report showed that since the introduction of the ECCE Policy in 2010, there has been a marked improvement in the quality of ECCE services in the country; enrolment and uptake of ECCE have drastically increased; and generally, awareness about the need for supporting ECCE has been done and taken root in most of the country (MOE, 2020). Accordingly, the national gross enrolment ratio increased from 5.3% in 2009/10 to 45.9% in 2016/17 (MOE, 2018a).

As mentioned in the previous section, this increase is due to the improved reporting of O-class and child-to-child data in the year. Furthermore, at the end of ESDP V (2015/16 to 2019/20), the government set a target to achieve 80% in 2019/20 (MOE, 2021a). Various strategies have been implemented by the government to achieve these objectives. For instance, implementing feeding programmes, bringing schools closer to communities, advocating for free and compulsory pre-primary education in all areas established, creating satellite centres to accommodate children living far from school, training teachers and providing supervisory support. As a result, enrolment of pre-

primary education is increasing every year though underreporting which remains a persistent issue in kindergarten centres. However, the MOE report notes that ESDP V targets have been missed in both sexes and 45.4% of children are enrolled in ECCE across the country in 2019/20 (MOE, 2020). In 2020/21, nationally, 36.7% of children are enrolled in ECCE classes, a decrease of 6.5% from the previous year's result (MOE, 2021b). Except for a very slight improvement, the national gross enrolment rate continually decreases in subsequent years from 45.9% in 2015/16 to 36.7% in 2020/21 (MOE, 2021a). According to the MOE report, this is due to the absence of data from the Tigray region. Furthermore, recent findings by Kim, Hailu, Rose, Rossiter and Teferra (2022) showed that even after the massive expansion in pre-primary enrolment in Ethiopia, inequalities in access to pre-primary education remain. As indicated in their findings, there is a huge variation in enrolment growth and pre-primary coverage across regions and age-appropriate enrolment. Furthermore, they stated that:

> Only a small proportion of the target group of 6-year-old children attend preschool, with those from dis- advantaged areas less likely to do so, and under-age enrolment is common in some regions. The reform appears, therefore, to have benefited areas that are better resourced. However, the schools and the communities which are likely to need pre-primary education the most –and which the government has identified as a priority for the services –have lower rates of coverage of O-Class (Kim et al., 2022, p.111).

To this end, to evaluate the achievement attained thus far by the education system the Gross Enrolment Rate (GER), Net Enrolment Rate (NER) and Adjusted Enrolment Rates (ANER) have been calculated and presented using tables and associated charts. In ESDP V the target that is stated that needs to be reached is 80% GER by 2019/20. None of the regions has achieved this. At a national level, there needs to be a large increase in enrolment in the coming years for this target to be reached (MOE, 2016). The following table (Table 2.1) shows the national annual tracks progress towards ECCE access.

Table 2.1: ECCE Gross Enrolment, GER Region and Sex, Gross enrolment

Region	Gross enrolment			School-age			Ger%		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Afar	12,522	10,754	23,276	70,337	66,674	137,011	17.8	16.1	17.0
Amhara	354,666	338,088	692,754	840,208	805,220	1,645,428	42.2	42.0	42.1
Oromia	488,609	434,375	922,984	1,616,052	1,571,670	3,187,722	30.2	27.6	29.0
Somali	9,588	7,854	17,442	274,543	267,815	542,358	3.5	2.9	3.2

25

Benishagul-gumuz	14,105	12,390	26,495	46,626	44,877	91,503	30.3	27.6	29.0
Snnp	410,221	377,798	788,019	824,736	827,047	1,651,783	49.7	45.7	47.7
Gambella	11,624	10,718	22,342	16,842	16,329	33,171	69.0	65.6	67.4
Harari	5,629	5,118	10,747	8,524	8,156	16,680	66.0	62.8	64.4
Addis Abeba	104,455	99,137	203,592	108,996	108,136	217,132	95.8	91.7	93.8
Dire Dawa	6,779	5,994	12,773	15,058	14,521	29,579	45.0	41.3	43.2
Sidama	110,387	103,857	214,24	230,679	222,117	452,796	47.9	46.8	47.3
National	1,528,585	1,406,083	2,934,668	4,052,601	3,952,562	8,005,163	37.7	35.6	36.7

Source: Education Statistics Annual Abstract (MOE, 2021b, p.9)

As shown in the table (Table 2.1), regionally, Somali and Afar perform the worst, with GER of just 3.2% and 17% respectively, and this is also lower than their corresponding figure of last year. The table above indicates that the gross enrolment rate for ECCE in the Benishangul-Gumz and Oromia regions is very low, lower than the national gross enrolment rate. Addis Ababa showed commendable achievement, with a GER of 93%; though the result is lower compared to last year, which was 105.5%.

Moreover, the context of the ECCE in the Amhara regional state, which is the study site for this research, must be considered. As can be seen from Table 2.1., in 2019/20 the gross enrolment rate of ECCE in the Amhara region is below 50%. According to education statistics annual abstract data, for more than ten years i.e. from (1999/2000 to 2010/11 G.C) ECCE in Amhara is in a stagnant stage; the GER of ECCE was 2.2% (ANRS, 2013; MOE, 2001, 2013). Following the implementation of O-class modalities in 2004 E.C (2011/12), there has been a sizable increase in the gross enrolment and uptake of ECCE in the Amhara region. In 2011/12 the GER increased from 2.2% to 14.39% (MOE, 2013).

Furthermore, the GER of ECCE of Amhara increased from 28.9% to 42.5% in 2020/2021 and the majority of children in Ethiopia enrol in 'O' class modalities of pre-primary education (ANRS, 2013; MOE, 2021b). Despite this, the majority of children enrolled in ECCE at the national or regional level are not at their appropriate school age for the level, because there is a significant difference between GER and net enrolment rate (NER). In 2019/20, the ECCE NER results were far from the GER results, with 27.5% (26.7% Female and 28.3% Male). This implies that there is

26

a significant number of over-aged children enrolled at the ECCE level, though the result has increased from the previous year for both sexes.

There is a huge gap in their GER and NER showing that a significant number of over-aged children are attending their pre-primary level of education. Hence, the sector should give proper attention to narrowing the gap between GER and NER (MOE, 2020). In 2019/20 national NER are 37.5% and Amhara 40.5% (MOE, 2020). Recently, the Ministry of Education assessed the general status of ECCE and designed mechanisms to enable the country to meet the SDG goal of 2030. In ESDP VI, ECCE was legally defined as part of compulsory education for 5- and 6-year-olds. Every child aged 5 to 6 has access to free, safe, quality and developmentally appropriate pre-primary education to be ready for primary education. Accordingly, in ESDP VI the government set a target to increase the gross enrolment of ECCE from 41.8% in 2018/19 to 74.1% in 2024/25 (MOE, 2021a). Therefore, very recently regions have started to run preschool classes (commonly called zero-grade programs) within the primary school premises with the intent of mitigating the problem of access.

2.4   Conclusion

The purpose of this chapter was to provide the historical trajectory of ECCE in Ethiopia. It also highlighted current policy development and practices related to ECCE in Ethiopia. In addition, I tried to demonstrate what ECCE resembles in different regimes in Ethiopia. I have shown that although ECCE has a long history in Ethiopia, ECCE does not appear to be government's top priority. ECCE remained in the hands of private organizations, and these private providers operated mainly in towns or cities. This meant the continuation of unequal access and inequalities in rural areas. At policy level, there has been significant improvement since the development of the National Policy Framework for ECCE in 2010. However, I argue that despite policy development, ECCE remains inadequate.

27

CHAPTER THREE

LITERATURE REVIEW

3.1   Introduction

In the previous chapter (Chapter two), I provided the context of ECCE in Ethiopia focusing on the historical trajectory of ECCE in an Ethiopian context and highlighting the development of ECCE from a policy perspective. This chapter is devoted to the Literature Review. I start by introducing the conceptual map (see figure 3.1) containing all the constructs pertinent to my study and that guided how I approached the literature review. This is followed by a conceptualisation of two key terms, namely Early Childhood Education and Care (ECCE) and the notion of holistic development in the area of ECCE. I then dedicate a section to how young children learn drawing on the work of leading philosophes and theorists. Following this, I go into a discussion of the various elements captured in my conceptual map (Figure 3.1), to gain a deeper understanding of the myriad of issues surrounding ECCE.

3.2   A Conceptual Map

The following figure (Figure 3.1) illustrates a conceptual map of the interaction and interrelatedness of the theoretical constructs pertinent to my study in relation to the holistic development of young children.

28

Figure 3.1 Conceptual Map

Before offering a discussion on these constructs captured in the figure (Figure 3.1), I first turn to the conceptualisation of ECCE and the notion of holistic development.

3.2.1   A conceptualisation of Early Childhood Care and Education

The concept of Early Childhood Care and Education (ECCE) has different meanings in different contexts. For this reason, different terms are used to describe ECCE, including, Early Childhood Care and Development (ECCD), Early Childhood Development (ECD), Early Childhood Education (ECE), Early Childhood Education, Care and Development (ECECD), Early Childhood Education and Development (ECED), and other terms that nations use to refer to multi-sectoral and/or integrated approaches to early childhood systems and services. The widely used term 'Early Childhood Care and Education' arose out of the World Education Forum held in Dakar, Senegal in 2000 (Vargas-Barón, 2016).

29

ECCE has become an umbrella term that refers to a range of processes and mechanisms that sustain and nurture young children's overall development during the early years of life and prepare them for formal schooling and future academic success (Greenberg, Herman-Smith, Allen, & Fram, 2013). ECCE is usually defined as before the age of normal schooling, the period from birth to 8 years old, that encompasses forms of care and support of a family and community to promote children's healthy development (Vargas-Barón, 2016). It is also denoted as the formal teaching and care of young children by people other than their families or in settings outside of the home (Mohanty, 2014). As described in the previous chapter, in the Ethiopian context, ECCE refers to preschool-aged children 4-6+ years (MOE, 2010). The focus of this research was only on educational aspects which are delivered in public preschools (kindergarten, child-to-child and O-class). For this reason, pre-primary education and kindergarten will be used interchangeably in line with UNESCO.

3.2.2 Holistic Development of Young Children

Human development is integrated and interdependent. As a function of experiences, the brain and human capacities grow throughout the entire developmental continuum and across the developmental (cognitive, physical, emotional, spiritual, social, and cultural) dimensions in interactive ways (Darling-Hammond et al., 2020). In principle, holistic education is an eclectic and inclusive concept that encompasses a wide range of philosophical orientations and pedagogical practices; its focus is on wholeness, and it attempts to avoid excluding any significant aspects of the human experience (Mahmoudi, Jafari, Nasrabadi, & Liaghatdar, 2012; Pařízek, 2021). Furthermore, holistic education focuses on the relationship between the whole and the part and suggests that teaching and learning approaches need to be rooted in a larger vision (Mahmoudi et al., 2012). It aims to help every child reach their highest innate potential while focusing not only on the children and their autonomy and freedom, but also on wholeness, and interconnectedness with other people and the environment (Pařízek, 2021).

The challenge of holistic development for teachers is that an integrated and dynamic developmental system is optimally supported when all aspects of the educational environment support all of the dimensions of children's development (Darling-Hammond et al., 2020). An advantage of integrated systems is providing a continuum of learning and services for young

30

children (OECD, 2017a). To enhance young children's holistic development, the ECCE curriculum framework needs to include important learning areas by taking care of all the developmental needs of the young child (Mohanty, 2014). Parallel to this, to ensure the holistic development of young children particular attention must be given to parental and community involvement.

Recent findings show that a holistic approach must necessarily connect with family and community contexts by developing strong and respectful partnerships to understand and build on children's experiences and as needed, to strengthen any aspects of the developmental system where there are challenges to children's health and well-being (Darling-Hammond et al., 2020). Moreover, a holistic approach to ECCE requires policy implementation and programming that ensures that child rights to health, nutrition, cognitive and psychosocial development and protection are all met (Mohanty, 2014). Implementation of ECCE policy is an important driver for building ECCE systems that would enhance holistic development and foster quality in children's everyday interactions (OECD, 2021). Indeed, government commitment and policy direction have a positive step and need to be supported by several international studies, programme evaluations, and quality measurements that have repeatedly shown that they have positive effects on children's learning and development (OECD, 2017a).

A holistic approach would thus provide a system of support as needed for healthy development, and productive relationships, and to enhance the academic progress of young children. Darling-Hammond et al. (2020) noted that young children's holistic development develops within a complex system of contexts, interactions and relationships. To ensure young children's holistic development, ECCE policy, curriculum theory, teachers' training and competency, alignment of curriculum, pedagogy and assessment, appropriateness of physical environment and district, and parent and community involvement need to be integrated. Thus, the central implication of holistic development is that this integrated and dynamic developmental system is optimally supported when all aspects of the educational environment support all of the dimensions of children's development (Darling-Hammond et al., 2020).

3.2.3　Different philosophical perspectives on how young children develop and learn

Historically, ECCE has been informed by a number of philosophical and theoretical insights (Edwards, 2009; Whitebread, 2018). In order to understand the foundations of ECCE, it is imperative to look at the historical roots of how young children's development and learning were perceived by the pioneers, such as Rousseau, Pestalozzi, Froebel, Montessori, and Piaget because the contemporary theorists and approaches to ECCE have built on the work of these pioneering philosophers (Edwards, 2009).

Jean-Jacques Rousseau (1712–1778) was not an early childhood educator, but his ideas greatly influenced the field (Essa, 2014). In Rousseau's assumption, "children are innately noble, good, innocent, corrupted only by human society (Pound, 2011) and their way of learning is different from that of adults, and they should be removed from the corrupting influences of society to maintain this goodness" (Essa, 2014). Rousseau posits that teachers teach children in a protected natural environment through concrete experience, not from the abstract through trial and error experimentation (Essa, 2014). Children's unique nature, therefore, needs to be nurtured and protected by providing an appropriate environment in which their development can be maximized (Essa, 2014). Rousseau supports a child-centred approach and encourages teachers to develop a curriculum based on the stage of development of the child, not on adult-imposed criteria. Today, many early childhood teachers agree with Rousseau's notion that children have a unique nature that needs to be nurtured and protected, and they also recognize the need to provide an appropriate environment for young children, in which their development can be maximized (Essa, 2014).

Johann Pestalozzi (1746–1827) was another pioneering philosopher who worked with young children and was known for his powerful personality and his selfless and passionate dedication and commitment (Essa, 2014). Pestalozzi felt that "all people, even the poorest, had the right to an education as a way of helping them develop their moral and intellectual potential" (Essa, 2014, p.125). Unlike Rousseau whose work was essentially theoretical, Pestalozzi believed that learning for young children is intricately tied to concrete experiences and observation or children learn actively, from concrete experiences (Essa, 2014; Pound, 2011). Furthermore, Pestalozzi stressed the important role of the mother in children's earliest years (Essa, 2014). Pestalozzi's educational methods are still used today and emphasise the importance of recognizing individual differences

32

among children and the relevance of children's self-activity rather than rote as the basis of learning (Essa, 2014).

Friedrich Froebel (1782–1852) has been one of the greatest influences on early childhood education in the UK and beyond (Bruce, 2014). Froebel was known as the father of kindergarten and believed that all teaching was based on self-activity and highlighted the importance of both the natural and human-built environment (Pound, 2011; Roopnarine & Johnson, 2013). He used a planned curriculum that included "the Gifts and the occupations to enhance children's study of the forms of nature, the forms of beauty, and the forms of knowledge" (Roopnarine & Johnson, 2013), and much of the curriculum highlighted the learning of mathematical concepts and symbolic relationships through manipulative objects such as blocks, spheres, and cylinders (Lim & Genishi, 2010). In addition, Froebel's curriculum encouraged children to observe and explore objects collected from the natural environment (Lim & Genishi, 2010).

Froebel believed that the child's development occurs in a natural and unfolding process; in his assumption "the growing child could be compared to a blooming flower, which grows from a seed to the mature plant, with the teacher taking on the role of a gardener" (Edwards, 2009; Roopnarine & Johnson, 2013). This gave rise to his famous description of early education as being the 'kindergarten' or the 'children's garden (Edwards, 2009). For this reason, the role of teacher is to support and nurture children's growing developmental abilities (Edwards, 2009). As a pedagogical approach, Froebel placed great emphasis on the importance of play since he saw play as a pure and natural mode of learning through which children achieve harmony (Essa, 2014).

Maria Montessori (1870-1952) was an Italian medical doctor and educator (Isaacs, 2015). Montessori, working with slum children in Rome, developed a successful method of early education that is still widely followed today (Essa, 2014). Montessori believed that children develop in stages or planes and that each stage has its own unique qualities and characteristics (Isaacs, 2015). She identified sensitive periods as the times when children are most receptive to absorbing specific learning or skills than at other times when particular things could be learned most effectively (Susan Edwards, 2009b; Essa, 2014; Pound, 2011). She called this capacity the 'absorbent mind', analogous to a sponge soaking up liquid (Essa, 2014). Montessori felt that all children have a fundamental, inborn intellectual structure that unfolds gradually as they develop,

33

although individual differences are due to different environmental experiences (Essa, 2014). In the Montessori assumption, the environment, indoors and out, is carefully arranged so that children can choose from an appropriate range of structured learning materials (Pound, 2011). Montessori posits that the environment should be favourable to the development of the whole child, which would enable them to self-regulate their own learning and should offer opportunities for the development of the potential of each individual (Essa, 2014; Isaacs, 2015). Montessori used the term 'prepared environment' to describe the match of the right materials to children's stages of development (Essa, 2014). Children select structured apparatus from a range provided and are allowed to repeat the same experience time after time (Pound, 2011).

It is the role of the teacher to ensure that the environment provides for the developmental needs of each child (Isaacs, 2015). Montessori's curriculum focuses on daily living (cooking, gardening, dressing and cleaning); sensory education; language development; mathematics; and an exploration of the world which is designed to integrate mathematical, linguistic (talking, listening, reading and writing), sensory and daily living activities (Pound, 2011). Open-ended scheduling with large blocks, time for free work and play is part of Montessori curriculum (Mooney, 2013). Careful observation and reflection serve as the key tool for the identification of these developmental needs of children and curriculum planning (Mooney, 2013; Pound, 2011).

3.2.4   Contemporary Theories and Philosophies in Early Childhood Care and Education

Theories of child development serve as oncological and epistemological meta-narratives that provide a scientific basis for child-rearing, child-care, and health as well as foundational professional knowledge for policy and practice (Wood, 2020). During the 20th and 21st centuries, the early childhood curriculum was centred on developmental views to explain how children develop and how knowledge is acquired (Edwards, 2003). In particular, the cognitive constructivist view, which emerged from the work of Piaget and the sociocultural view, which emerged from Vygotsky, has had a dominant influence on the explanations of child development, the foundation of curriculum and pedagogy for young children (Babakr, Mohamedamin, & Kakamad, 2019; Edwards, 2003; Smith, 1993). Vygotsky's work framed this study theoretically and therefore I devoted more time to it in the next chapter. The following section provides a brief description of

Piaget's cognitive development theory and Developmentally Appropriate Practice (DAP), a curriculum framework that emerged from Piaget's theories on how young children learn.

3.2.4.1 The Cognitive Developmental Theory of Jean Piaget

Cognitive developmental theory was formulated by Jean Piaget and focuses on how children's intelligence and thinking abilities emerge through distinct stages (Essa, 2014). Piaget was among the most influential developmental psychologists of the twentieth century; he describes how children's thinking is unique in each of the four stages and develops in a series of periods or stages (Essa, 2014; Smith, 1993). Since the 1960s, Piaget's theory has been used as an underpinning knowledge base to explain how children learn and develop their thought processes (Babakr et al., 2019; Lim & Genishi, 2010; Smith, 1993; White & Coleman, 2000). Piaget's theory was rooted in Pestalozzi and Froebel's idea (Lim & Genishi, 2010).

Like his predecessors, "Piaget constructed universalist trajectories of human growth as dynamic, systematic, and irreversible processes" (Lim & Genishi, 2010, p.517). The basic tenets of the theory of Piaget are formulated in four axioms as follows, "(i) Intelligence is constructed based on action, (ii) action is the source of development, (iii) thought is a condensed form of action and (iv) cognition at all genetic levels is a product of real actions performed by the agent (subject) with objects" (Rubtsov, 2020, p.5). In other words, development is essentially an individualistic process and the child is viewed as an active but isolated scientist actively construct their own understand of the world through his/her existing cognitive structures and his/her interactions with the human and physical environment (Curtis & O'Hagan, 2014; Hockenbury et al., 2016; Smith, 1993).

Piaget viewed development as sequential and each period is dependent upon the previous stage (Smith, 1993). He identifies four distinct cognitive development stages that he believed every child goes through consecutively and these stages of growth are commonly divided into, (i) sensorimotor, (ii) preoperational, (iii) concrete and (iv) formal operational stages (Babakr et al., 2019; Hockenbury et al., 2016; Smith, 1993; White & Coleman, 2000). Each stage marks a shift in how they think and understand the world (Hockenbury et al., 2016). These stages were organized hierarchically from general to specific and biologically programmed to unfold at their respective ages (Hockenbury et al., 2016). Each of these stages is characterized by universality, invariant sequence, transformation and irreversibility, and gradual evolution (White & Coleman, 2000).

35

Piaget also believed that this progression of cognitive development is a continuous, gradual process and children in every culture, even in different environmental contexts progress through the same sequence of stages at roughly similar ages (Hockenbury et al., 2016). Only hereditary and environmental differences could influence the rate at which a given child progressed through the stages (Hockenbury et al., 2016). As a child advances to a new stage, thinking is qualitatively different from that of the previous stage or there is a fundamental shift in each new stage in how the child thinks and understands the world (Hockenbury et al., 2016). According to Wood (2020), the Piagetian 'ages and stages' conceptualization of cognitive development, focused on the developmental domains (physical, cognitive, socio-affective), and subject areas notably literacy, science and mathematics.

The assumption that there are clearly defined stages that each child will go through at approximately the same age leads to pre-service teacher education that includes the study of the stages of child development and early childhood settings commonly being grouped into areas or rooms based on age (Duhn & Hennessy, 2019). In Piaget's argument, the best strategy for the preschool curriculum is to keep children curious, make them wonder, and offer them real problem-solving challenges, rather than give them information (Mooney, 2013). A Piagetian theory is often the basis for a free play curriculum where children make the choices and do the activities with the teacher, but the teacher intervention is as little as possible, acting as a resource for the child rather than participating jointly (Smith, 1993).

Although Piaget's theory is well-known within the fields of psychology and education, it has nevertheless received enormous amounts of criticism (Akpan & Kennedy, 2020; Hockenbury et al., 2016; Mooney, 2013; Pound, 2011). Vygotsky criticized Piaget for ignoring the context of situations and the cultural and historical factors that he believed affected children's learning or cognition and thinking ability (Babakr et al., 2019; Curtis & O'Hagan, 2014). Piaget places too much emphasis on the maturation process of a child while overlooking or underestimating the impact of social interaction with teachers and peers (Akpan & Kennedy, 2020; Hockenbury et al., 2016; Mooney, 2013). In post-developmental critique, "the scientific methods used in Piaget's developmental psychology tend to describe domain-specific mechanisms and processes but do not explain the variations that lie in wider dimensions and intersections of diversities, such as cultures, ethnicities, languages, gender, disabilities, sexualities and social class" (Wood, 2020, p. 323).

36

Furthermore, many others have also criticized Piaget's theory for overestimating the cognitive abilities of adolescents and adults and underestimating infants' capacity, as it has been found that some children are able to perform concrete operations before the age of seven years (Akpan & Kennedy, 2020; Babakr et al., 2019; Hockenbury et al., 2016). As Akpan and Kennedy (2020, p.138) notes that "Piaget's theory also fails to recognize that children may have different bits of intelligence as per Gardner's theory of multiple intelligence because chronological ages do not always correspond to stages of development as defined by Piaget". However, others challenge that the work is not scientific research because much of Piaget's observation was done on his own three children (Mooney, 2013). Even though Piaget did not suggest specific educational applications of his work, teachers have transformed his theory into actual models more than any other. Then again Mueller & File (2020) noted that developmental theories are not useful in deciding what content ought to be included in an early childhood curriculum, but they do have profound implications for how instruction is conceptualized and enacted.

3.2.4.2 Developmentally Appropriate Practice (DAP)

DAP is another influential teaching and learning approach that emerged from the cognitive intellectual learning theories of Piaget that are used to frame early childhood care and education curriculum and learning experiences for children (Duhn & Hennessy, 2019; Edwards, 2003; Smith, 1996). The DAP concept was initially developed and mandated by the National Association for the Education of Young Children (NAEYC, 1987) (Gestwicki, 2017). In its original version, DAP had only two dimensions, i.e. age and individual appropriateness and did not consider the impact of culture on learning (Goldstein, 2008). In other words, DAP assumes universal predictable changes in children's development at particular ages and stages, regardless of context (Smith, 1996). In recent times, the NAEYC has revised and included culturally appropriate practices that draw on a broader theoretical base from Vygotskyan sociocultural theory, even though the revised DAP still includes three important pieces of information: age, individual, and social and cultural context (Duhn & Hennessy, 2019; McLachlan, Fleer, & Edwards, 2010a). In DAP, learning occurs through children's spontaneous discovery through their own self-directed play within a resource-rich environment and the teacher has little intervention (Smith, 1996). According to Goldstein (2008), the various dimensions of DAP, such as age appropriateness, individual appropriateness, sociocultural appropriateness, and socio-political appropriateness, interact with,

37

influence, and contradict each other in an almost infinite variety of ways. Goldstein (2008) further noted that there is no single correct response to the question of what curriculum content and which instructional practices are developmentally appropriate for an individual child.

DAP is a widely accepted curriculum framework as it provides a guidance framework for the early childhood profession for planning and implementing early childhood programs (Roopnarine & Johnson, 2013; Taylor et al., 2018). The basic assumption of DAP is that the early childhood curriculum needs to emerge from the children's interests, developmental capacities, personalities and individual needs (Mueller & File, 2020). In other words, DAP suggests that the curriculum needs to be responsive to the child's current level of skill and interests. DAP guidelines emphasized curriculum content subject matter disciplines such as language arts, mathematics, science, social studies, health and physical education, and arts and it also encourages child-centred approaches and child-initiated activity and teacher-supported play (Hyson, 2008; Mueller & File, 2020; White & Coleman, 2000).

For the most effective means of educating young children, DAP guidelines suggest that learning experiences need to be appropriate for children's developmental abilities and must meet the developmental expectations that have been identified as occurring in relation to children's ages and stages of development (Duhn & Hennessy, 2019; Edwards, 2003; McLachlan et al., 2010a; White & Coleman, 2000). The idea of developmental appropriateness, therefore, assumes that learning experiences for children should be designed according to their appropriate stage of development.

From the DAP perspective, the teacher has little intervention since the primary role of the teacher is to guide, facilitate, demonstrate, collaborate, and expand children's involvement with materials and equipment by providing directions or labels, asking questions, pointing out opportunities for new discoveries, noting possible play options, and guiding children's observations (Smith, 1996; Mueller & File, 2020; White & Coleman, 2000). Teachers are explicitly encouraged to take into account gender, culture, disabilities, social-economic factors, family factors, and any other important elements to meet the developmental and learning needs of a child (Duhn & Hennessy, 2019). The role of children is thus to act as explorers and discoverers because, in DAP, learning occurs through children discovering the world spontaneously through their own self-directed play

within a resource-rich environment (Mueller & File, 2020). In this section, I offered a discussion around the philosophies and theories on how young children learn. What follows is a discussion of the key components that impact the holistic development of the child as captured in figure 3.1

3.2.5 Early Childhood Education Curriculum, Pedagogy and Assessment

3.2.5.1 Early Childhood Education and the Curriculum

Various scholars noted that curriculum is a complex and highly contested field of study. Definitions of the curriculum vary, and the meaning of curriculum has been debated and transformed over time (Hedges, Cullen, & Jordan, 2011; Pugach, Blanton, Mickelson, & Boveda, 2020). A curriculum may refer to a system, as in a national curriculum; an institution, as in the school curriculum; or even to an individual school, as in the school geography curriculum (Scott, 2008). According to Lim and Genishi (2010, p.514), the term curriculum refers largely to "planned approaches to teaching and learning that are guided by theoretical and philosophical beliefs about the nature of learners and about the kinds of knowledge(s) that should be taught". In this way of thinking a curriculum contains specific content knowledge, objectives and goals, teaching procedures, and assessment strategies. From another perspective, the curriculum is less planned and seen as developing through interaction between teacher and students (Lim & Genishi, 2010).

In the field of ECCE, curriculum refers to the contents and methods that substantiate children's learning and development (OECD, 2012a). Early childhood education curriculum can be broadly defined as a set of experiences that can occur in almost any setting in which children happen to be engaged in an activity and curriculum experience includes the physical setting, the materials, the specific content, and the social and physical interaction (Gullo, 2005). In another context, it is not limited to a classroom in the formal sense of the word; it is a complex field of interrelationships between teachers and children, content and pedagogical practices, and what takes place in early learning sites and larger social contexts (Mueller & File, 2020). Nevertheless, contemporary research shows that there is little agreement internationally as to the nature and goals of early years curricula and fervent debate continues about the kinds of curricula, pedagogy and outcomes desirable of early childhood education (Hedges et al., 2011; Hedges & Cooper, 2014; Wood & Hedges, 2016). In addition, ECCE is characterised by multiple, sometimes opposing or overlapping images of the child as a learner. Some view the child as an organism unfolding over

39

time or as a scientific subject or creative player or an active thinker or a relational and cultural agent. These varied images of children have shaped curricular models for young children in different ways (Lim & Genishi, 2010). Indeed, identifying specific elements of the curriculum based on what experts claim to be important knowledge in their disciplines is the first important step in setting up a teaching programme (Hatch, 2010). The message from this is clear that real content is important in the early childhood curriculum (Hatch, 2010). Curriculum frameworks set the principles, standards, guidelines and approaches that teachers could use to foster children's development, learning and well-being (OECD, 2021). It also outlines the strategies and techniques implemented by teachers to provide opportunities for young children's development within a particular social and material context (OECD, 2021). Therefore, learning should be the stuff of early education, curriculum content should be the focus of what children learn and teachers should use as many teaching strategies as necessary to maximize every child's opportunity to learn (Hatch, 2010).

In the area of early childhood education, there is a wide range of curricular approaches and models that are guided by different philosophical viewpoints and models; nevertheless, contemporary research supports an integrated curriculum approach. For the holistic development of all children, an integrated curriculum framework occupies a significant place in children's learning environments throughout their schooling. Thus, an integrated curriculum framework needs to address important learning areas by taking care of all the developmental needs of the young child. The concept of integration comes from the integrated nature of development; that is, what happens in one domain of development, such as cognitive growth, also influences the domains of physical and emotional development (White & Coleman, 2000). It also facilitates the adoption of a common pedagogical approach to accomplish the programme (Mohanty, 2014). Hence, the call for an integrated curriculum recognises the importance of all aspects of development: social, emotional, physical, cognitive, language, and creative development rather than focusing primarily on cognitive or single development (Essa, 2014). In essence, appropriate curriculum frameworks support process quality through several mechanisms, including their content, routines, activities, resources, and encouragement of interactions. Articulating a curriculum framework and its links to pedagogy are important policy strategies for enhancing quality in ECCE (OECD, 2021).

40

3.2.5.2 Early Childhood Education and Pedagogical Approaches

Curriculum and pedagogy are powerful tools to shape interactions within ECCE settings. The former sets the principles and goals that ECCE teachers use to foster children's development, learning and well-being, while the latter refers to the strategies and techniques implemented by teachers to offer these opportunities as well as for the smooth accomplishment of the curriculum programme (OECD, 2021; Mohanty, 2014). Thus, the implementation of curriculum frameworks is tightly linked with pedagogy, which denotes the foundation of a curricular approach (OECD, 2021).

Pedagogy is a set of instructional techniques and strategies which enable learning to take place and provide opportunities for the acquisition of knowledge, skills, attitudes and dispositions within a particular social and material context (Siraj-Blatchford et al., 2002). It encompasses both what teachers DO and THINK and the principles, theories, perceptions and challenges that inform and shape it (Moyles, Adams, & Musgrove, 2002). A pedagogical or educational approach is used to explain the roles of the teachers, the materials and space, pedagogical practices, and in some cases, the learning objectives (Stephanie Wall, 2015). Furthermore, Moyles et al. (2002) noted that young children's capacities are shaped by the quality and the nature of the pedagogical interactions between ECCE teachers and children, as well as interactions between peers, and their environment.

In contemporary early childhood education, many curriculum models have drawn on the learner-centred and developmentally appropriate approach, with an emphasis on play-based learning and many, have used constructivist theories of learning, drawing on Piaget's theories of how children learn through active participation (McLachlan et al., 2010a; Stephanie Wall, 2015). Even though Developmentally Appropriate Practice (DAP) has a positive impact on children's ability to initiate and maintain interpersonal relations and, in the long term, on children's motivation and interest in learning, yet has no direct effects on academic outcomes (Stephanie Wall, 2015). Piaget's theory proposed that children are active learners, and their interaction with the physical world provides the main constraints on and contributions to the development of their intelligence. Children learn and construct meaning as they act upon objects in space and time (McLachlan et al., 2010a). In a child-initiated approach, the role of the teacher is to observe children and set up environments to support learning (McLachlan et al., 2010a). On the other hand, from a sociocultural perspective

41

instruction was viewed as the driving force of development (Daniels, 2001). It creates opportunities for the individual to master new psychological tools (true concepts) (Johnson, 2009). It recognizes the inherent connections between teaching, learning, and development. Instruction may best be characterized as integrating a student-centred approach with deliberate teaching (Johnson, 2009). For Mueller & File (2020)

> If Vygotsky's notion that learning leads development were taken seriously, then "appropriate" classrooms would look and operate differently than those based primarily on Piagetian principles. Teacher and student roles would be constructed in new ways, and the curriculum and instruction experienced by students would be different than are prescribed in the current early childhood literature (Mueller & File, 2020, p.56).

A sociocultural perspective offers an alternative to both the traditional teacher-centred view of teaching and the unstructured child-centred discovery view of teaching.

For Vygotsky, pedagogies arise and are shaped in particular social circumstances that children do not develop in isolation, rather that learning takes place when the child is interacting with the social environment (Daniels, 2001). Adopting a sociocultural perspective on learning means being concerned with the influence of the contexts in which children learn, how learning varies with social and cultural experiences and how adults, other children, tools and resources support and shape learning (Stephen, 2010). Moreover, the focus of attention, from a sociocultural perspective, is not on the teacher or the students, or both, but on the character and quality of the activities they are engaged in together, the resources they are using to engage in those activities, and what is being accomplished by engaging in those activities (Daniels, 2001). It is the responsibility of the teacher to establish an interactive instructional situation in the classroom, where the child is an active learner and the teacher uses their knowledge to guide learning (Daniels, 2001). Hence, from a sociocultural perspective, the role of a teacher is now much more demanding than merely being a guide.

3.2.5.3 Pedagogical Approach from Sociocultural Perspectives

According to Eun (2010), sociocultural-based instructional principles have the potential to inform practice. The author has identified three general instructional themes that inform the practical implications of sociocultural theories. The first theme relates to the importance of home–school connections; the second is sociocultural views of instruction interactive, collaborative, dynamic,

42

and dialogical nature of teaching and learning, and the third is sociocultural-oriented instruction which viewed teaching and learning as a process, rather than a product (Eun, 2010). Based on these general sociocultural themes, Eun (2010) identifies eight instructional principles. It is not the aim of this study to present all pedagogical approaches. However, the main constructs are presented as follows.

a) Mediated instruction

For Vygotsky, the essential mechanism in the formation of higher mental functions is the process of internalization, and mediation is the basic mechanism through which all higher psychological functions develop (Kozulin et al., 2003). Therefore, instruction that aims to develop higher psychological functions should be built around the process of mediation (Eun, 2010). Psychological functions and mediating means are emerging from the child's social interaction with adults, peers, and objects, but before these functions become an integral part of the personality, they manifest themselves in the "outer" world as interaction between the child and the people around him or her (Kozulin et al., 2003). Initially, they emerge in the social context and are gradually absorbed and transformed inwardly (Kozulin et al., 2003).

b) Collaborative instruction

The central tenet of sociocultural theory is that knowledge is co-constructed and internalized through guided participation in a range of joint activities (Zhang et al., 2017). The creation of a learning environment can be conceived of as a shared problem space, inviting the students to participate in a process of negotiation and co-construction of knowledge (Kozulin et al., 2003) rather than an established piece of fact that is transmitted from one person to another (Eun, 2010). The assumption is that all knowledge and ability arise in social activity, all learning is co-constructed, and nothing is ever gained by taking the interactional dimension out of the equation (Walqui, 2006). Collaborative instruction creates an opportunity for guided participation in which a more experienced child or teacher provides support for the success of the less experienced child in a particular task (John-Steiner & Mahn, 1996a). In collaborative instruction, mutual respect is the dominant norm for negotiating beliefs, values, and knowledge among all participants, including teachers and competition would be devalued (Eun, 2010). One way to realize collaborative instruction is to rely on diverse types of group work that involve all participants by taking turns in

43

taking on various roles (e.g., monitoring group progress, evaluator of the final product, etc.) as they progress from one group project to another (Eun, 2010).

c) *Discursive instruction/ instructional communication*

Language arises initially as a means of communication between the child and the people in his environment (Vygotsky, 1978a). The basic unit of language is conversational interaction, not sentence structure or grammatical pattern (Walqui, 2006). Communication is how all participants engage in the instructional process to negotiate and generate knowledge through collaborative dialogue, problem-solving, reasoning, and logical thinking (Eun, 2010). Teachers should, therefore, engage in extensive dialogues with their students both as a group as well as on individual bases (Eun, 2010). It was in communication that social understanding was made available for individual understanding (Daniels, 2001). Communication about words within schooling leads to the development of scientific concepts by the individual (Daniels, 2001).

d) *Contextualized instruction*

Situated learning is primarily a socio-cultural process (Zhang et al., 2017). Sociocultural perspectives encourage early childhood professionals to examine context as well as the children's zones of proximal development when making judgments about children and when planning for learning (McLachlan et al., 2010a). Home-school connection or making the connection between students' experiences outside the school and school learning is very important because informal learning outside of the school helps children to interact with the real world, these knowledge and skills should provide a foundation for what is learned in the schools (Eun, 2010). Children's potential for learning depends both on their existing knowledge and their capacity to learn (Murphy, 1996) and learning will be most effective when built on students' existing background knowledge of the children (Eun, 2010). For this reason, learning in school should be contextualized within what the students already know and are able to do (Eun, 2010). Contextualized instruction captures the unity between the child and their social and material environment (Fleer, 2015a). Instead of a universal view of ages and stages or milestones that children pass through, Vygotsky's theory of child development invites us to think in a localized and more specific way about children's development, who they are, what they bring and how they relate to and experience their social and material environment (Fleer, 2015a).

44

*e) **Responsive instruction***

Responsive instruction is grounded in the sociocultural theory of Vygotsky. Culturally responsive instruction is when teaching approaches build upon the strengths that students bring from their home cultures, instead of ignoring these strengths or requiring that students learn through approaches that conflict with their cultural values (Eun, 2010). It maintains the interdependence between all aspects of development, more specifically, it addresses the issue that cognitive and affective developments are intricately tied and complexly related (Eun, 2010).

*f) **Integrated instruction***

Sociocultural theory fundamentally rests on the notion of an integrated system of teaching (Smith, 1996). Vygotsky viewed development to occur not through the individual development of specific functions or domains, but through the change in the systemic interrelationships among the diverse functions or domains. Therefore, learning needs to be integrative by combining diverse school learning domains and by addressing real-life tasks and must take into account that development is based on a balanced integration of various psychological and physiological processes (Eun, 2010).

*g) **Developmental instruction***

Vygotsky suggests that children's participation in cultural experiences promotes learning and leads to development (McLachlan et al., 2010a). Through participation in the cultural community, children carry forward the cultural knowledge they have acquired, but also transform this knowledge and use it in new ways within the community for themselves and others (McLachlan et al., 2010a). Grounding educational practices within real-life activities also relate to the principle of developmental instruction and developmental instruction focuses on cultivating knowledge and skills that learners may generalize to any situations that require similar intellectual functioning (Eun, 2010).

*h) **Activity-oriented instruction***

Learning is most effective when it is situated in the concrete social and physical environment of children and when they have abundant opportunities to apply their knowledge and skills to solve

45

real-life problems (Eun, 2010). Throughout the past century, increasingly developmental theories of Piaget's have been used to describe the early childhood care and education curriculum and pedagogy. There is now a growing recognition of the importance of sociocultural theory as an alternative framework for early childhood care and education curriculum and pedagogy. In sum, sociocultural informed instruction has the potential to shed light on the path to improving instruction for all children by providing a more comprehensive picture of human development that takes into account a system of interrelated factors (Eun, 2010). In addition, there is a wide range of pedagogical approaches. Therefore, early childhood teachers should make an informed selection from the range of pedagogic techniques that have been developed and tested within the various early childhood education programs that are most appropriate for their particular needs and context (Mortimore, 1999). Having reviewed the pedagogic issues in early years' education, I will now review early childhood care and education assessment strategies.

3.2.6 Assessment in Early Childhood Care and Education

Education is at its best when there is an alignment and coherence between curriculum, pedagogy and assessment. Putting curriculum, instruction, and assessment into an interlocking bundle makes sense for teachers' instruction and children's learning (Hatch, 2010). In ECCE assessment plays an important role by providing baseline data about the knowledge, understanding, skills, interests, and dispositions of children that can be used by teachers to develop curricula and design future instruction (Nah & Kwak, 2011). However, the assessment of young children poses greater challenges than people generally realise because the course of development is uneven and sporadic (Bowman et al., 2001). Similarly, Vygotsky (1987) posits that it is very difficult to make judgments about children's learning and development because development is always in a state of change i.e. not static (McLachlan et al., 2010a). Thus, assessment procedures must be used intelligently and with care. In addition, each assessment needs to be used in the way in which it was designed and intended (Bowman et al., 2001). However, many researchers commonly share that: assessment is a process; it is used as a tool for decision-making; it can be applied to an individual or a group of children; and assessment results are used for placement, programme planning and evaluation, and monitoring trends (Gullo, 2005; Haywood & Lidz, 2007). In particular, in ECCE, assessment is used to gain an understanding of a child's overall development, to understand individual children's developmental progress or to report progress (how the child has developed and what has been

46

learned), to identify those who are at risk for academic failure or are potentially in need of special education services, to plan instructional programme (effectiveness of instructional strategies) and for programme accountability (Gullo, 2005; Wortham, 2014). In other words, the purpose of assessment can be seen as a method for feeding into the teaching process, improving the teaching itself, and provoking a rethinking of pedagogies and a re-evaluation of teaching practices (Arndt & Tesar, 2015). Furthermore, assessments should have a meaningful purpose and need to be related to the child's development and learning, as well as be meaningful to parents and other adults who need to understand the child's profile of progress and learning needs. The assessment process should include the child and the child's parents if the process is to be the most comprehensive and informative (Wortham, 2014).

Just as there are different purposes for assessment, there are many different types of assessments (Bowman et al., 2001). Assessments can be either formal or informal; formal assessment includes, academic readiness tests, developmental screening tests, and diagnostic tests, most of which are traditional standardized tests whereas informal assessment contains direct observation, interviews, questionnaires, performance assessment, portfolio assessment, developmental or academic rating scales and checklists, and anecdotal records. Informal assessments will yield information that the teacher can use to design, implement or modify curriculum activities on the way to mastery to meet individual children's needs or to group children for more effective instruction, give more meaning to children's performance and can suggest concrete ways to modify curriculum for effective instruction (Gullo, 2005).

On the other hand, the traditional standardized tests were constructed and produced within a positivist and objective paradigm, aimed at making 'true', 'objective' rankings of results and knowledge, removing factors that might influence the variables and outcomes, and highlighting the child's abilities, skills, and areas for improvement (Arndt & Tesar, 2015). Standardized tests are those that allow one to compare the performance of an individual child with that of their peers or identify their competence to complete the assessment task based on factors of ability, understanding, and contextual influences (Gullo, 2005; McLachlan et al., 2010a). The traditional standardized test score is nothing more than a snapshot of a child's ability; it reflects a given point in time and represents only one aspect of the child's performance and it also misrepresents children's learning (Bowman et al., 2001; Gullo, 2005).

47

As mentioned earlier this study was framed in the sociocultural theory of Vygotsky thus, early childhood care and education learning and assessment were viewed through the lenses of sociocultural perspectives. From a sociocultural perspective, the ultimate goal of assessment is to identify emerging or maturing functions that lead to the next level of development, rather than already developed mental functions (Haywood & Lidz, 2007). Vygotsky (1987) argued that traditional approaches to assessment always measured what had passed (Fleer, 2015b) or offered information about "yesterday's" functioning and provide limited information that is useful for planning for the future (Kozulin et al., 2003). For this reason, Vygotsky criticized assessment approaches that measured what a learner was able to accomplish independently (Davin, Herazo, & Sagre, 2017).

Vygotsky argued that the maturing functions are the source of changes in the internal structure of a given age period and assessment procedures should be aimed at identifying the current status of these maturing functions because these functions are inadequate for independent performance. It is necessary to identify them through dynamic, interactive procedures that provide indications for estimating the extent of their development (Kozulin et al., 2003). From this perspective, Dynamic Assessment (DA) emerged as a way to diagnose learners' maturing psychological functions (i.e. their zone of proximal development), such as voluntary attention, problem-solving capacity, and logical thinking (Davin et al., 2017).

In essence, DA emerged as a means of assessing learning potential, the capacity to learn more effectively than either was evidenced by present performance or predicted by standardized tests of intelligence (Haywood & Lidz, 2007). Instead of studying the child's individual performance, DA focuses on the difference between performance before and after the learning or assistance phase and it bridges the "yesterday" of learners with their potential for tomorrow (Kozulin et al., 2003). This means that dynamic assessment is an interactive procedure that follows a test-intervene-retest format focusing on the cognitive processes and metacognitive characteristics of a child (Gullo, 2005; Haywood & Lidz, 2007; Kozulin et al., 2003). Furthermore, dynamic assessment procedures focus on the processes rather than the products of learning (Kozulin et al., 2003) and it destroys the normative value of standardized tests that focus on the product of learning (Haywood & Lidz, 2007). According to Haywood & Lidz, (2007, p.329) "it is more applicable when (i) standardized scores lead to pessimistic predictions; (ii) learning appears to be artificially constrained; (iii)

48

language and/or cultural issues may restrict performance; (iv) classification is not a primary issue in the assessment". Hence, dynamic assessment is a form of alternative assessment that can be combined with other forms of assessment (Gullo, 2005). Similarly, it can provide information that is not readily available through standardized testing which is crucial for effective remediation (Kozulin et al., 2003).

In DA assessment, the children are directly engaged in the learning process by using mediated learning experiences; a mediated learning experience is an interaction that takes place between an assessor and a child; the assessor mediates the environment to the child through appropriate framing, selecting, focusing, and feeding back to the child the experiences that the child is having (Gullo, 2005). The interaction between the child and adult or teacher creates a zone of proximal development.

In Vygotsky's conceptualization of assessment, the Zone of Proximal Development (ZPD) is one of the most useful aspects of Vygotsky's theory in the dynamic assessment approach (Gullo, 2005) because the concept of ZPD nicely captured future performance (Fleer, 2015b). In the 'space' where the evolving psychological functions of a child emerge during the process of joint or shared activities with a more competent partner, and where "everyday" concepts shift to "scientific" concepts, ZPD has practical implications in the two educational domains of assessment and instruction (Kozulin et al., 2003). Hence, the notion of ZPD gives three important insights into the issue of dynamic assessing:

> It focuses our attention on those 1) psychological functions of the child that are emerging but have not yet fully developed; 2) ZPD introduces assisted performance as a legitimate parameter of assessment procedure; and 3) ZPD aids in conceptualizing the gap between the child's actual performance and his or her learning potential (Kozulin et al., 2003).

I will return to Vygotsky's notion of ZPD in the next chapter. Essentially, dynamic assessment focuses on learning processes, cognitive modifiability, responsiveness to an adult's mediation, and amenability to instructions and guidance, which are particularly suited for individuals who require individualized learning experiences, such as children with special needs and learners with atypical educational backgrounds (Kozulin et al., 2003). Dynamic assessment attempts to diagnose abilities that are fully matured as well as those that are still in the process of maturing. or so far into the learner's frustration level that it does not build on the current knowledge base and creates problems

49

with motivation and perseverance (Kozulin et al., 2003). The most important aspect of assessment lies in linking it to curriculum and pedagogy to ensure children's holistic development and to provide opportunities to develop their maximum potential, as well as to help develop their emerging skills.

3.2.7 Teacher Training and Professional Development

3.2.7.1 Early Childhood Care and Education (ECCE) and teachers' training

Preservice (initial) teacher preparation and continued professional development are key building blocks in developing effective teachers and implementing curriculum frameworks (Darling-Hammond, 2017; OECD, 2021). Similarly, Kutluca (2021) noted that the implementation of the curriculum is tightly linked with teachers' training and professional development. However, teachers' training requirements may differ in different countries and have different standards that might range from certificate preservice training up to a bachelor's degree or higher. The most important qualifier of effective teaching is the pedagogical content knowledge (PCK) that each teacher is expected to have (Kutluca, 2021). In this respect, Shulman (1987) categorised teacher knowledge into seven themes: (i) content knowledge; (ii) general pedagogical knowledge, with special reference to those broad principles and strategies of classroom management and organization; (iii) curriculum knowledge, with a particular grasp of materials and programs that serve as a tool of the trade for teachers; (iv) pedagogical content knowledge, that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding; (v) knowledge of the learner and their characteristics; (vi) knowledge of educational contexts and (vii) knowledge of educational ends, purpose, and values and their professional and historical grounds.

As noted by Shulman (1987) among these categories pedagogical content knowledge is of special interest because it identifies the distinctive bodies of knowledge for teaching. Shulman (1987, p.8) noted that "pedagogical content knowledge represents the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented and adapted to the diverse interest and abilities of learners, and presented for instruction". Following, Lantolf and Poehner's (2014) pedagogical content knowledge concerns not merely knowledge of one's discipline but comprises an understanding of how important concepts and principles in a

50

discipline may be sequenced logically and be represented by models and charts, as well as how classroom tasks and dialogic interaction may be enlisted to support learner engagement with the material. Curriculum and pedagogy both have a direct effect on children's experiences and interactions in ECCE, are important drivers of process quality, and need to be embedded in staff's initial education and training and professional development (OECD, 2021). As such, there is a need that hinges a great deal on teachers' pedagogical content knowledge in their preservice training.

Conversely, ECCE teachers need to have a range of competencies to create conducive learning conditions for children (Sheridana, Williamsa, Sandbergb, & Vuorinenb, 2011). Preschool teacher competence is constituted in the intersection of values, knowledge and ideologies on different system levels and is composed of three categories: (i) competence of knowing what and why, (ii) competence of know-how, and (iii) interactive; relational and transactional competence (Sheridana et al., 2011). On the contrary, Lillvist et al. (2014) note that preschool teacher competence was composed of six different dimensions including general pedagogical competence, specific content competence, distinct teacher competence, play competence, the competence of child perspective, and collaborative and social competence. The latter describes teachers' competence in collaboration and involvement with parents, management and other professionals (Lillvist et al., 2014).

There may be different preschool teachers' competencies, however, there is a need to create a shared understanding of the meaning of teacher competence. In so doing, teachers' training colleagues have an important task in giving the theoretical base and competencies needed. In line with this, Novianti and Febrialismanto (2020) suggests that teachers should keep on learning and practising to enhance their knowledge of the curriculum. This implies that training alone is insufficient and that ongoing support efforts are necessary to transfer knowledge and skills to practice.

3.2.7.2 ECCE Teacher In-service Professional Development

Teachers' learning does not end when they graduate from university or leave preservice preparation; in many ways, the most powerful learning begins when teachers begin their first classroom assignments (Darling-Hammond, 2017). In addition, the current policy context

51

challenges early childhood teachers to have a nuanced understanding of child development to provide rich, meaningful educational experiences for all children and families in their care (Sheridan et al., 2009). Moreover, technological advances are accelerating rapidly in some areas and one can become professionally obsolete in a matter of months (Guskey & Guskey, 1991). Therefore, to remain optimally effective and to improve the learning of children, teachers must regularly engage in in-service professional development.

According to Guskey (2000), professional development is characterised as an intentional, ongoing and systematic process. It is intentional because professional development has a clear statement of purpose and goal; the goals are worthwhile and the goals can be assessed (Guskey, 2000). It is an ongoing process, meaning that for effective learning environment teachers at all levels must be continuous learners throughout the entire span of their professional careers (Guskey, 2000). Similarly, researchers noted that effective in-service training must be intensive, cohesive and continuous, with opportunities to apply knowledge and receive individualised feedback and mentoring to support improved teaching practices and positive children outcomes (Bowman et al., 2001; Hong, Torquati, & Molfese, 2013). However, viewing professional development as a one-time event that takes place three or four days out of the school year severely limits teachers' opportunities to learn (Guskey, 2000).

Professional development is systematic and is not seen only as an individual process of professional advancement, but also as a process that changes the culture of the institution of early childhood education and includes all participants in the educational process (Guskey, 2000; Vujičić & Tambolaš, 2017). The reason for this is that, without a systematic approach, organizational variables can hinder or prevent the success of improvement efforts, even if the individual aspects of professional development are done correctly (Guskey, 2000). In-service training is a strong network of customs, rules, norms and behaviours that influences the daily lives and work of all its individuals (Vujičić & Tambolaš, 2017). As a result, clear objectives and intensive and continuous opportunities with a systematic approach to professional development are required.

3.2.7.3 Models of Professional Development

Researchers (Eun, 2018; Guskey, 2000), have identified six major professional development models: training, observation/assessment, involvement in a development/improvement process, study groups, inquiry/ action research, individually guided activities and mentoring. Each of these professional development models differs in their assumptions, expectations, and beliefs about teachers' professional growth (Guskey, 2000). The definition and discerption offered by Eun, (2018) and Guskey (2000) are presented as follows.

- The training model is most widely used and typically involves, large group presentations and discussions, workshops, seminars, colloquia, demonstrations, role-playing, simulations and micro-teaching all fall within this model of professional development (Eun, 2018). The training model is the most efficient and cost-effective for reaching a large number of participants in a single session (Eun, 2011, 2018; Guskey, 2000). However, it offers few opportunities for individualisation and lacks follow-up support (Eun, 2011, 2018). Therefore, for the successful implementation of new ideas, the training session needs to be extended, appropriately spaced, or supplemented with additional follow-up activities to provide feedback and coaching (Guskey, 2000).

- The observation/assessment model of professional development benefits both the observer and the observed (Eun, 2011); the observer gains professional experience from closely monitoring and watching the teaching experience of a colleague, whereas the observed teacher, gains new insights and receives immediate feedback and suggestions for improvement from his/her colleague (Eun, 2008, 2011, 2018; Guskey, 2000). In line with this, Eun (2011) noted that close attention has to be paid to the competency levels of the teachers involved. But, time coordination may be difficult when the teachers have conflicting schedules (Eun, 2008). In order to accommodate the need of the other, both the observer and the one being observed must be committed to the time and willing to coordinate their schedule (Guskey, 2000).

- Involvement in a development or improvement process and study group models usually address common problems at a level broader than the classroom (e.g. school or district level) and all interested teachers could get together to form study groups to jointly find a

53

solution (Eun, 2011, 2018). These models usually begin with the identification of a problem that concerns all of the participants (Eun, 2018). It also provides teachers with a chance to gain new knowledge and skills as well as opportunities to find solutions to common problems through collaboration with peers by conducting research or engaging in discussions (Eun, 2008). Teachers could also engage in involvement in a process model to collaboratively seek ways to address their current needs and interests (Eun, 2011). One of the limitations of this model is the nature of group dynamics because it could favour certain participants over others so that decisions may be made based on persuasive opinions rather than grounded in firm research (Eun, 2011, 2018). Thus, to be effective, it should be structured, organized, and managed carefully (Eun, 2018).

- Inquiry or action research and individually guided activities are models of professional development that concern the immediate problems encountered in the classrooms (Eun, 2011). Individually guided activities models of professional development are more likely to be employed at the individual level (although inquiry/action research may involve groups as well) and be carried out either collaboratively or individually (Eun, 2008, 2011). Inquiry/action research and individually guided activities begin by identifying a problem that is of immediate concern for an individual teacher's practices (Eun, 2018). The main difference between the two individual-level models is that inquiry/action research typically begins by identifying a problem or question, whereas individually guided activities usually start with the identification of a need or interest (Eun, 2008).

- Individually guided activity models are flexible and provide an excellent format for self-initiated and self-directed learning, which in turn helps them to become reflective professionals and make thoughtful decisions (Eun, 2018; Guskey, 2000). It also allows teachers to choose their own professional development goals, become more reflective of their teaching practices and continuously analyse them for further improvement as well as to enhance teachers' perceived efficacy (Eun, 2018). However, unless specific opportunities for collegial exchange are built into professional development plans, the notions of a shared mission and united purpose may also be lost as well as there may be little collaboration or professional sharing (Eun, 2018). As a result, steps also must be taken to ensure that the individual goals chosen are sufficiently challenging, worthwhile, and

54

related to specific improvements in professional practice and enhanced student learning (Guskey, 2000).

- Observation or assessment and mentoring are two models of professional development that rely on pairing two teachers to work together on various areas of classroom practices (e.g., instruction, assessment, classroom management) (Eun, 2018). Peer coaching and clinical supervision fall within this model, which involves pairing highly experienced and successful teachers and less experienced or beginning teachers (Eun, 2008, 2011; Guskey, 2000).

From these professional development models suggested by Eun (2011) one gets an idea of what could work and in which context. Teachers seldom see the value of attending courses to improve their own teaching. Eun (2011) provides six professional development principles for the effective implementation of professional development. These principles are grounded in Vygotsky's socio-cultural theory. These include (i) providing teachers with culturally relevant resources (equipping teachers with the 'cultural tools'), (ii) establishing collaboration and communication among teachers, collaborative network that brings teachers together to share not only their intellectual challenges and resolutions but also emotional struggles and coping strategies, (iii) provide continuous follow-up support, (iv) focusing on development, (v) integrating research, theory and practice in designing and implementing professional development and (vi) combining various models of professional development and using them in conjunction with one another (Eun, 2011).

In essence, professional development must be clear, consistent, intentional, ongoing and systematic and appear to be integral to the process of improving results (Guskey, 2000). It needs to be intensive and cohesive and include ongoing support in the form of mentoring or coaching as teachers apply and reflect upon their learning in the classroom context (Hong et al., 2013). To provide a highly effective means of professional growth and improvement, different models need to be combined in thoughtful ways at both the individual and organizational levels.

3.2.8 School, Family, and Community Partnerships

"Just about all teachers and administrators would like to involve families, but many do not know how to go about it" (Epstein, 2010, p.82).

Research (Larocque, Kleiman, & Darling, 2011; Epstein, 2011), recognises the importance of a strong and positive relationship between homes and schools in the development and education of young children. Some researchers, teachers, and others use terms like parent engagement or parent participation. Epstein (2011) argues that "these terms still emphasise parental actions and efforts while obscuring the need for schools and communities to take responsibility for organising programs that allow all parents to become productively involved in their children's education". Parental involvement seems to be somewhat one-dimensional and often puts all of the responsibility on parents to connect with teachers and administrators and to become involved with their children at home (Rapp & Duncan, 2012; Epstein, 2011). In contrast, school, family, and community partnerships assign responsibilities to schools, families, and communities to share information, ideas, activities, and services about schools and children's education (Epstein, 2011).

To Bryan and Henry, (2012, p.409) "school–family–community partnerships are collaborative initiatives and relationships among school personnel, family members, and community members and representatives of community-based organizations such as universities, businesses, religious organizations, libraries, and mental health and social service agencies". The broader term of school, family, and community partnerships is necessary to increase equity of involvement. It also includes students as key partners because they are influenced by all three contexts (home, school, and community), and recognises that students are the primary actors in their education (Epstein, 2011). For school improvement efforts to be successful, various interest groups should effectively communicate with one another.

3.2.8.1 Parental involvement

Parental/family involvement can be generally defined as the parents' or caregivers' investment in the education of their children (Larocque et al., 2011). Parents are their children's first teachers; parental involvement in their children's education begins at home by providing a safe and healthy environment, appropriate learning experiences, support, and a positive attitude toward school, and they remain their children's life-long teachers (Đurišić & Bunijevac, 2017)(Rapp & Duncan, 2012). Parental involvement in early childhood and elementary education is a vital resource for children's academic success and it results in increased student success, more positive attitudes toward school, fewer placements in special education, lower dropout rates, and fewer suspensions

56

(Đurišić & Bunijevac, 2017; Epstein, 2010; Rapp & Duncan, 2012; Walker, Shenker, & Hoover-Dempsey, 2015). The reason developing and establishing a partnership between school, family and community enhance parenting skills and leadership, connect families with others in the school and the community, help teachers with their work, enhance parent and teacher satisfaction, and enriches current school programs by bringing parents into the educational process (Đurišić & Bunijevac, 2017). However, the main reason to create a strong and positive relationship with schools is to help all children succeed in school and later in life (Epstein, 2010). Despite research findings indicating that parents who participate in school activities have a significant impact on their children's achievement and educational benefits, many parents are excluded from participating in their children's education (Lo & Xu, 2019). Parental involvement programmes are diverse and multifaceted, and researchers have proposed various parental involvement typologies. Hornby (2011) identifies two types including home-based parental involvement, such as listening to children read and supervising homework, and school-based parental involvement, such as attending parent education workshops and parent-teacher meetings.

Similarly, (Epstein, 2011) has identified six types of parental partnership involvement in schools are (i) parenting (helping all families understand child and adolescent development and establishing home environments that support children for learning); (ii) communicating (designing and conducting effective forms of two-way communications about school programs and children's progress); (iii) volunteering (recruiting and organizing help and support at school, home, or in other locations to support the school and students' activities); (iv) learning at home (providing information and ideas to families about how to help students with homework and curriculum-related activities and decisions); (v) decision making (having parents from all backgrounds serve as representatives and leaders on school committees and obtaining input from all parents on school decisions); and (vi) collaborating with the community (identifying and integrating resources and services from the community to strengthen and support schools, students, and their families, and organizing activities to benefit the community and increase students' learning opportunities) (Epstein, 2011, p. 46). Implementing these different types of parental involvement and involving parents or families in various ways helps teachers meet children's needs and the needs of parents or families. Input from these participants helps to address school challenges and improve plans,

activities, and outreach so that all parents or families can be productive partners in their children's school success.

Therefore, to ensure effective parental involvement, preschool principals and teachers need to continually develop, implement, evaluate, and improve plans and practices collectively that encourage family and community involvement (Đurišić & Bunijevac, 2017). Furthermore, for parental involvement to be most effective, preschool principals must create a welcoming and inviting environment; make the school less intimidating; contact families throughout the year, not just when problems arise; and attempt to involve all parents in their children's education, as well as unique needs of the community, make the educational experience more positive for everyone involved (Đurišić & Bunijevac, 2017; Epstein, 2011). On the other hand, teachers, in particular, need to have the organizational and communication skills necessary for maintaining contact with parents through meetings, written communication, home visits, and telephone calls (Hornby, 2011). Likewise, Epstein and Sheldon (2006) identifies seven principles that have emerged from prior research and exemplary practice that should help researchers across disciplines think about how to study the structures, processes, and outcomes of family and community involvement in education in a new way to:

> (i) broaden the familiar term of parental involvement to school, family, and community partnerships to recognize the shared responsibilities of teachers, parents, and others for children's development and learning; (ii) understand the multidimensional nature of involvement; (iii) view the structure of partnerships as a component of school and classroom organization; (iv) recognize multilevel leadership for involvement at the school, district, and state levels; (v) focus involvement on student success; (vi) acknowledge the importance of increasing the equity of involvement of parents to promote more successful students; and to (vii) advance knowledge and improve practice with more and better studies (Epstein & Sheldon, 2006, pp.1-2).

These principles alluded to by Epstein (2011), could assist researchers to think in new ways about the structures and processes of family and community involvement that will help teachers, parents, and community partners work more systematically and collaboratively to support student success.

3.3   Conclusion

The purpose of this chapter was to review and engage with literature pertinent to this study. I started by introducing the conceptual map containing all the key variables or constructs that

58

pertained to understanding ECCE in relation to the holistic development of young children. The conceptual map was used here as a guide for this literature review. In addition, I conceptualised the key concepts in this study, namely ECCE and the notion of holistic development. Followed by a discussion of the philosophies and theories on how young children learn. In addition, I outlined the theoretical and empirical literature that relates to the learning and development of young children. Next, I turn to the theoretical framework that underpinned this study and that provided the conceptual lenses to make sense of the data and in turn answer the research questions.

CHAPTER FOUR

THEORETICAL FRAMEWORK OF THE STUDY

4.1 Introduction

The previous section outlined the theoretical and empirical literature that relates to the learning and development of young children. It provided an overview of the historical development of early childhood care and education. This chapter (Chapter four) discusses the theoretical framework underpinned by Vygotsky's Sociocultural Theory. The theoretical framework is the foundation from which all knowledge is constructed (metaphorically and literally) for a research study (Grant & Osanloo, 2016). It serves as the structure and support for the rationale for the study, the problem statement, the purpose, the significance, and the research questions (Grant & Osanloo, 2016). Furthermore, the theoretical framework acts as a "blueprint" for the entire dissertation inquiry, it provides a clear direction and structure for how the researcher will philosophically, epistemologically, methodologically, and analytically approach the dissertation as a whole (Grant & Osanloo, 2016).

Without a theoretical framework, the structure and vision for a study are unclear, much like a house that cannot be constructed without a blueprint. Therefore, the researcher must keep the "theoretical framework front and centre in justifying the research questions, statement of the problem, the significance of the study, and as a way to help determine the research design and the analysis plan" (Grant & Osanloo, 2016, p.24). I now engage with Vygotsky's main arguments and constructs in particular the ZPD, social interaction, mediation and scaffolding to explain the curriculum implementation challenges faced by ECCE teachers in the case of Amhara National Regional State, Ethiopia.

4.2 The Sociocultural Theory of Lev Vygotsky

Vygotsky is widely recognized as the founder of sociocultural theory (Mahn, 2012). He brought a fresh theoretical perspective to child development and learning and gives the early childhood community different tools for thinking differently about child development (Marilyn Fleer, 2015a; Mooney, 2013; Smith, 1993). Vygotsky considered development as a process marked by qualitative transformations and objected to the analysis of children's abilities based on intelligence

60

tests (Kozulin et al., 2003; Mooney, 2013). Instead, he suggests that careful observation (qualitative research) of children should be considered as valid as their scores on a test (quantitative research) (Mooney, 2013). Vygotsky's explanation for human development and learning has gained increased attention because the theory has addressed many of the criticisms of Piaget's genetic epistemology theory (Edwards, 2009; Edwards, 2003; Mahn, 2012). Sociocultural theory's primary focus is on the integration of social, cultural, and biological elements into the learning processes, and Vygotsky believed that sociocultural circumstances play a central role in human cognitive development (Rahmatirad, 2020).

The sociocultural learning theory is truly a framework for understanding learning and teaching; it gives the early childhood educator a new perspective and helpful insights into children's growth and development (Bodrova & Leong, 2007). The sociocultural approach to learning and development was first systematized and applied by Vygotsky and his collaborators in Russia in the 1920s and 1930s (John-Steiner & Mahn, 1996b). Vygotsky developed a rich and multifaceted theory at a time when psychologists were intent on developing a simple explanation of human behaviour, through which he examined a range of subjects, including the psychology of art, language and thought, and learning and development, including a focus on the education of students with special needs (John-Steiner & Mahn, 1996b). However, following the special decree of the Central Committee of the Communist Party (Stalin's administration), his work was banned, denounced, and declared to be vicious and even evil in the Soviet Union and to the rest of the world for 20 years until 1956 (Berk & Winsler, 1995; Elena Bodrova & Leong, 2007; Gajdamaschko, 2015; John-Steiner & Mahn, 1996b).

The late 1950s and early 1960s intellectual thaw provided new opportunities for Vygotsky's work; scholars revived Vygotsky's ideas, applying them in many areas of education (Bodrova & Leong, 2007). Since then, sociocultural theory has gained increasing attention outside Russia and has been further developed by scholars in over a dozen countries (Berk & Winsler, 1995; Elena Bodrova & Leong, 2007; John-Steiner & Mahn, 1996b). According to Rezaee (2011), the sociocultural theory is the third generation of psycholinguistics. It is not merely a social issue; it can be studied as well from a psycholinguistic perspective (Rezaee, 2011). The central proposition of sociocultural theory is fundamentally humans, but the notion extends not only to the world of social relationships but also to the world of higher mental functions (Rezaee, 2011). Vygotsky himself stressed the

61

importance of cultural tools in the development of higher mental functions (Veraksa & Veraksa, 2018). Currently, sociocultural theory is changing how psychologists view development and the way teachers work with young children (Bodrova & Leong, 2007).

Vygotsky's sociocultural theory has changed the way teachers perceive children's interactions with others and sets out a new view of child development and learning (Mooney, 2013). Early childhood teachers, who are trained in Piaget's theories, viewed children's knowledge as being constructed from personal experiences and the development of cognitive structure depends on the opportunity for children to interact with supporting environments (Bowman, Donovan, & Burns, 2001; Fleer, 2015a; Mooney, 2013). However, unlike Piaget's view, Vygotsky believed that the origins of thinking are deeply embedded in the fabric of social interaction and thought that personal and social experience cannot be separated (Smith, 1993; Mooney, 2013).

In the Vygotskian view, the world children inhabit is shaped by their families, communities, socioeconomic status, education and culture, and their understanding of this world comes, in part, from the values and beliefs of the adults and other children in their lives (Mooney, 2013). For Vygotsky, interactions between children and more capable others are the engine that moves cognitive development forward (Hatch, 2010). Through interaction with an adult children learn from each other every day, they develop language skills and grasp new concepts as they speak to and listen to each other (Mooney, 2013) and their development is the result of children's competence being challenged and extended with help (Smith, 1993).

A sociocultural view of learning provides early childhood teachers with an alternative perspective to the criticisms raised against universal theories of development that have traditionally colonized how teachers explain and think about young children's development (Edwards, 2003; Fleer, 2015; Smith, 1993). In formulating a curriculum, the sociocultural approach gives much more attention to the social and cultural context of development and less to the emergence of development from within the individual child without adult participation (Smith, 1996). In sociocultural theory, the ECCE curriculum focuses on how learning occurs between children, teachers, and the environment, and it acknowledges children's experiences that have value in their families and communities and uses children's existing cultural practices and strengths to work towards particular educational and learning goals (McLachlan et al., 2010a). As such, learning experiences

62

need to be selected based on what that particular community values and that will be different from one community to the next (Fleer, 2015a). In this regard, the social and cultural context in which children were born served to define how they would develop and what they would learn. Furthermore, a sociocultural approach to curriculum focuses on extending learning beyond every day to the development of mature concepts that help children develop an understanding of how and why their world works (McLachlan et al., 2010a). It also allows children to create and review their plans for play, and problem solves, and learn from one another as a way to extend their individual ZPD (Lim & Genishi, 2010).

Since a sociocultural curriculum focus on culturally valued knowledge (Hedges & Cullen, 2005), the curriculum should be flexible enough rather than rigid, able to be modified with social circumstances, be responsive to the views of parents and the wider community, and to take into account multicultural participants in early childhood settings, not just the dominant cultural group (Smith, 1996). In Vygotsky's view curriculum should lead rather than follow child development and instruction is only useful when it moves ahead of development (Smith, 1996; Daniels et al., 2007). According to Edwards (2009),

> Teachers do not just follow the development of the children but have to set socially valued goals depending on the shared values of teachers and parents. They do not just try to encourage the children indirectly by offering them the right environment; they also invite children to actively participate in their world as adults. Besides this, they will accord a great deal of importance to the cooperation of children amongst themselves (Edwards, 2009, p.24).

Thus, once early childhood teachers buy into this idea (learning should become the driving force behind everything they do), they come to accept that genuine content can be identified for them to teach, and they need a repertoire of teaching strategies so they can match instruction with curriculum and children's learning needs (Hatch, 2010).

4.2.1 Assumptions of Vygotsky's Sociocultural Theory

As mentioned, Vygotsky differs substantially from the dominant psychological models that have long been widely accepted, including Piaget. Vygotsky's sociocultural theory was viewed by some psychologists and pedagogues as an alternative way to understand the development of children and adults because it offers a substantially different understanding of psychological development, and the theory suggests different methods of psychological research and new approaches to

63

pedagogy (Gajdamaschko, 2015). Vygotsky's assumption is that human cognition and learning are social and cultural as opposed to individual phenomena (Kozulin et al., 2003). Vygotsky maintained that the mind can never be considered or discussed as separate from the social, cultural, and historical context and strongly believed in the close relationship between learning and development and the sociocultural nature of both (Nouro, 2014; Kozulin et al., 2003). This implies that mental functioning in the individual can be understood only by examining the social and cultural processes from which it derives (Wertsch & Tulviste, 1992). Eun (2008, p.13) also noted that "cognitive development, or acquiring higher mental functions, is possible only through the social interaction between or among people that ultimately leads to internalization by the individual".

Instead of the universal view of ages and stages or milestones that children pass through, Vygotsky's sociocultural theory of child development invites us to think in a localized and more specific way about children's development. For Fleer, (2015, p.34), "Who they are, what they bring and how they relate to and experience their social and material environment" are important for their learning. A sociocultural view of child development gives the early childhood community different tools for thinking differently about child development, and this keeps at bay those universal theories of development that have traditionally colonized how we as teachers think about young children's development (Fleer, 2015a). As opposed to the individualistic theory of learning, the Vygotskian approach emphasizes the importance of sociocultural forces in shaping the situation of a child's development and learning and points to the crucial role played by parents, teachers, peers, and the community in defining the types of interaction occurring between children and their environments (Kozulin et al., 2003).

The concept of mediation emphasizes the role played by human and symbolic intermediaries placed between the individual learner and the material to be learned (Kozulin et al., 2003). Thus, children's development of higher mental processes involves learning to use the tools of culture, such as language and symbols, through the guidance of other people who are more skilled in the use of these tools (Lim & Genishi, 2010). The sociocultural view led teachers to use tools as a strategy to cultivate the latent abilities that lie within each child's zone of proximal development (ZPD) (Lim & Genishi, 2010:517).

In contrast to the dominant theories of his time that dichotomized learning and development; viewing one as an external and the other as an internal process, Vygotsky viewed the unity and interdependence of learning and development starting from a child's birth (John-Steiner & Mahn, 1996b). In Vygotsky's assumption, there are highly complex dynamic relations between developmental and learning processes that cannot be encompassed by an unchanging hypothetical formulation (Vygotsky, 1978). From a Vygotskian perspective, development or maturation is viewed as a precondition of learning but never the result of it (Vygotsky, 1978, p.80). Subsequently, Vygotsky developed the following position:

> Learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and with his peers . . . learning is not development; however, properly organized learning results in mental development and sets in motion a variety of developmental processes that would be impossible apart from learning. Thus learning is a necessary and universal aspect of the process of developing culturally organized, specifically human, psychological functions (Vygotsky, 1978, p.80).

In essence, the basic tenets of Vygotsky's theory of learning can be summed up as follows:

- Social interaction is the basis of learning and development.
- Mediation is central to learning.
- Language is the main vehicle (tool) of thought. Language plays a central role in mental development.
- The Zone of Proximal Development (ZPD) is the primary activity space in which learning occurs.
- Learning precedes development or learning can lead to development.

In the next section, I engage with these basic tenets of Vygotsky's theory of learning by delving deeper into the constructs that comprise Vygotsky's intellectual toolbox. These constructs will ultimately provide me with the tools to make sense of the data that will be presented in the chapters that follow.

65

4.2.2 Engagement with the theoretical constructs of Lev Vygotsky

The Zone of Proximal Development (ZPD), mediation and scaffolding lie at the heart of Vygotsky's theory and are used to understand human cognition and learning as social and cultural rather (Kozulin et al., 2003). In this section, I provide a discussion of each of these constructs and highlight the instructional implications of each. In addition, I engage with the notion of social interaction and play pedagogy from a Vygotskian perspective.

4.2.3 Zone of Proximal Development (ZPD)

The Zone of Proximal Development is one of the most well-known and widely used constructs in Vygotsky's intellectual toolbox. It was introduced as a way of conceptualizing the relationship between learning and development (Bodrova & Leong, 2007; Eun, 2019; Kozulin et al., 2003). Over time, the ZPD has become the concept of reference for education and teaching in most areas and subjects (Daniels et al., 2007). Vygotsky chose the word "zone" because he conceived development not as a point on a scale but as a continuum of behaviours or degrees of maturation (Bodrova & Leong, 2007). The Zone of proximal development (ZPD) is defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978,p.86). In other words: "what the child is able to do in collaboration today he will be able to do more independently tomorrow" (Vygotsky, 1987, p. 211). Figure 4.1, provides a graphical representation of the ZPD:
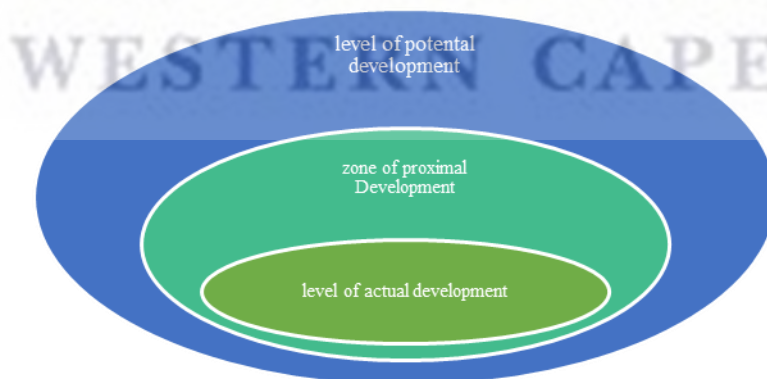
Figure 4.1: Graphical representation of zone of proximal development

Source: Vygotsky (1978)

66

For Vygotsky (1978), the state of a child's mental development can be determined only by clarifying its two levels: the actual developmental level and the zone of proximal development (Vygotsky, 1978). A child's actual developmental level defines functions that have already matured, which are the end products of development, and the zone of proximal development defines those functions that have not yet matured but are in the process of maturation or functions that will mature tomorrow but are currently in an embryonic state (Vygotsky, 1978). Vygotsky termed these functions as "buds" or "flowers" of development rather than the "fruits" of development (Vygotsky, 1978).

According to Vygotsky (1978, p. 86), "the actual developmental level characterizes mental development retrospectively; while the zone of proximal development characterizes mental development prospectively". The zone of proximal development is, therefore, used for two different purposes in the analysis of psychological development i.e., the transition from one age period to another (Chaiklin, 2003). One is to identify the kinds of maturing psychological functions, and the second is to identify the child's current state in relation to developing these functions needed for that transition. The 'maturing functions' are the 'present age', and the 'next age' is the objective zone of proximal development (Chaiklin, 2003). This zone is 'objective' in the sense that it does not refer to any individual child, but it reflects the psychological functions that need to be formed during a given age period, for the next age period to be formed (Kozulin et al., 2003). Vygotsky argues that:

> …in normal children, learning which is oriented toward developmental levels that have already been reached is ineffective from viewpoint of a child's overall development. It does not aim for a new stage of the developmental process but rather lags behind this process. Thus, the notion of ZPD enables us to propound a new formula, namely that the only "good learning" is that which is in advance of development (Vygotsky, 1978).

According to Bodrova and Leong (2007), the ZPD is dynamic and constantly changing, it shifts as the child attains a higher level of thinking and knowledge. This means the level of assisted performance will change as the child develops (Bodrova & Leong, 2007). The level of assisted performance includes behaviours performed with the help of, or in interaction with, another person, either an adult or a peer (Bodrova & Leong, 2007). This assistance or interaction may involve giving hints and clues, rephrasing questions, asking the child to restate what has been said,

asking the child what he understands, and demonstrating the task or a portion there of (Bodrova & Leong, 2007).

4.2.3.1 Instructional Implication of Zone of Proximal Development

The concept of ZPD provides an attractive metaphor for designing instruction and analysing learning. It however poses a real challenge when put into practice (Shabani, Khatib, & Ebadi, 2010). Ahmadian (2014) noted that ZPD is not an abstract notion; rather, it is an opportunity for both the learners and teacher which understanding the problem in class is created. For Vygotsky, (1978, p.87) "ZPD permits teachers to delineate the child's immediate future and his dynamic developmental state, allowing not only for what already has been achieved developmentally but also for what is in the course of maturing". It is therefore important to distinguish between what a child is currently capable of doing (his or her current developmental level), what he or she could do with some assistance (their ZPD), and those tasks that are currently beyond their ability to engage with (outside their ZPD) (Danish, Saleh, Andrade, & Bryan, 2016). If teachers can make these distinctions, they can then determine how to organize instruction towards advancing children's understanding within their ZPD. This implication denotes that instruction is not to be taken as the transmission model of didactic teaching (Ahmadian, 2014; Rowlands, 2003). Hence, ZPD helps teachers to target instruction and assessment more effectively (Danish et al., 2016).

Concerning the organization of instruction, Vygotsky argued that instruction should be tied more closely to the level of potential development than to the level of actual development (Wertsch & Tulviste, 1992). As noted by Daniels et al. (2007), the first important implication of ZPD for pedagogy is that teaching and assessment should be focused on the potential of the learner rather than on a demonstrated level of achievement or understanding. Secondly, teaching or instruction should create the possibilities for development through the kind of active participation that characterizes collaboration, that should be socially negotiated, and that should entail the transfer of control to the learner. In such analyses, it is essential to keep in mind that the actual and potential levels of development correspond with intra-mental and inter-mental functioning, respectively. By doing so, one can avoid the temptation to view the zone of proximal development simply as a formulation for improving the assessment of individual mental functioning (Wertsch & Tulviste, 1992). All these claims about the relationship between actual and potential levels of development

68

reflect Vygotsky's more general concern with the intra-mental and inter-mental planes of mental functioning outlined in his general genetic law of cultural development (Wertsch, 1993). Furthermore, the ZPD method enables teachers to understand not only the cycles and maturation processes that have already been completed but also those processes that are currently in a state of formation, that are just beginning to mature and develop (Wertsch, 1993). As noted by Moll (1990), effective instruction must be prospective; must be aimed at a child's proximal level of development.

With regard to assessment, traditional testing reflects only the current level of learners' achievement, rather than the learner's potential for development in the future (Shabani et al., 2010). Vygotsky argues that measuring the level of potential development is just as important as measuring the actual developmental level (Wertsch & Tulviste, 1992). However, from the sociocultural point of view, assessment must be based on diagnostic procedures grounded in an explanatory understanding of a child's current state of development (Kozulin et al., 2003).

In sociocultural theory, in particular, the notion of the zone of proximal development suggests that the goals of educational assessment should be to (i) identify abilities that are in the process of developing, and (ii) attempt to predict what the learner will do independently in the future (Rezaee, 2011). As noted by Shabani et al. (2010) Vygotsky used "collaboration procedure and interpretation as diagnostics in instructional experiments to identify learners who have "larger" and "smaller" zones of proximal development". Thus, by identifying those students who are within their ZPD and articulating the kinds of support that are necessary for more expert performance, teachers can better distinguish between their disparate levels of competence and capability (Danish et al., 2016). Therefore, to truly assess students' capabilities within their sociocultural context, one must identify their subjective Zone of Proximal Development as it relates to the culturally defined objective ZPD (Danish et al., 2016). Hence, the role of ZPD in assessment becomes clear: once we understand students' current and emerging capabilities (Danish et al., 2016). Furthermore, the principle of ZPD gives three important insights to teachers with regard to the issue of dynamic testing:

> (i) It focuses our attention on those psychological functions of the child that are emerging at a given moment but that have not yet been fully developed; (ii) The concept of ZPD introduces assisted performance as a legitimate parameter of assessment procedure; and (iii) ZPD helps teachers to conceptualize the

69

difference between the level of actual performance and the learning potential of the child (Kozulin et al., 2003, p.17).

In this regard, Vygotsky advocates dynamic assessment because "dynamic assessment (DA) attempts to diagnose abilities that are fully matured as well as those that are still in the process of maturing" (Shabani et al., 2010, p.240). In dynamic assessment (DA), as called for in Vygotsky's ZPD, assessment and instruction are dialectically integrated as the means to move toward an always emergent (i.e., dynamic) future (Shabani et al., 2010). As noted by Bodrova and Leong (2007), the size of the ZPD for one child may vary from one area to another, or at different times in the learning process. This implies that the ZPD is different for different children since some children require all possible assistance to make even small gains in learning; while other children make huge leaps with much less assistance (Bodrova & Leong, 2007). Therefore, teachers have to break goals into sub-goals and structure tasks or activities fitting into different levels that are redefined and recombined as the student's performance improves or as the ZPD is explored in the interaction between the participants and thereby employing a variety of teaching strategies, modifying and adjusting tasks, setting expectations, demonstrating, assisting and facilitating (Bodrova & Leong, 2007).

In addition, the teacher might build redundancy into the interaction, repeating directions or modelling actions several times (Bodrova & Leong, 2007). Furthermore, by choosing toys, equipment, materials, or tools, the teacher limits and structures the task even before the learner appears. However, the changes in adult structuring and support follow the learner's lead and are not arbitrarily imposed based on the content of the material or an abstract idea of how the information should be taught (Bodrova & Leong, 2007). In this conceptualization, the teacher does not pass on a package of information and knowledge to the learners and thereby children were not perceived as containers that must be filled with knowledge and skills by teachers.

Fundamentally, the main features of the analysis of the zone of proximal development are: (i) whole child, (ii) internal structure (i.e., relationships between psychological functions), (iii) development as a qualitative change in the structural relationships, (iv) brought about from the child's actions in the social situation of development (reflecting what the child perceives and is interested in), and (v) each age period has a leading activity/contradiction that organizes the child's actions (within which subjective interests are operating) and which contributes to the development

70

of the new functions (Chaiklin, 2003). The notion of ZPD values the role of teachers in a child's learning and instruction is taken as a system where both children and the teacher interact with each other.

4.2.4 Scaffolding

The term scaffolding is originally derived from the construction industry (Silva, 2017) or it is a construction-related concept (Gonulal & Loewen, 2018). In the construction sector, scaffolding refers to temporary structures used to assist workers in the construction or renovation of buildings (Gonulal & Loewen, 2018). However, in recent decades scaffolding has become a popularly used technique in the field of psychology and education and it was adapted by teachers to characterise a teaching strategy (Berk & Winsler, 1995; Gonulal & Loewen, 2018; Silva, 2017). It was in the mid-1970s that the metaphor of "scaffolding" was originally introduced in the fields of psychology and education by Bruner and his associates in their analysis of the role of tutoring in problem-solving and to determine the most important component of tutoring (Berk & Winsler, 1995). Scholars have linked scaffolding to the work of the Soviet psychologist Lev Vygotsky (Berk & Winsler, 1995; Bodrova & Leong, 2018; Pea, 2004; Smith, 1993; Stone, 1998), particularly with his concept of the zone of proximal development (ZPD) (Gonulal & Loewen, 2018).

However, there are no direct references to the work of Vygotsky, although it is clear that the approach is consistent with Vygotsky's notion of assisted performance (Scott,1998). Furthermore, Wood, Bruner and Ross (1976) agreed that scaffolding developed from Vygotsky's notion of ZPD. Similarly, Scott (1998) noted the concept of scaffolding is closely related to the zone of proximal development in describing the kinds of support that a teacher could offer to assist children's learning by first completing a specific task before developing the competence to accomplish the task independently on their own. Thus, the concept of scaffolding is undoubtedly useful because it makes more explicit some of the instructional implications of the idea of the ZPD (Bodrova & Leong, 2013). Indeed, Vygotsky's work was an impetus for the development of the notion of scaffolding (Gonulal & Loewen, 2018). The teacher in the Vygotskian classroom does not wonder around the room scanning children's activities and making the occasional comment or question directed at a child (Smith, 1993). Instead, they have a highly interactive role and they actively engaged in tasks with children on a sustained basis and focus their instruction on scaffolding skills

71

and concepts that are just beyond the students' level of independent functioning (Mueller & File, 2020; Smith, 1993). For instance, during the play period, teachers promote children's in-depth involvement, helping them persist in and elaborate on their make-believe play ideas (Hyson, 2008). In sociocultural (Vygotskian) based instruction, there are three main principles of instruction such as instruction should amplify child development and not accelerate it, teachers and children co-construct knowledge, and teachers assist children to make a transition from assisted to independent performance using scaffolding (Roopnarine & Johnson, 2013).

There are several definitions and explanations for the term scaffolding. Some of the definitions provided by researchers are that scaffolding refers to a learning opportunity in which teachers or a more expert tutor help a less expert child to answer a question, correct an error, or perform a task without telling the student the answer or doing the work for him or her (Mackiewicz & Thompson, 2014). Holton and Clarke (2006, p. 131) define scaffolding as "an act of teaching that (i) supports the immediate construction of knowledge by the learner; and (ii) provides the basis for the future independent learning of the individual". It has also been interpreted as the support which is given to the child to meet his cognitive potential (Lang, 2018).

Generally, scaffolding is defined as a kind of help or support given to the learner, in which he or she can easily participate and work under the guidance of an expert (Pathan et al., 2018). For Hammond and Gibbons (2005a) scaffolding is a kind of support that is designed to enable learners to accomplish tasks and develop understandings that they would not be able to manage on their own. Scaffolding is task-specific support, designed to help the learner independently to complete the same or similar tasks later in new contexts (Hammond & Gibbons, 2005b). Moreover, Wood et al., (1976) defined scaffolding as "a process that enables a child or novice to solve a problem, carry out a task or achieve a goal that would be beyond his unassisted efforts". Therefore, scaffolding is guidance and interactional support given by a teacher or tutor in the zone of proximal development that intends to represent the level of modelling and support that the learner has in developing their task (Silva, 2017; Smith, 1993).

According to Vygotsky, if learning precedes development, then teachers should be looking to get their students working in their ZPD (Akpan & Kennedy, 2020). However, by definition, a student given a task considered beyond their ZPD will fail unless they are given suitable support.

72

Scaffolding is a structure put in place to enable the learners to succeed in such a way that they will learn new competencies (Akpan & Kennedy, 2020). In other words, the task had to be both entertaining and challenging to the child while also proving sufficiently complex to ensure that his or her behaviour could develop and change over time (Wood et al., 1976). Children can even operate beyond their optimal level and move from where they are now to where they can be with teacher scaffolding, in which a teacher more fully participates in the child's activity by providing instruction through guided practice, prompts, clues, modelling, explanation, leading questions, discussion, joint participation, encouragement, and control of the child's attention (Grant & Osanloo, 2016). This indicates that 'scaffolding' include joint problem-solving and intersubjectivity (where the child and teacher involved in the activity reach an agreement about what is to be achieved) (Edwards, 2009b).

4.2.4.1 Scaffolding Techniques and Approaches

For scaffolding to be successful, teachers must help learners develop strategies that they can apply to new problems they will encounter, not just to answer specific questions (Bodrova & Leong, 1998). According to Gonulal and Loewen (2018), six instructional scaffolding techniques can be used by teachers. These are modelling, bridging, contextualizing, schema building, re-presenting text, and developing metacognition. In modelling, learners are given representative examples of what is expected of them, which gives them concrete guidelines or students see or hear samples of what is requested (Gonulal & Loewen, 2018). In bridging teachers use learners' prior knowledge to build up new knowledge or skills (Gonulal & Loewen, 2018; Harraqi, 2017). Gonulal and Loewen (2018) maintain that bridging helps establishes a personal link with learners by forging a connection between their lives and the subject matter. Contextualizing concerns brings complex ideas closer to the students' world experience (Harraqi, 2017). This technique of scaffolding requires teachers to use many teaching strategies and different teaching aids; for example, hands-on activities, labs, and demonstrations, as well as videos and pictures (Gonulal & Loewen, 2018; Harraqi, 2017).

In schema building, teachers help learners to connect new information to already existing structures (Gonulal & Loewen, 2018). Re-present texts to learners is another scaffolding technique (Gonulal & Loewen, 2018). Learner autonomy and metacognition development are fostered

73

through the teacher's modelling strategies, for instance, think-aloud and self-assessment activities (Gonulal & Loewen, 2018). The use of such techniques, however, does not automatically imply that scaffolding has been successfully provided (Gonulal & Loewen, 2018:4). Indeed, there are certain key characteristics of scaffolding that teachers need to keep in mind when using a scaffolding technique (Gonulal & Loewen, 2018). This will be discussed in more detail in the subsequent section.

4.2.4.2 Characteristics of Scaffolded Instruction

The goal of scaffolding is the development of students' abilities until they can apply the new skills and strategies independently to complete the tasks successfully (Larkin, 2001; Winn, 1994). According to Gonulal and Loewen (2018), there are some key characteristics of scaffolded instruction that teachers need to keep in mind when using a scaffolding technique. These are collaboration, contingency, fading, and the transfer of responsibility. The first and most important feature of scaffolding is collaboration (Gonulal & Loewen, 2018). Collaboration is at the heart of the teacher-student relationship and allows flexibility to learners (Langer & Applebee, 1987). If students are not invested in the task, their motivation to understand and participate in it is diminished (Winn, 1994). Instead of imposing teacher-oriented goals for the student; a teacher might help students set their own goals and work with students to help them meet these goals (Benko, 2013). "The critical point is that a teacher's stance can assist students' performances by creating an atmosphere wherein students feel both motivated and supported" (Benko, 2013, p.293). However, not all forms of collaborative support are considered scaffolds (Gonulal & Loewen, 2018). Interactions with the teacher while jointly completing a task foster shared understanding (Winn, 1994).

The relationship between the teacher and students in terms of respect for the teacher as the more knowledgeable other and trust between students and the teacher is also critical to the effectiveness of scaffolding (Stone, 1989, cited in Winn, 1994). Consequently, a teacher might minimize students' frustration by taking a collaborative approach to instruction (Benko, 2013). The second feature of scaffolding is contingency (Gonulal & Loewen, 2018). Scaffolding should be provided only when needed and should be adjusted to the student's level of understanding (Gonulal & Loewen, 2018). Instead of giving support right away, teachers should act contingently (Gonulal

& Loewen, 2018). This is the reason that scaffolding should operate within the student's ZPD; in other words teachers or scaffolders should access the student's level of comprehension and work at the same or a slightly higher level (Gonulal & Loewen, 2018). Tasks need to be introduced holistically and in the context in which they are to be used; thus, the integrity of the task is maintained throughout instruction (Winn, 1994). Prior to this, teachers need to collect information about their student level of competence; for teachers to be able to determine whether to increase or decrease the amount of support provided (Gonulal & Loewen, 2018). The third important characteristic of scaffolding is fading; gradually withdrawing assistance over time as the student becomes more competent (Gonulal & Loewen, 2018). As would be expected, and in line with the original meaning of scaffolding, the adult provides more active interventions and greater amounts of scaffolding, directing more of the child's behaviour than he will later in the process (Bodrova & Leong, 2007). Thus, as the child's or learner's skills develop, the need for a scaffold gradually ceases to exist (Silva, 2017). This means that the level of assistance gradually decreases and the teacher or expert "hands over" the responsibility or task to the learner by removing the scaffolding (Bodrova & Leong, 2007).

This gradual release of responsibility is accomplished by continuously decreasing the degree of assistance provided by the teacher without altering the learning task itself (Bodrova, Elena; Leong, 2001). However, the pace of fading depends on the student's level of performance (Gonulal & Loewen, 2018), and by its nature scaffolding is specific just-in-time support that gives students the pedagogical push that enables them to work at a higher level of activity (Gonulal & Loewen, 2018). The fourth feature of scaffolding is the transfer of responsibility which is closely related to fading (Gonulal & Loewen, 2018). After initially providing the necessary support to enable students to share an understanding of these tasks and to carry them out successfully, the teacher gradually relinquishes responsibility for the task to the students (Winn, 1994).

In essence, the notion of instructional scaffolding provides both a framework for analysing ongoing instruction and a metaphor that teachers may find helpful in reformulating their practice (Langer & Applebee, 1987). Furthermore, Langer and Applebee (1987) maintain that unlike the notions of curriculum that underlie current practice, instructional scaffolding leaves room for encouraging reasoning of a higher order as well as for the development of basic skills.

75

4.2.4.3 The instructional implication of scaffolding

According to Wood et al. (1976), scaffolding comprises of six key instructional functions that the teacher or tutor could provide (i) recruiting the child's interest to actively engage in an activity or task-it is the teacher's first and obvious task to enlist the children's interest in and adherence to the requirements of the task, (ii) reduce or simplify the number of steps required to solve the problem so that the child can manage themselves or reducing the size of the task to the level where the child could recognize whether or not he had achieved (iii) direction maintenance-maintain the child's interest in pursuing the goal to guide and keep the children in the pursuit of a particular objective, (iv) marking critical feature-point out the critical features that show the difference between the child's performance and the ideal performance to solve the problem and identify correct responses, (v) frustration control-in order to reduce a stressful activity should be less dangerous or stressful with a tutor than without and (vi) demonstrating or modelling-demonstrate the idealised version of what the child is doing. Similarly, Berk and Winsler (1995) has identified the following components and goals for effective scaffolding. These are:

- Joint problem-solving: engagement of children in an interesting and culturally meaningful, collaborative problem-solving activity. The participants may be adult-child or child-child.
- Intersubjectivity: effective scaffolding needs creating a shared understanding as each partner adjusts to the perspectives of the other. Negotiating or compromising by constantly striving for a shared view of the situation is an essential feature of scaffolding.
- Warmth and responsiveness: to maximize children's engagement and collaboration, the emotional tone of the adult needs to be warm, pleasant, and responsive.
- Keeping the child in the ZDP: structuring the task and surrounding environment and constantly adjusting the amount of adult intervention to the child's current needs and abilities.
- Promoting self-regulation: allowing children to regulate joint activity as much as possible. This requires teachers to relinquish control and assistance as soon as the child works independently (p.27- 30).

As Winn (1994) points out that the teacher is the scaffold or the one who, as the more knowledgeable other, challenges children to engage in tasks that they are unable to complete

76

independently. Wood et al. (1976) noted that a teacher's stance or their way of interacting with children is critical for supporting students or for effective scaffolding and teachers might take a collaborative stance instead of an evaluative stance (Benko, 2013). For example, instead of imposing teacher-oriented goals for student writers, a teacher might help students set their own goals and work with students to help them meet these goals (Benko, 2013).

4.2.5 Mediation

> "...the most fundamental concept of sociocultural theory is that the human mind is mediated" (Lantolf, 2004, p.1).

Mediation forms the core of the Vygotskyan view of developmental processes that runs throughout Vygotsky's thinking and to which all other theoretical concepts are directly or indirectly connected (Daniels, 2015; Fani & Ghaemi, 2011; Roth, 2007; Vanpatten & Williams, 2015). Vygotsky conceived that the critical feature of higher mental functioning and human action (voluntary attention, intentional memory, planning, logical thought and problem-solving, learning and evaluation) in general are mediated by tools ("technical tools") and signs ("psychological tools") (Forman et al., 1993; Lantolf, 2004; Wertsch, 1993). According to Forman, Minick and Stone (1993), basic to all his work on this issue was the insight that the inclusion of psychological tools, or signs in human functioning, fundamentally transforms this action. However, Daniels (2015) noted that Vygotsky did not give a single and unified definition of mediation and "yet some aspects of the concept remain elusive and somewhat underexplored".

From a Vygotskian perspective, a child is neither shaped by his or her environment into a social being nor does the child unfold his or her innate potential by adapting to this environment (Bodrova, 1997). Instead, human action and the mind (both social and individual processes) are fundamentally shaped by cultural tools or mediational means (Wertsch, 1993). This implies that the relationship between humans and the physical world is indirect, that is mediated by signs (Daniels et al., 2007) or mediated by concrete material tools (Lantolf, Thorne, & Poehner, 2015). In other words, humans do not act directly with or on the physical world but, instead, they use culturally and historically modelled physical tools (Daniels et al., 2007). In Vygotsky's account, social interaction and mental processes are heavily dependent on the forms of mediation (such as tools and language) (Wertsch, 1993). The physical, as well as symbolic or psychological tools,

help humans to expand their physical abilities and enable them to change the condition in which they live (Daniels et al., 2007). Mediation serves as a buffer between the person and the environment and acts to mediate the relationship between the individual and the social-material world (Vanpatten & Williams, 2015). According to Vanpatten and Williams (2015):

> …physical tools are outwardly directed; symbolic tools are inwardly or cognitively directed. Just as physical tools serve as auxiliary means to enhance the ability to control and change the physical world, symbolic tools serve as an auxiliary means to control and reorganize our biologically endowed mental processes. This control allows humans, unlike other species, to inhibit and delay the functioning of automatic biological processes. Rather than reacting instinctively and non-thoughtfully to stimuli" (Vanpatten & Williams, 2015, p.210).

The physical and symbolic tools are artefacts created by human culture(s) over time and are made available to succeeding generations; they can modify before passing from one generation to the next (Lantolf, 2004) and each generation reworks its cultural inheritance to meet the needs of its communities and individuals. This means that cultural artefacts or mediational means are products of sociocultural evolution to which individuals have access by being actively engaged in the practices of their communities (John-Steiner & Mahn, 1996b; Wertsch & Tulviste, 1992). However, psychological tools are not invented by the individual in isolation (John-Steiner & Mahn, 1996b); they are seen as artificial and of social rather than organic or individual origin (Daniels, 2015), and they are appropriated by groups or individuals as they carry out mental functioning (Wertsch & Tulviste, 1992). Cultural artefacts: physical objects and symbolic systems developed by human societies throughout their history that mediate their social and psychological behaviour (Vanpatten & Williams, 2015). In this respect, it is understood that humans use existing cultural and physical artefacts and create new ones that allow them to regulate or control their behaviour (Lantolf et al., 2015).

Moreover, "the mediational means, or cultural tools, are inherently situated culturally, institutionally and historically" (Daniels, 2015, p.40). In other words, symbolic systems are specific to a given culture, and once internalized by individual learners become their inner cognitive tools (Kozulin et al., 2003). However, some aspect of mediation has identical meaning and importance in different cultures for different social groups (Kozulin, 2002). In Vygotsky's view, language plays a special role in the development of symbols used in various systems for

78

counting; mnemonic techniques; algebraic symbol systems; works of art; writing; schemes, diagrams, maps, and mechanical drawings; all sorts of conventional signs, etc., can serve as psychological tools (Vygotsky, 1981). Other tools, increasingly recognised in the sociocultural discourse-the paintbrush, the computer, calendars, and symbol systems are central to the appropriation of knowledge through representational activity by the developing individual (John-Steiner & Mahn, 1996, p.193). In all cases, these mediational means are the products of sociocultural evolution and are appropriated by groups or individuals as they carry out mental functioning (Forman et al., 1993).

Vygotsky is of the view that there are two faces of mediation, one human and the other symbolic (Kozulin et al., 2003). The human mediator usually tries to answer the question of what kind of involvement by the adult is effective in enhancing the child's performance and those who focus on the symbolic aspect pose the question, of what changes in the child's performance can be brought about by the introduction of symbolic tools– mediators (Kozulin et al., 2003). These signs and symbols may be external as well as internal, for example, a stop sign or red light is a universal sign for stopping forward motion and is understood by the world around (Bodrova & Leong, 2007).

4.2.5.1   Instructional Implication of Mediation

Psychological tools are cultural-based, symbolic artefacts, such as symbols, texts, or graphic organisers, that, when internalized, help individuals to master, including perception, memory, and attention (Barnett et al., 2008). Vygotsky described psychological tools as devices for mastering mental processes, they were seen as artificial and of social rather than organic or individual origin (Daniels, 2001). In Vygotsky's work, a mediator can assist children with their ZPD with several mental processes such as perception, attention, and memory as well as specific social behaviours (Bodrova & Leong, 2007), and these three concepts are crucial in understanding learning and development. As noted by Bodrova and Leong (2007) everyday objects become sensory standards that help children perceive differences in colour, size, shape, and even sound, that is perception. Children use mediators to attend to or focus on objects, events, and behaviours, we call it attention. The ability to attend deliberately is a necessary skill for learning because the most attention-grabbing thing may not be the most important characteristic of what the child is learning about. Children have to learn to ignore competing or distracting information and to focus on specific

79

characteristics that are important to solving a problem or learning a task (Bodrova & Leong, 2007). Another higher mental function that can be assisted through mediation is deliberate memory (Bodrova & Leong, 2007). With an ever-increasing amount of information to remember, memory definitely can use some help. Using external mediators to support memory is not a new idea; in fact, adults use them all the time (Bodrova & Leong, 2007). Similarly (Daniels, 2015) human memory is seen as a function that is actively supported and transformed through the use of signs. Mediators also help children to monitor and reflect on their thinking and prompt metacognitive skills (Bodrova & Leong, 2007).

4.2.6   Social Interaction

In contrast to developmental psychology, sociocultural theorists denied the strict separation of the individual and their social environment (Smith & May 2014). Vygotsky argued that the origins of thinking are deeply embedded in the fabric of social interaction (Cole et al., 2006; Fleer, 2015a). Similarly, Rogoff (2003) asserted that individual development must be understood, and cannot be separated from its social and cultural-historical context. And the power of Vygotsky's ideas lies in his explanation of the dynamic interdependence of social and individual processes in the co-construction of knowledge (John-Steiner & Mahn, 1996b). The learning of an individual always involved a process of internalising (to an intra-personal or intra-mental plane) what was first experienced in interaction with others (i.e., experienced on an inter-personal or inter-mental plane) who had already internalised that learning (Akpan & Kennedy, 2020). As noted by Murphy (1999, p.70) "like genes, social interaction and social arrangements are an essential aspect of child development, without which it would be impossible to conceive of a child developing".

In Vygotsky's model of development, social interaction and language are seen as central drivers in children's learning and social interaction are referred to as one of the main processes of the learning component and the basis for all learning (Steenbeek & van Geert, 2017; (Pathan et al., 2018; Walqui, 2006). Within sociocultural perspectives, learning emerges from social interaction and as such is always fundamentally a social being (John-Steiner & Mahn, 1996b). Rogoff (1990) asserts that individual thinking processes relate to the cultural context and the social interactions of children that provide guidance, support, direction, challenge, and impetus for development. Similarly, John-Steiner and Mahn (1996) states that from the beginning of an activity; learners

80

depend on others who have more experience; over time they take on increasing responsibility for their learning and participation in joint activity. This means that from the beginning the child is a social being, involved in social exchanges that guide the development of higher cognitive processes (Murphy, 1999). Similarly, Walqui (2006) argues that consciousness, the notions of self and identity, physical skills and mental abilities, all have their origin in social interaction between the child and parent, and between the child, peers, and others, including teachers. Thus, social interaction is expected to promote learning through the guidance provided by interaction with people who have achieved some skill in the use of those intellectual tools (Murphy, 1999). But note that, in Vygotsky's assumption, social interaction precedes the development of knowledge and ability (Walqui, 2006).

Sociocultural theory is grounded in a perspective that the individual does not separate from the social and Vygotsky argues that learning emerges from social interaction and as such is always fundamentally a social being (Vygotsky, 1994, cited in John-Steiner & Mahn, 1996b). Hence, Vygotsky's perspective is that the nature of the interdependence between individual and social processes in the construction of knowledge can be clarified by examining three major themes:

> (i)individual development, including higher mental functioning, has its origins in social sources; (ii) human action, on both the social and individual planes, is mediated by tools and signs; and (iii) the first two themes are best examined through genetic, or developmental analysis (John-Steiner & Mahn, 1996, p.192).

To Vygotsky (1978), "every function in the child's cultural development appears twice, on two levels. First, on the social, and later on the psychological level; first, between people as an inter-psychological category, and then inside the child, as an intra-psychological category" (p.128). The developing individual thus relies on the vast pool of transmitted experiences of others (John-Steiner & Mahn, 1996b). This implies that expertise in the use of cultural tools is central to the role of social interaction, and interaction with expert peers can be similar to that with adults in guiding young children's cognitive development (Rogoff, 1990). In addition, Rogoff, (1990) claims that children's social interactions with significant individuals in their lives (parents, peers, teachers, and other adults) profoundly shape their interpretations of the world and higher-order thought processes. According to Murphy (999), the model of most effective social interaction is thus joint problem-solving with guidance by a more skilled person. Therefore, the novice is thereby

able to participate in skills beyond those that he or she is independently capable of handling (Rogoff, 1990).

Furthermore, development then builds on the internalisation by the novice of the shared cognitive processes, appropriating what was carried out in collaboration to extend existing knowledge and skills (Murphy, 1999). In line with this, Vygotsky (1978) argued that social interaction and participation with others in cultural activities with skilled partners lead to the internalisation of the tools for thinking, enhancing children's competence. This mechanism through which social interaction facilitates cognitive development resembles apprenticeship, in which a novice works closely with an expert in joint problem-solving in the zone of proximal development (Rogoff, 1990). In Vygotsky's position, cognitive abilities are socially guided and constructed. In this case, culture serves as a mediator for the formation and development of specific abilities, such as learning, memory, attention, and problem-solving. Therefore, from the stance of the sociocultural approach, social interaction provides children with the opportunity to do joint problem-solving and thereby enhancing children's thinking and competence.

4.2.6.1　Learning through Play

Play is fundamental in early childhood care and education because it drives young children's optimal development and learning (Nouro, 2014). Play-based learning is a pedagogical approach that emphasises the use of play in promoting multiple areas of children's development and learning (Danniels & Pyle, 2018). Play and learning are dimensions that stimulate each other and could be seen as an indivisible entirety, which is part of children's experiences, and which helps them create an understanding of their surrounding world in a lifelong process (Samuelsson & Johansson, 2006). Play is simultaneously a facet of a child's developing personality, sense of self, intellect, social capacity, and physicality as well as the source of energy for development that directs their energy toward activities of their own choice (Nouro, 2014). Thus, play-based learning provides an excellent environment for the holistic development of young children. It allows children to develop their fullest potential emotionally, socially, intellectually, linguistically, and physically, especially in thinking skills (Danniels & Pyle, 2018; Nouro, 2014). For Vygotsky (1978, p.102) "play contains all developmental tendencies in a condensed form and is itself a major source of development".

Apart from the specific rationale for making play the central focus of school programs for young children, teachers and researchers take opposing perspectives on the type and kinds of play learning (e.g., free play, guided play, direct instruction) that best support young children's learning of content and skills (Danniels & Pyle, 2018). This is an ongoing debate. Free play and guided play are two types of play-based learning. Free play refers to behaviours that arise from intrinsic motivation and is self-directed by intrinsic motivation and that represent expressions of children's interests and desires, whereas guided play is teacher supported and focused on a specific learning objective (Nouro, 2014). In guided play, the teacher allows children to maintain the locus of control and also provides indirect guidance that will allow them to explore the right aspects of the environment to reach the learning goal (Danniels & Pyle, 2018). Studies show that guided play is indeed effective at allowing children to learn. Specifically, research has found that children who engaged in guided play activities were more likely to learn a target piece of information than children who engaged in free play and, in some cases, more than children who were directly instructed (Danniels & Pyle, 2018).

In free play, children play because of their intrinsic interests and no "one task" is imposed on the child by adults and the child does not need to utilize a sense of will or purposeful intention to meet adult expectations (Nouro, 2014). However, unless teacher-directed activities are attuned to the children's level, it is difficult for the children to adhere to the task (Nouro, 2014). Researchers that agree with the sociocultural interpretation of how children learn through play support guided play. Altun (2018) noted that studies from a sociocultural perspective indicate that teacher or adult involvement can have a positive impact on children's play and learning.

Drawing on the work of Vygotsky, play becomes the first activity in which children are driven not by their need for instant gratification, but instead by the need to suppress their immediate impulses (Leong, 2015). Vygotsky argued that play was a central activity in preschool and that without it children did not develop the creativity, self-regulation, and other underlying skills necessary for later development (Bodrova & Leong, 2007). Vygotsky was primarily concerned with how development and learning take place through social interactions within sociocultural contexts (Nouro, 2014). For this reason, he emphasizes the social and cultural nature of make-believe play, which means that it is shaped by the social context of children's upbringing (Bodrova & Leong, 2007). Vygotsky explained that play was essential to the development and the source of it and

83

creates the zone of proximal development (Bodrova & Leong, 2007). In addition, Vygotsky limited the definition of play to the dramatic or make-believe play of pre-schoolers and primary school-age children (Bodrova & Leong, 2007). His definition of play does not include many kinds of other activities such as games, movement activities, object manipulations, and explorations that most people and teachers still call play (Bodrova & Leong, 2007; Leong, 2015). According to Vygotsky, role play or make-believe has three components: children create an imaginary situation, take on and act out roles, and follow a set of rules determined by specific roles (Bodrova & Leong, 2007). These components of make-believe play contribute to the development of self-regulation and promote intentional behaviour. The development of self-regulation becomes possible because of the inherent relations that exist between the roles children play and the rules they need to follow when playing these roles (Bodrova & Leong, 2011).

4.2.6.2 The role of Teachers in Play

Teacher-child interaction during play can be multifaceted and teachers endorse diverse roles during children's play (Loizou, 2017). Depending on their theoretical perspectives and pedagogical understanding of children's learning, multiple studies underline the different roles and types of involvement that teachers perform to support children's play. As Altun (2018) stated there are three types of teachers' participation in play, partial participation, non-participation, and full participation. Furthermore, Altun (2018) identified four different teachers' roles as planner or organizer, observer or guider, play partner, and non-involver.

According to Bodrova and Leong (2007), teachers are involved in make-believe play as both a planner and a participant. For instance, teachers as partners are involved in helping the child to distinguish between essential and nonessential properties, make connections with the larger system of concepts, look for clues about the child's thinking process and decide how much support should be given. Teachers as the 'planners' engage in shared activity indirectly by modifying and planning the learning environment (Bodrova & Leong, 2007). Loizou (2017) suggests enriched teacher involvement in children's play rather than just setting up the environment.

In essence, play-based learning provides an excellent environment for the holistic development of young children. As mentioned, it promotes children's fullest potential emotionally, socially, intellectually, linguistically and physically. Allowing for imagination, creativity, moral reasoning

84

and peer cultures. However, children's learning experience depends on teachers' pedagogical views, knowledge and willingness to put the theory into practice.

4.3   Criticism of Sociocultural Theory of Vygotsky

In recent years, sociocultural theory has gained popularity, particularly in educational settings. However, there are several criticisms of the Vygotsky approach (Ameri, 2020). According to (Smith, 1993) sociocultural theory rejects the primacy of individual development, but it tends to put much emphasis on collaboration as a source of cognitive development. Similarly, Ameri (2020) claimed that the sociocultural theory does not recognise that individuals can rise above social norms based on their ability to bring about personal understanding in that it disregards individuals such as gifted students or child prodigies. Moreover, Vygotsky's descriptions of developmental processes were cited as being vague and speculative (Rahmatirad, 2020).

Ameri (2020, p.1534) critiqued that "Vygotsky's sociocultural theory does not seem to apply to all social and cultural groups because "social groups may not be whole and equal with all learners being able to gain the same meaning from engagement". Likewise, others have critiqued that the application of the ZPD in practice is more problematic (Pathan, Memon, Memon, Khoso, & Bux, 2018) and "it is unclear in that it does not account for a precise picture of a child's learning needs, a child's present capability level, or a child's motivational influences" (Ameri, 2020, p.1534). In addition, "the ZPD does not explain the process of development or how development occurs" (Ameri, 2020). Vygotsky's theory focused more on the processes through which children develop and neglected the characteristics that children of particular ages are likely to demonstrate (Rahmatirad, 2020). Despite its increased theoretical currency in relation to early childhood education, the role of sociocultural theory in early childhood education does not necessarily represent a straight and easily definable path (Edwards, 2003).

4.4   Strengths of Sociocultural Theory

Despite these criticisms, it should be noted that Vygotsky's sociocultural theory and the basic concepts of ZPD, mediation, scaffolding and the notion of social interaction provide a useful framework for teachers, researchers, and policy developers to imagine new and different possibilities for early childhood education that are traditionally colonised by those universal

85

theories of development that have shaped how we as teachers think about young children's learning and development (Edwards, 2009; Fleer, 2015a; Marilyn Fleer, 2015). In this respect, Vygotsky argued that "presuppose limitations may not exist in practice with the right support" (Ameri, 2020, p.1534). On the other hand, Ameri (2020) claims that education never divorces itself from the culture in which our students are brought up. The sociocultural perspective addresses how social, and cultural beliefs and historical artefacts affect how learning takes place (Ameri, 2020; Pathan et al., 2018). Sociocultural theory focuses not only on how adults and peers influence individual learning but also on how cultural beliefs and attitudes affect how learning takes place (Ameri, 2020).

Similarly, there is a view that sociocultural focus on the social, cultural and historical artefacts which play a pivotal role in children's cognitive development as well as their potential performance (Pathan et al., 2018). More importantly, a revolutionary view of development as discussed by Vygotsky also encourages teachers and researchers to notice the relations between the ideal form and what is the child's current form of development (Fleer, 2015a). In the conceptualisation of development, early childhood teachers look closely at what each child brings to a particular social situation rather than focusing on the child's interests or focusing on documenting what they can or cannot do (Fleer, 2015a).

4.5   Conclusion

This chapter provided an overview of the sociocultural theory of Vygotsky in which this study is theoretically framed. I used theoretical constructs like the Zone of Proximal Development (ZPD), mediation, and scaffolding. These constructs provide me with a framework and theoretical lens to understand the relationship between development and teaching, especially useful when thinking about the appropriateness of curriculum, assessment, pedagogical practice, and physical environment as well as identifying the crucial role played by peers, parents, and the community in defining the types of interaction occurring between children and their environments. The sociocultural theory of Vygotsky provides a solid foundation to understand teaching-learning environments that value the whole child and honour the different cultures, languages, prior experiences and learning styles that children bring to the classroom. Moreover, Vygotsky's theory is especially useful to understand early childhood education in culturally and linguistically diverse

86

countries like Ethiopia. In this context, sociocultural theories appear effective to explain and explore curriculum implementation challenges faced by ECCE teachers in Amhara National Regional State of Ethiopia in ensuring the holistic development of young children.

The next chapter outlines the methodological trajectory of this study. It describes the research design employed, as well as data collection procedures and the methods of analysis along with ethical procedures followed.

CHAPTER FIVE

RESEARCH DESIGN AND METHODOLOGY

5.1   Introduction

In the previous chapter, I engaged with Vygotsky's Sociocultural Theory and his constructs of ZPD, scaffolding and mediation to frame this study theoretically. The purpose of this chapter is to provide a detailed account of the methodological considerations pertaining to this study. The idea is to offer an articulation of the research design, data production process, method of analysis and the ethical procedures followed. First, I offer a table (Table 5.1) which shows the multiple data sources employed in this study in relation to the research questions this study attempted to address. This is followed by making a case for why this study is underpinned by pragmatism and why I selected to use a mixed method research approach and design to frame the way I collected and analysed my data.

Table 5.1: Matrix of Sources of Data in Relation to Research Questions

Research questions	Questionnaire	Interview	Observation	Documents
RQ 1: What is the nature of ECCE in the Amhara National Regional State in Ethiopia?		X		X
RQ 2: To what extent does the ECCE curriculum address the holistic development of children?	X	X	X	X
RQ 3: What is the nature of teacher training in early childhood education and how does this impact their ability to implement and deliver the curriculum?		X	X	X
RQ 4: How does the curriculum, pedagogic practices, and assessment align to support the holistic development of children?		X	X	X
RQ 5: To what extent does the physical environment support the holistic development of children?		X	X	
RQ 6: What is the nature of District, Community and Parental support in the implementation and delivery of the curriculum?		X	X	X

5.2   Meta-theoretical Framework and Selection of a Research Paradigm

This study was built upon the philosophical insight gained from the pragmatism assumption. According to Leavy (2017), ontological and epistemological belief systems are joined in

88

paradigms. For Guba (1990, p.17) a paradigm is "a basic set of beliefs that guides action". Creswell & Creswell (2018) define a paradigm as "a philosophical orientation about the world and nature of research that a researcher brings to a study". A paradigm may be viewed as a mental model and conceptual framework that describes how researchers think about their topic and research questions (Plano Clark & Ivankova, 2017) or it serves as an "exemplar" for how research is done in a given field (Morgan, 2007). Moreover, it tells the researcher what is important, legitimate, and reasonable (Patton, 2015). Furthermore, Leavy (2017) viewed a paradigm "as sunglasses with differently shaped frames and different coloured lenses, through which research is conceived and executed and thus they are often difficult to see".

Scholars endorsed that researchers should identify and clearly define the meta-theoretical framework i.e., the ontological, epistemological and methodological assumptions that they adopt while conducting research because the philosophical stance lies behind the methodology and influences the practice of the research process throughout the design, implementation, and reporting stages (Cameron, 2011; Creswell & Creswell, 2018; Shannon-Baker, 2016). Identifying and explaining the broad philosophical assumptions also provides a warranty to justify a particular set of inquiries and without philosophical reflection, it is misleading the inquiry (Hathcoat & Meixner, 2017). For this reason, the researcher has to present a philosophical position clearly and convincingly. In contrast, Patton (2015, p.154) argued that "adherence to a methodological paradigm can lock researchers into unconscious patterns of perception and behaviour that disguise the biased, predetermined nature of their methods, decisions, prejudices and paradigmatic blinders limit methodological choices, flexibility and creativity".

There are many world views that we used to guide our actions such as positivist or post-positivist, interpretive/constructivist, transformative and pragmatic paradigms (Creswell & Creswell, 2018; Guba, 1990). Each of these research paradigms has a distinct focus and particular emphasis, and they are grouped into their speciality areas based on their philosophical assumptions, the nature of reality being studied and the knowledge claims about what we can and cannot know, as well as how they utilize theories and finding (Lodico, Spaulding, & Voegtle, 2006). On the other hand, they have a consensus about which questions are worth asking, which methods are most appropriate for answering them and on the bases of warranted assertions about the workability of different lines of action (Morgan, 2007b). To this end, researchers assert that the various versions

of the paradigm concept are not mutually exclusive, nor is one of them right and the other wrong. The crucial question is: which paradigm is appropriate for the topic under study? In this case, the choice of research paradigm should depend on the research question at hand (Cohen, Manion, & Morrison, 2018; Creswell, 2014). As mentioned, this study was built upon the philosophical insight gained from pragmatism, as well as the mixed methods research approach.

5.2.1 Pragmatism

In terms of ontology and epistemology, pragmatism is not affiliated with any single system of philosophy and reality (Rahi, 2017; Weaver, 2018). For pragmatists, it does not matter if there is a single reality or multiple realities (Lodico et al., 2006; Patton, 2015). Pragmatists believe that truth is whatever works at the time or reality relative to the current situation (Easterbrook, Singer, Storey, & Damian, 2008; McCaslin, 2008). Furthermore, pragmatists believe that reality is actively created as individuals interact in the world, and it is thus ever-changing (tentative) (Weaver, 2018). In pragmatic theory, knowledge is not an abstract relation between the knower and the known, but rather an active inquiry process that creates a continual back-and-forth movement between beliefs and actions (Morgan, 2014). It is judged by how useful it is for solving practical problems (Easterbrook et al., 2008). Pragmatists reject older epistemological paradigm conflicts between quantitative and qualitative, forming a logical link between the two paradigms of inquiry or creating methodological middle (Morgan, 2014).

Unlike other philosophical paradigms, the pragmatic perspective draws on employing "what works," using diverse approaches, giving primacy to the importance of the research problem and question, and valuing both objective and subjective knowledge (Morgan, 2007b). For mixed method researchers, the pragmatic paradigm opens the door for different world views, different assumptions, multiple methods, a different forms of data collection and analysis (Creswell & Creswell, 2018). Moreover, pragmatism support paradigm integration and helps mixed research peacefully coexist with the philosophies of quantitative and qualitative research (Johnson et al., 2007). Thus, researchers are free to select methods and approaches that best meet their needs and purposes; the essential is to find the best techniques and procedure of research that solve problem statement" (Creswell & Creswell, 2018; Rahi, 2017). Furthermore, the pragmatic paradigm allows mixed methods researchers not only a top-down deductive or grounded inductive research design

90

but also a continuous cycle of adductive reasoning to produce socially useful knowledge (Feilzer, 2010). A pragmatic approach allowed me to take a pluralistic approach to collect various types of data, both quantitative and qualitative, to answer the research questions.

5.3 Mixed Methods Research Design

In this study, based on the nature of the research questions and objectives of the study, I chose a mixed methods research design to explain and explore the challenges ECCE teachers face in implementing the curriculum to ensure the holistic development of young children in Amhara National Regional State of Ethiopia. The definitions of mixed methods research are fundamental and go beyond using specific terminology; it directly shapes or determines the mixed methods research process i.e. the selection of methods, what was being mixed, when integration occurred, how to draw inferences, and the stage in the research process (Cameron, 2011; Plano Clark & Ivankova, 2016).

For this study, I used Plano Clark's definition of mixed methods research which is that "mixed methods research is a type of research that involve the synergistic combination of different aspects of quantitative and qualitative research including the different perspectives, intents, research questions, data sources, analytic techniques, and interpretations associated with these two approaches" (Plano Clark, 2017, p.305). I used the term "mixed methods research" throughout this study because it integrates quantitative and qualitative methods of data collection and analysis (Creswell, 2015; Creswell & Creswell, 2018; Creswell & Plano Clark, 2011; Plano Clark & Ivankova, 2016). The following section deals with the critique and rationality for using a mixed method research design.

5.3.1 Critiques of Mixed Methods Research

Researchers who advocate a purist methodological stance often criticise the mixed methods research approach. They claimed that it is inappropriate to mix qualitative and quantitative research including its associated methods because they are informed by different and irreconcilable or contradictory ontological, epistemological and methodological assumptions (Alasuutari et al., 2009; Hathcoat & Meixner, 2017; Howe, 1988; Johnson & Onwuegbuzie, 2004; McCaslin, 2008; Morgan, 1998; Sale, Lohfeld, & Brazil, 2002; Teddlie & Tashakkori, 2010). Another critique of

mixed methods research is related to academic traditions, training, funding limitation, and researchers' rationales or interest because the choice of mixed methods research is directly shaped by the researchers' contexts, such as their personal and disciplinary assumptions about research (Hesse-Biber, 2010; Plano Clark & Ivankova, 2016).

In contrast, Howe (2003) argues that this incompatibility principle of determining research methods in a one-way fashion is a false dichotomy and untenable. Teddlie & Tashakkori (2010) agree by noting that:

> Incompatibility issues are irrelevant within such a humanistic framework because, in everyday life, we do not wake up each day reminding ourselves that we are going to be "objective" today, and "subjective" tomorrow, or "compassionate" today and "aloof" tomorrow, and so forth. We see mixed methods as an extension of everyday sense-making (Teddlie & Tashakkori, 2010, p.819).

Mixed methods research covers the large set of points in the middle area between the two opposing poles (subjectivist and objectivist) (Johnson & Onwuegbuzie, 2004). The pragmatic notion of "what works" therefore offers freedom for the researcher to choose methods that work best to address a study's problem and questions (Creswell, 2003; Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2010).

However, the route to mixed methods research is not as easy as it requires extensive time, resources, and the researcher's skill and creativity to collect, analyse and combine qualitative and quantitative data in a single study (Creswell & Clark, 2011; De Vos, 2011; Morgan, 1998; Sheperis et al., 2010). For this reason, it is suggested that a mixed methods researcher needs to be familiar with the techniques of qualitative and quantitative data collection and analysis. The researcher should know the different characteristics of mixed methods research and decide which mixed methods designs are most useful for the project at hand. Moreover, researchers must be aware of their research positions at all stages of the research process and need to step out of their confronting zones both in terms of the methodology they use and the view of the nature of reality from which they are working (Creswell & Plano Clark, 2011; Hesse-Biber, 2010). In light of this, a mixed methods research design was used in this study to explain and explore the challenges that ECCE teachers face in implementing the curriculum to ensure the holistic development of young children.

92

5.3.2   Rationality of Mixed Methods Research Approach

The intent of using mixed methods research is not to replace either approach, but rather to maximize the strengths and minimize the weaknesses of both in a single study and across studies (Greene et al., 1989; Johnson & Onwuegbuzie, 2004). In other words, the rationality of collecting and integrating quantitative and qualitative data rests on the assumption that the weaknesses of one method will be offset by the counter-balancing strength of another because multiple and independent measures do not share the same weakness or potential for biases (Creswell & Plano Clark, 2011; Jick, 1979). Similarly, Sheperis and Daniels (2010) state that mixed methods research allows a researcher to further explore diverse perspectives and constructs at a "deeper" level, where the quantitative strand reveals what the qualitative strand leaves out and vice versa. Similarly, the use of multiple measures may also uncover some unique variances that otherwise may have been neglected by single methods (Jick, 1979). In line with this, there is a metaphor for fishnets:

> …a fisherman has several fishing nets, each with one or more holes. To come up with one good net, the fisherman decides to overlap the different fishing nets, forming one overall net. All the nets have holes in them; however, when the nets are put together, there will probably no longer be a hole in the overall net (Johnson & Christensen, 2017, p.139).

Mixed methods research is therefore applicable when one data source is insufficient to address the study's research problem and the integration of the two databases provides a more complete understanding of the research problem than either method by itself (Creswell, 2014; Creswell & Plano Clark, 2011). Indeed, mixed methods research provides the most informative, complete, balanced, and useful research results (Johnson et al., 2007).

Another essential feature of mixed methods research is its flexibility. It allows researchers to use multimethod to explore or answer multiple or different research questions or variables that require a different parameter in a single study (Creswell & Plano Clark, 2011; Moorley & Cathala, 2019). Methodological eclecticism is the other reason for the use of mixed methods research. Methodological eclecticism is a process of selecting and then synergistically integrating the most appropriate techniques from a myriad of QUAL, QUAN, and mixed methods to thoroughly investigate a phenomenon of interest (Teddlie & Tashakkori, 2010).

Various researchers noted that there is no methodological approach that is intrinsically better than another in terms of generating knowledge and agrees that a single method cannot capture the whole and complex reality (Creswell & Plano Clark, 2011; Moorley & Cathala, 2019). Therefore, to take advantage of the unique opportunities of mixed methods research, researchers can strategically integrate qualitative and quantitative to draw a potential strength; and this holds the promise of compensating for the respective weaknesses of both approaches (Dominguez & Betina, 2014). As such, both the quantitative and qualitative approaches were needed for this study to answer different research questions, working from the premise that the integration of two research approaches provides a better understanding of the research problems than either approach alone can provide.

5.3.3 Concurrent Mixed Methods Research Design

Within mixed method methods research, there are different typologies of mixed methods research designs; these are concurrent or convergent parallel design, sequential (explanatory or exploratory) design, embedded design, transformative design, and multiphase design (Creswell, 2012; Creswell & Plano Clark, 2011). Each of these designs represents different procedures of data collection, and data analysis, as well as the interpretation and reporting of data in a research study. In this study, I employed a concurrent mixed methods research approach (QUAN + QUAL) to explain and explore curriculum implementation challenges faced by early childhood education teachers in Ethiopia in ensuring the holistic development of young children. A concurrent or convergent parallel design is a single-phase approach that involves a simultaneous collection of qualitative and quantitative data and which typically has equal priority to quantitative and qualitative data; the strands are kept independent during analysis, and the results are usually merged in the interpretation phase of the research (Bryman, 2016; Creswell & Creswell, 2018; Creswell & Plano Clark, 2011; Doyle, Brady, & Byrne, 2016).

The rationale for concurrent mixed methods design is to offset the weakness of the other form by capitalizing on the strength of both to form an integrated whole (Bryman, 2016; Creswell, Plano-Clark, Gutmann, & Hanson, 2003). In other words, the premise of using this design is that a single data set is not sufficient since different questions need to be answered and each type of question required different types of data (Creswell & Plano Clark, 2007). In a concurrent design, both

94

qualitative and quantitative data provide different types of information (detailed views of participants qualitatively and scores on instruments quantitatively), and together they yield results that should be the same (Creswell, 2014). In this study, ECCE curriculum experts at the (national and regional levels) were interviewed qualitatively and ECCE teachers were studied both quantitatively and qualitatively and the entire data was analysed in separate phases before being integrated into the discussion phase.

5.3.4 Data Integration

Data integration consists of merging the results from the qualitative and the quantitative findings (Creswell & Creswell, 2018). This is the most challenging aspect of mixed methods research, especially deciding how to represent and use the three sets of findings, i.e. qualitative, quantitative, and mixed methods to answer the research questions (Leavy, 2017). The reason for this is that bringing together a numeric quantitative database with a text qualitative database is not intuitive (Creswell & Creswell, 2018). The qualitative and quantitative data will be integrated either for corroboration, elaboration or expansion, initiation, complementarity, and contradiction (Brannen & O'Connell, 2015; Bryman, 2006). Thus, in this study, the two datasets were integrated or combined to answer the research questions as well as for corroboration, elaboration, and complementation of the findings (Brannen & O'Connell, 2015; Bryman, 2006).

There are several ways to merge or integrate the two databases. One could use individual /separate subsections of the results or side-by-side displays, transformation, and joint displays of data (Creswell, 2014; Creswell & Creswell, 2018; Leavy, 2017). In this study, I followed a side-by-side display i.e. each set of findings was presented in individual/separate subsections of the results (i.e. the quantitative statistical results were presented first and then followed by the qualitative results (e.g., themes) (Creswell, 2014; Creswell & Creswell, 2018). The independent findings of the two datasets were integrated or combined in the discussion in chapter eight. The discussions and interpretations were presented by integrating the qualitative and quantitative findings based on the research question and objectives of the study with the support of a review of relevant literature and a theoretical framework (Creswell & Creswell, 2018). That means the quantitative results obtained using questionnaires and structured observation were complemented by qualitative data obtained through the use of semi-structured interviews and document analysis. The

95

two datasets were juxtaposed to generate complementary insights that together create a larger picture (Creswell, 2014; Leavy, 2017). Following in figure 5.2 is a graphical representation of the quantitative and qualitative data integration process, which describes a concurrent quantitative and qualitative data collection and analysis process.
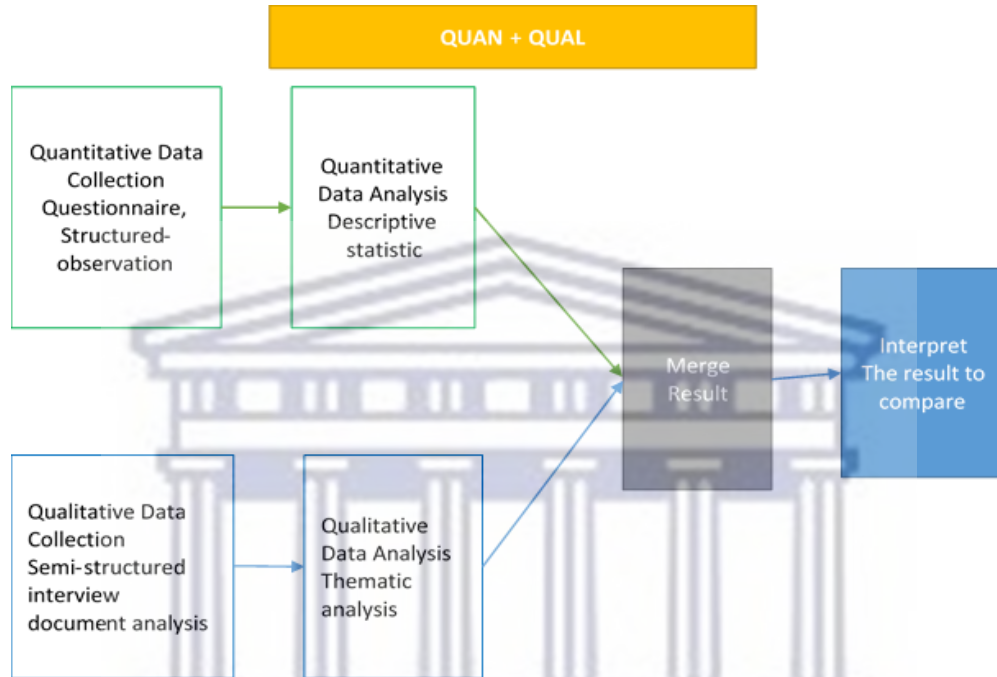
Figure 5.2: Concurrent mixed methods research design illustrating data integration

Source: Concurrent Mixed Methods Research design, adapted from (Creswell & Creswell, 2018, p.300)

In terms of priority, the equivalent status/simultaneous design is QUAN + QUAL. The capital letters represent the main or dominant method. The notation '+' is used to indicate a simultaneous design. The next section deals with research procedures and strategies such as the sample, sampling techniques, data collection instruments, and analysis of the data.

5.4 Research procedures and strategies

This section deals with sampling, data collection, and the data analysis steps within this research study

5.4.1   Sampling designs and Sampling Procedure

As previously mentioned, a concurrent mixed methods research design was employed in this study. The quality of research stands not only on the appropriateness of methodology and instrumentation but also on the suitability of the sampling design that has been adopted (Cohen et al., 2007). Sampling design involves making a series of decisions not only about how many individuals to include in a study and how to select these individuals but also about conditions under which this selection will take place (Onwuegbuzie & Collins, 2007). The overall purpose of sampling is to generate a sample that will address research questions (Teddlie & Yu, 2007). For this reason, the researcher may employ either probability or purposive sampling or both to answer research questions (Bryman, 1989).

In a mixed methods study, there are typically multiple samples and these samples may vary in size (dependent on the research strand and question) from a small number of cases to a large number of units (Teddlie & Yu, 2007). According to Onwuegbuzie and Collins (2007), sampling in mixed methods research typically is much more complex than in monomethod studies because sampling schemes must be designed for both the qualitative and quantitative research components of the study. To meet the specific mixed methods designs (e.g., concurrent, sequential designs) mixed methods, the researcher has to combine probability and purposive sampling techniques in certain unique prescribed ways (Teddlie & Yu, 2007).

With regard to the objective of the study, I employed both purposive or non-probability and probability sampling techniques to choose participants. A qualitative study's goal is usually not to generalise to a population, but rather to gain insights into a phenomenon, a person, or an event. For this reason, the researcher deliberately chooses individuals, groups, and settings that will help him/her understand the underlying phenomenon (Onwuegbuzie, 2007). For qualitative sampling, non-probability sampling included convenience and purposive strategies were used to select participants. Convenience sampling involves drawing samples that are both easily accessible and willing to participate in a study (Teddlie & Yu, 2007). Ideally, quantitative research relies on probabilistic sampling to provide statistical inferences. However, "the size of the sample was informed primarily by the research objective, research question(s), and, subsequently, the research design" (Onwuegbuzie, 2007, p.288). For the selection of survey participants or sample units, I

97

employed simple random sampling and multistage sampling. Combining the two orientations allowed me to generate complementary databases that included information that had both depth and breadth regarding the phenomenon under study (Teddlie & Yu, 2007).

5.4.2 Selection of study Site and Participants

This study was conducted in the Amhara National Regional State which was selected through convenience sampling. Convenience sampling chooses settings, groups, and/or individuals that are conveniently available and willing to participate in the study (Onwuegbuzie, 2007). It is assumed that having access to samples can facilitate and make data collection easier. I am familiar with the culture and way of life of the society because I have worked in various areas of the region and still live there. This allowed me to easily contact the participants and spend time with them without incurring significant costs. The population of this study included education experts from the Ministry of Education and Regional Education Bureau and ECCE teachers. In the sample preschools, there were 1958 ECCE teachers or ECCE teachers, from these 608 were diploma holders and 713 were certificate holders and the rest (637) were uncertified teachers. These uncertified teachers were not part of the study. Only, 1321 (608 diplomas and 713 certificates) teachers were part of the study. Due to time and financial constraints, it was not possible to include the entire population. From 1321 teachers, 30% (396) of ECCE teachers were selected, through multistage random sampling, to complete the questionnaire.

Multistage random sampling was used to minimize geographical variations into non-overlapping and manageable sizes and to avoid personal judgment. This type of sampling is appropriate when the population is large and widely dispersed thereby multistage sampling help to minimize the area into non-overlapping areas and when gathering a simple random sample poses administrative problems (Cohen et al., 2007). Multistage sampling may involve selecting large primary sampling units such as states, districts, towns, and finally specific families within towns (Kothari, 2004). The region's political administration is appropriate for multisampling techniques. In Amhara National Regional State there are 15 administrative zones, these zones were further subdivided or clustered into Districts/Woreda. In the first stage of 15 administrative zones, three administrative zones (North Wollo, Bahir Dar City, and East Gojam zone) were selected using simple random sampling. These zones were further subdivided and clustered into Districts/Woreda. In the second

stage, 11 Districts/Woreda were selected using multi-stage purposeful sampling based on their accessibility. In the third stage, 162 preschools were selected based on their accessibility and the purpose of the study. Finally, as mentioned above from 1321 certified teachers 30% (396) of teachers were selected using simple random sampling for the quantitative data. The reason for this is that in probability random sampling every element in the population has a known and non-zero chance of being selected (Leavy, 2017) or has an equal and independent chance of being selected from the population, ensuring that the sample will be representative of the population (Creswell, 2014; Lodico et al., 2006). Thus, inclusion or exclusion from the sample is a matter of chance (Creswell, 2009; Kothari, 2004). In addition, from these sampled preschools, 25 preschools were selected for structured observation using convenience sampling based on their accessibility.

For qualitative data, four ECCE teachers and two experts (one from the Ministry of Education and one from the Regional Education Bureau) were selected using purposive sampling techniques. First I select four preschools using purposeful sampling, and then four ECCE teachers (one from each school) were chosen using purposeful sampling techniques based on their teaching experience and level of education because they are expected to have knowledge and experience about the phenomenon under investigation. The ECCE experts from the Ministry of Education and Regional Education Bureau were selected using available sampling for this study because they are in charge of supporting and inspecting ECCE curriculum implementation.

The idea behind qualitative research is to purposefully select participants or sites (or documents or visual material) that will best help the researcher understand the problem and answer the research question (Creswell, 2014). Purposive sampling is commonly used in qualitative research, and it is appropriate to identify and select individuals or groups who are particularly knowledgeable about the phenomenon (Leavy, 2017). The primary concern in purposive sampling is not to generalise; rather, its concern is to acquire in-depth information from those who are in a position to give it (Cohen et al., 2007). Interview data were collected from participants (ECCE teachers and experts) who are at different levels of positions. This helped me gain a more holistic view of the nature of curriculum implementation and the relevance of curriculum content to the holistic development of young children.

5.5 Data Collection Instruments

Different types of research questions need different types of data. For this reason, a concurrent mixed methods research design was employed as a research design in this study. Thus, for this study, both qualitative and quantitative data were collected concurrently using a structured questionnaire, structured observation, semi-structured interviews, and document analysis. Employing multiple data collection techniques allowed me to gather rich information from different sources and angles and offset the limitations of each data-gathering technique, as well as look at data from different perspectives.

5.5.1 Semi-structured Interview

An in-depth face-to-face semi-structured interview was conducted with four ECCE teachers and two ECCE experts (one from the Ministry of Education and the other from the Regional Education Bureau). Interviews yield direct quotations from people about their experiences, opinions, feelings, and knowledge (Patton, 2015). The semi-structured interviews allowed me to capture the perspectives of teachers and experts, their experience, expectations about the ECCE programme, curriculum implementation, activities, processes, and outcomes. In addition, semi-structured interviews have a flexible structure, which enabled me to ensure flexibility in how and in what sequence questions were asked (Gibson & Brown, 2009; Mason, 2004).

Semi-structured interviews enable probing for more information on particular points to explore the topics more discursively than structured approaches and even to explore topics that may emerge that were not included in the interview schedule (Gibson & Brown, 2009, p.90). According to Maree et al., (2016), there are three probing strategies: detailed-oriented, elaboration, and clarification probes that can be used for the maximum amount of data and to verify whether what have you heard, is actually what the person meant to say. So verbal probing and prompting were used to find out more information, to elaborate and clarify responses and also to understand the meanings of certain responses that were not clear to me. It was also useful to explain when teachers needed clarification or did not understand what certain questions meant. In addition, the interviews provided me with additional information that was missed in observations and was used to check the accuracy of the observations (Maxwell, 2013).

100

In this study, individual face-to-face interviews were conducted with the MOE and regional ECCE experts and teachers. The semi-structured interviews lasted about 45 minutes on average. Prior to the interview, participants were asked to sign a consent form to record the conversation and fill out a personal profile record form with information about their age, work experiences, and educational and professional qualifications. As a good hammer is essential to fine carpentry, a good recorder is indispensable to fine fieldwork (Patton, 2015). All interviews were audio-recorded to obtain a detailed record of the interview and to produce verbatim transcriptions. Audio recordings are important to capture what people exactly say in their own words. In addition, during the interview field notes were used to capture the main ideas and issues that were specific to the case sights. The interview protocols were structured and contained six main domains that covered the nature of the ECCE curriculum, curriculum implementation, alignment between curriculum content, pedagogy, and assessment, nature of teacher training, district, community, and parental support.

However, the interview method has its limitation. These limitations may include possibly distorted responses due to personal bias, anger, anxiety, politics, and a simple lack of awareness since interviews can be greatly affected by the emotional state of the interviewee at the time of the interview (Patton, 2015). Interview data is also subject to recall errors, reactions of the interviewee to the interviewer, and self-serving responses (Patton, 2015). Taking this into account, different sources such as structured observation, closed-ended questionnaires, and document sources were used to triangulate and build on the strengths of each type of data collection while minimizing the weaknesses of any single approach (Patton, 2015). Furthermore, the semi-structured interview protocols were pilot tested to assess the feasibility of the questions. This was followed by making the appropriate corrections, editing and reformation of certain statements.

5.5.2 Questionnaire

Another primary data collection instrument used in this study was a structured questionnaire. A questionnaire can help to measure many different kinds of characteristics or to obtain information about the thoughts, feelings, attitudes, beliefs, values, perceptions, personalities, and behavioural intentions of research participants (Johnson & Christensen, 2017). As such, to gather perceptions and reflections of ECCE teachers about the relevancy of ECCE curriculum content, structured

101

questionnaires were developed. The questionnaire contained a five-point Likert scale varying from 1 = strongly disagree to 5 = strongly agree. The instrument had 57 items with eight different scales to collect data from ECCE teachers. The contents included gross and fine motor development, self-regulation skill, health, safety, nutrition, social development, emotional development, and cognitive development (science, mathematics, and language). Finally, ECCE teachers were asked to indicate their level of agreement with each of the statements. A questionnaire is a widely used and useful instrument for collecting survey information, providing structured, often numerical data, able to be administered without the presence of the researcher, and often comparatively straightforward to analyses (Cohen et al., 2018).

Johnson & Christensen (2017) states that a questionnaire is a self-report data-collection instrument that each research participant fills out as part of a research study. Kothari (2004) added that a questionnaire is a systematically designed form or document with a set of questions to elicit responses from a large number of research informants, but it requires respondents' ability to read and understand. Others argue that a closed-ended structured questionnaire is cheap, reliable, valid, quick, and easy to complete (Cohen et al., 2018), easy for participants to understand, to choose alternative replies at times, as well as it is simple to administer and relatively inexpensive to analyse (Kothari, 2004). However, questionnaires are criticised for not being appropriate for measuring attitudes and reasons for specific actions or feelings. As a result, structured observation schedules, interviews, and document analysis were used to fill the gap. The questionnaire was piloted prior to using it in the main study.

5.5.3 Structured Observations

A structured observation schedule was another important data collection tool used in this study. The main purpose of designing structured observation in this study was to answer research question five. This question focused on the physical environment (indoor and outdoor facilities), curriculum content and pedagogy, personal and professional, and partnerships with families and communities. The structured observations were used in this study to triangulate and ensure the validity of data gathered from other forms of data (i.e. interviews and questionnaires) or to triangulate each form of data. In structured observation, the observer adopts a passive, non-

intrusive role, merely noting down the incidence of the factors being studied (Cohen et al., 2007). Each preschool was observed for two successive days.

Bryman (1989) noted that one of the chief arguments in favour of structured observation is that it gets away from the excessive reliance on questionnaires and interviews as sources of information about organizational behaviour. Meaning that the information is sought by way of the investigator's direct observation without asking for the respondent's willingness (Kothari, 2004). Furthermore, Gibson & Brown (2009) states that structured observations are appropriate where researchers have a very clear idea of what they want to look at and have a well-formulated rationale for why it is relevant to them. Moreover, structured observation entails the opportunity to record information as it occurs in a setting, to study actual behaviour, and to study individuals who have difficulty verbalizing their ideas (e.g., preschool children) (Creswell, 2012).

In a research process, observation allows the researcher to gather 'live' data from naturally occurring social situations (Cohen et al., 2007). In other words, the information obtained under this method relates to what is currently happening; "it is not complicated by either past behaviour or future intentions or attitudes" (Kothari, 2004, p.96). Unlike interviews or questionnaires, observations are independent of the respondents' willingness to respond and as such relatively less demanding of active cooperation on the part of respondents (Kothari, 2004). Another significance of structured observation is that the data analysis is fairly rapid since the categories have already been established (Cohen et al., 2007). However, structured observation schedules are less flexible, restricting attention and limiting the ability of observers to see new things. It is also limited to those sites and situations where the researcher can gain access (Creswell, 2012; McKechnie, 2012).

The reason for this is that structured observation concentrates directly on observable behaviour, so one is rarely able to get the intention behind the behaviour (Bryman, 2016). For this reason, descriptive and reflective field notes were used to supplement such gaps or to record data that may not fit or capture data that was not included in the observation checklist (McKechnie, 2012). In this regard, the adapted structured observation schedule has its own free space to record additional data or to leave comments about specific cases, descriptions of events, activities, and people (e.g., what happened) by making notes on what has been observed. The structured observation was adapted from the revised Global Guidelines Assessment (GGA) for the Education and Care of

103

Young Children. According to Hardin (2017, p.311), the GGA can contribute valuable information "to efforts focused on measuring and improving the quality of early care and education, such as 4.2 under Goal 4 in the 2030 Sustainable Development Goals". To adapt to the standardised structured observation schedule, a pilot test was conducted (Bryman, 1989). Based on the pilot test some subscales that were deemed irrelevant for this study were discarded.

5.5.4   Document Sources

Document sources have served mostly to complement other research methods. It has also been used as a stand-alone method (Bowen, 2009). In this study, document sources were selected to examine ECCE policies, and the alignment between the curriculum, pedagogy and assessment, amongst other things. It was specifically used to substantiate or triangulate and establish the credibility of the information gathered through other data sets (the interview, observation, and questionnaire). Document sources are most effective when events can no longer be observed or when informants have forgotten the details (Bowen, 2009; Patton, 2015). Documents that may be used for systematic evaluation as part of a study take a variety of forms, which consist of public and private records about a site or participants in a study, and it can include newspapers, minutes of meetings, diaries, and journals, attendance registers, letters and memoranda, newspapers, maps and charts, organizational or institutional reports; survey data and archival material in libraries (Bowen, 2009; Bryman, 1989; Creswell, 2012). Bowen (2009) has pointed out five main benefits of document sources including:

- Documents provide background information as well as historical insight within which research participants operate;
- Documents can suggest some questions that need to be asked and situations that need to be observed as part of the research- to generate new interview questions. This helps to show one method can interactively complement another;
- Documents provide supplementary research data;
- Documents provide a means of tracking change and development; and
- Verify findings or corroborate evidence from other sources-have greater confidence in the trustworthiness (credibility) of the findings (p.29-30).

104

However, there are some limitations in using document sources. Documents are sometimes difficult to locate and obtain, and information may not be available to the public. Furthermore, documents may be incomplete, inauthentic, or inaccurate (Creswell, 2012). In contrast, Bowen (2009) states that these are potential flaws rather than major disadvantages; its efficiency and cost-effectiveness, in particular, offer advantages that outweigh the limitations. Formal official documents such as ECCE policy documents, the official ECCE curriculum, syllabus, teacher guides, and national and regional statistical reports were used in this study. In addition, school records such as minutes of meetings, agendas, financial reports, children's exercise books, sample test papers, attendance registers, assessment activities, teachers' daily lesson plans, and annual plans were also reviewed for this study.

Following, in Figure 5.3, is a graphical representation of the methodological trajectory of my study, which outlines procedures followed from start to finish.
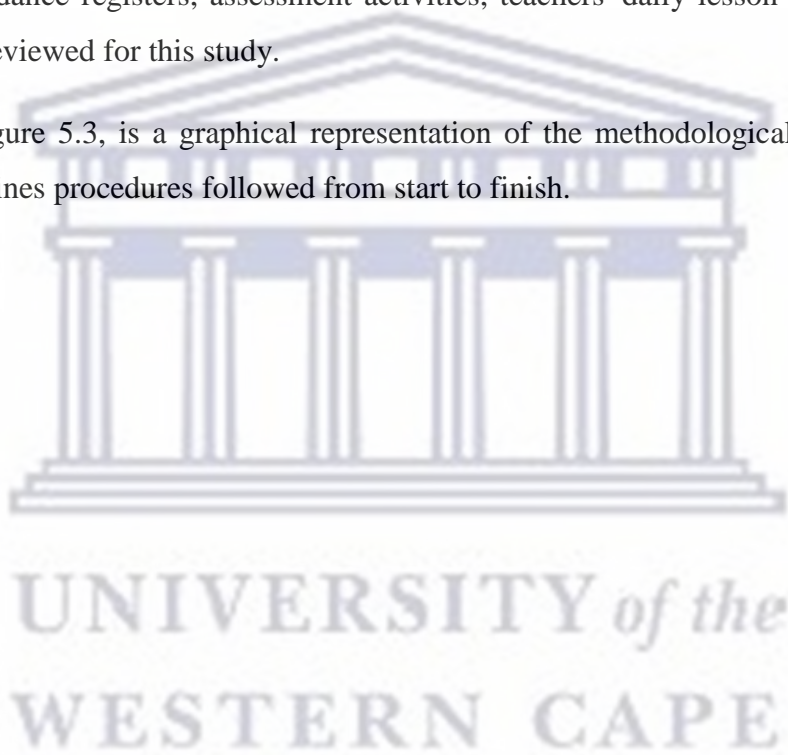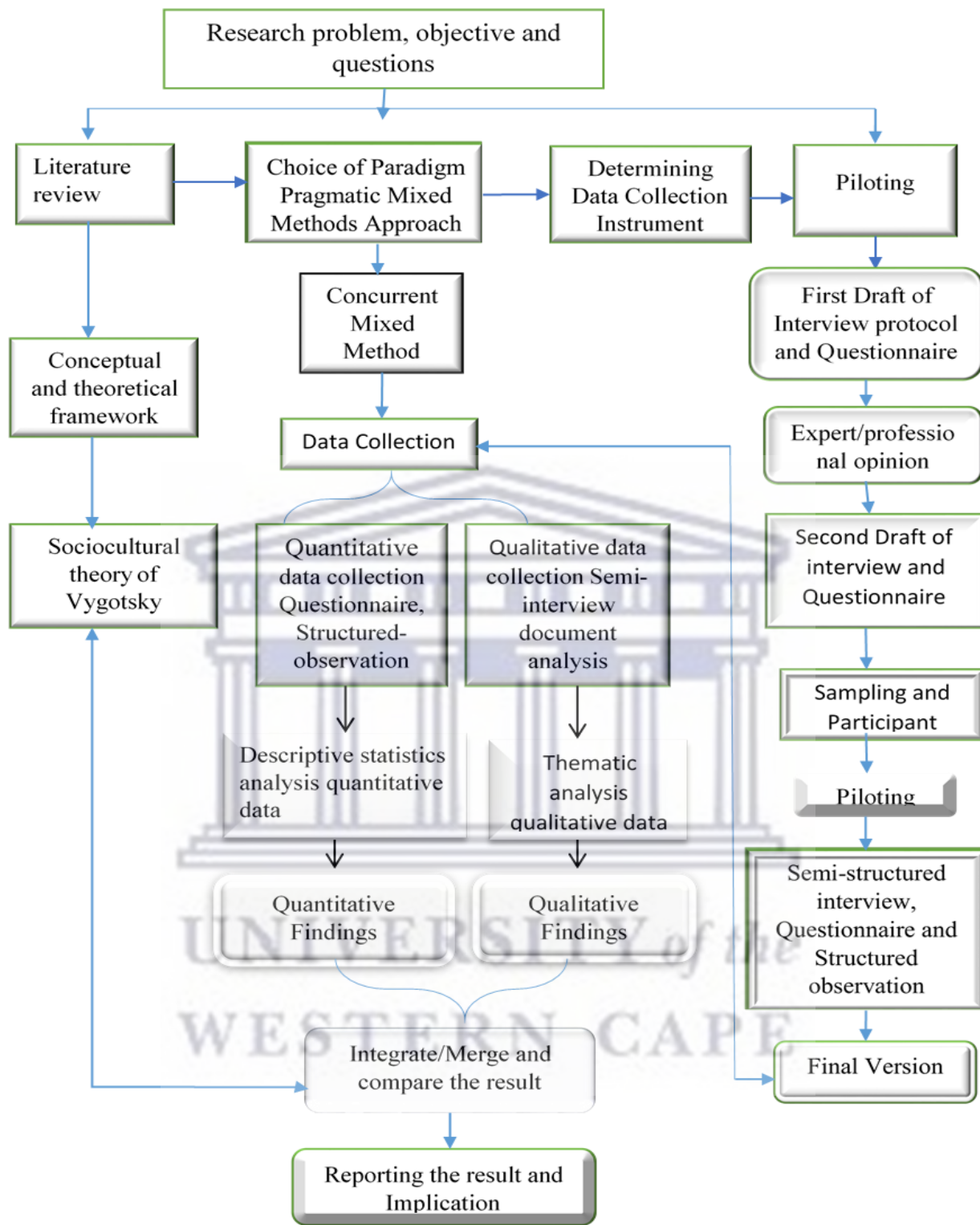
Figure 5.3: Methodological trajectory of the study

5.6   Data Analysis

As mentioned in the previous section, this study employed a concurrent mixed methods research design. Data analysis, in a concurrent mixed methods research design, involves the concurrent, but separate, collection and analysis of quantitative and qualitative data (Creswell & Creswell, 2018; Molina-Azorin, 2018). In this study, the two datasets (qualitative and quantitative) were prepared, organized, analysed and presented in separate sections before being integrated into the discussion and interpretation stage.

The quantitative data collected via questionnaires and structured observations were edited, coded, and entered into the Statistical Package for Social Sciences (SPSS) Version 26 for analysis and the data were analysed using descriptive statistics such as frequencies and percentages. Whereas the qualitative data that were generated through semi-structured interviews, documents and field notes were transcribed, scanned, sorted, manually coded, categorised and analysed thematically in the light of the research questions and objectives. Following is a detailed discussion of how the qualitative data was analysed.

5.6.1   Qualitative Data Analysis

The qualitative data analysis continued shortly after transcribing audio-recording interviews because qualitative data analysis is not a discrete procedure carried out at the final stages of research; rather it is an emerging and all-encompassing activity that continues throughout the life of the project (Basit, 2003; Moser & Korstjens, 2018). As mentioned in the previous section, the qualitative data collected through semi-structured interviews and field notes were organized, coded, and categorized systematically and analysed thematically based on the research questions. Cohen et al., (2018) noted that organizing, analysing and presenting data by research question helps to draw together all the relevant data for the exact issue of concern to the researcher, maintain the coherence of the material and provide a collective answer to the research question. Thereafter I followed the step-by-step guide for thematic analysis provided by (Braun & Clarke, 2006).

To facilitate my analysis, I first created a secure research file for each participant. The digital file folders were stored with a protective password. Each participant was assigned an identity code, as well as a date and context. For example, (RPA-T1, RPA-T2, UPC-T3 and UPD-T4) (see section

107

6.2). The units of analysis were organized and displayed in words, lines, sentences, and paragraphs. This allowed me to select ideas and pick out concepts, and themes and organize them into categories.

The interview protocol was written in English, however, conducted in Amharic. The results were analysed and reported in English. In order to reduce the potential problem with the translation of the interview, protocol and data were double-checked by two of my English language colleagues. The audio-recorded interviews were transcribed verbatim into Amharic text (from participants' spoken). All participants and the researcher were Amharic speakers. For accuracy and to reflect the experience of the interviewee, I tried to maintain a rigorous and thorough 'orthographic' transcription/'verbatim' account/of all verbal and sometimes nonverbal utterances (Braun & Clarke, 2006). I did the transcription myself as it enabled me to take preliminary notes, identify similarities and differences within and across the different sets of interviews, and revise and remember the content of the interviews (Moser & Korstjens, 2018).

To verify the accuracy of the transcripts against the original audio recordings, I listened to the audio recordings more than once. I did not find any difficulties in the Amharic transcription of the data as the participants and I are native speakers of Amharic. Amharic transcriptions were checked by the interview participants because member checking enabled participants to evaluate the truthfulness of the transcript which in turn strengthened the quality of the study (Cohen et al., 2018; Graneheim & Lundman, 2004; Petrova, Dewing, & Camilleri, 2016). This was followed by translating the Amharic transcript into English. The content and language translation were checked by two of my colleagues who are English language lecturers.

As an initial step to familiarize and immerse myself in the data, and to get the breadth and depth of the content, I thoroughly read the interview transcripts several times. In order to identify initial codes and patterns from the data, interview transcripts and field notes were further read and re-read. Thereafter, initial codes were identified based on the research questions (Saldaña, 2013). After the initial coding, I then went through the coded themes. Coding is the ascription of a category label to a piece of data, decided in advance towards an even more rigorous and evocative analysis and interpretation of a report (Cohen et al., 2018; Creswell, 2012). The purpose of the coding process was to make sense of text data. Subdividing or breaking down large segments of

108

transcripts or text data into smaller units in a new meaningful way by labelling the segments with codes or grouping similarly coded data or "families into categories, examine codes for overlap and redundancy, and collapse these codes into broad themes for analysis" (Cohen et al., 2018; Creswell, 2012; Saldaña, 2013). The coding was done manually using different colour highlighters.

There is a variety of qualitative data analysis software that can assist researchers, such as ALAS-ti, NVivo, and others. Computer analysis can save time and reduce drudgery by making writing, editing, and rewriting easier (Hatch, 2002). It also provides different coding tools and formats (for example, to store, name, label, sort, and organize large amounts of textual data to annotate, retrieve texts, locate and segment words and phrases), and prepare diagrams, extracts quotes, compares, and link data for systematic data analysis (Moser & Korstjens, 2018; Patton, 2015). However, there are limitations to the use of the software. For example, data and completed analyses may be lost due to technical failures and human errors, causing researchers to lose sight of the contexts of the study and the data set as a whole as well as forcing researchers to rely on what the computer can do rather than what should be done (Hatch, 2002).

In computer analysis, there is a sense of being distant from the data or having a physical impression of the data is not possible (Patton, 2015). Computer analysis is not mandatory or a prerequisite. It is partly a matter of personal preference and expertise of the researcher and the choice will be dependent on the amount of data to be analysed, as well as the funds and time available (Basit, 2003; Patton, 2015). Even though manually coding qualitative data analysis is tedious and time-consuming, coding qualitative data on paper and writing codes in pencil provide greater control and ownership over the work (Basit, 2003; Saldaña, 2013). It was easier and more productive than using a computer programme (Patton, 2015). Patton (2015) argues whether done manually or with the assistance of a computer programme, the real analytical work takes place in the researcher's head; implying that text analysis software does not perform the analysis for the researcher. It is the researcher who does the analytical work by looking at what is in the data, creating the categories, segmenting and coding, deciding what to retrieve and collate and making decisions about assigning codes as well as identifying categories concepts and patterns (Basit, 2003; Moser & Korstjens, 2018).

109

After extracting the preliminary codes as a third step, all codes were collected and continually grouped and re-grouped, into meaningful clusters under similar categories and themes to identify trends and patterns that represent emerging potential themes (King & Brooks, 2018). In this process, I used the similarity and contiguity strategies proposed by Maxwell (2013) to define categories and group units of data under similar categories/ themes, compare by category, and link threads and patterns within and between various categories/ themes. Maxwell explains that:

> Similarity relations involve resemblances or common features; their identification is based on comparison, which can be independent of time and place. Similarities and differences are generally used to define categories and to group and compare data by category. While Contiguity-based relations, in contrast, involve juxtaposition in time and space, the influence of one thing on another, or relations among parts of a text; their identification involves seeing actual connections between things, rather than similarities and differences. …I refer to strategies that focus on relationships of contiguity as connecting strategies (Maxwell, 2013: 108).

Maxwell, (2013) stated that even though, neither of these strategies can be assimilated into the other; they are based on different forms of relationship with specific data, but, they coexist. I compiled the themes and sub-themes to create a complete picture of the participants' shared experiences. Thereafter, themes were further refined and checked to see if they fit with the context of the entire datasets and appear to form a coherent pattern and generate a thematic 'map' of the analysis (Braun & Clarke, 2006). Finally, the qualitative data were analysed thematically. Figure 5.4 shows the graphical representation of a step-by-step process followed to analyse the interview transcripts to develop themes.
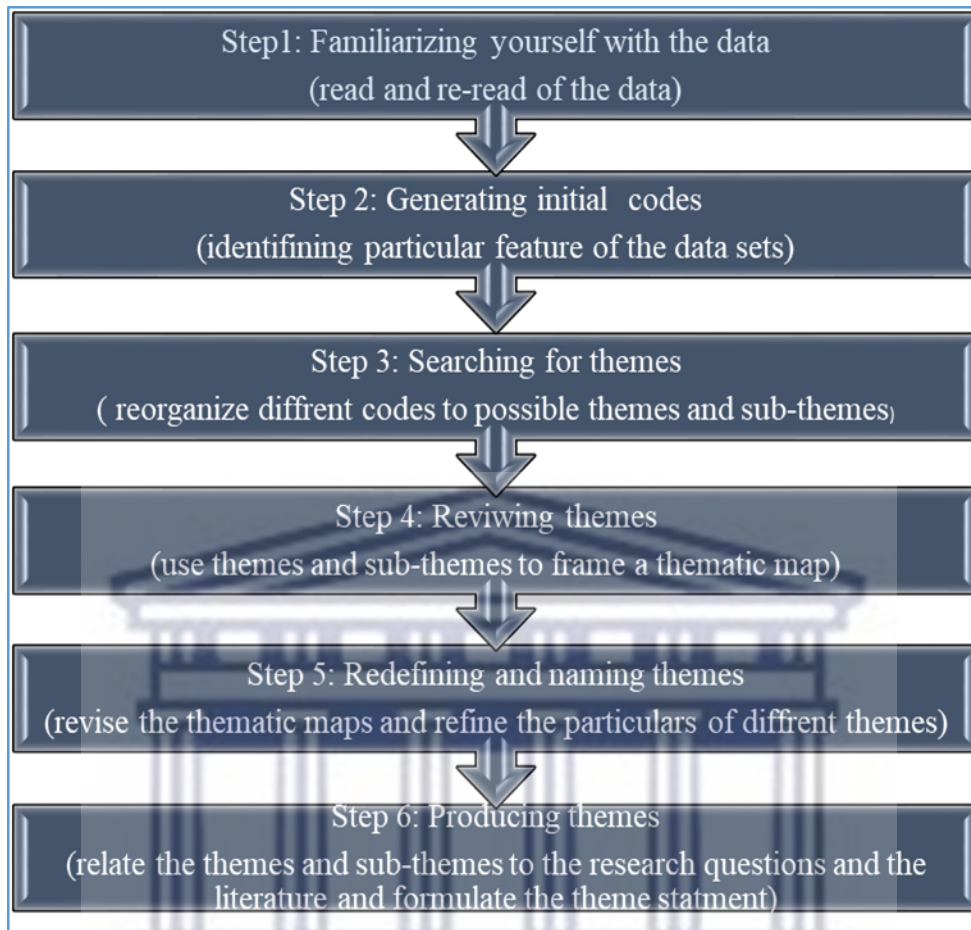
Figure 5.4: Thematic Analysis- A step-by-step process of how themes develop

Source: Adapted from Braun and Clarke (2006, p.87)

5.7   Addressing Issues of Validity and Reliability

The concept of validity and reliability does not have the same connotations in qualitative and quantitative research (Cohen et al., 2018; Creswell & Creswell, 2018; Kumar, 2011). Unlike terms used to judge rigour in quantitative research, qualitative researchers used different language to describe the trustworthiness or confidence of the results or findings (Bush & Amechi, 2019; Graneheim & Lundman, 2004). Due to the different nature and purpose of quantitative and qualitative traditions, it is incorrect to apply the same worthiness criteria or merit to establish trustworthiness or validity; and each research study must be evaluated according to the procedures used to generate the finding (Graneheim & Lundman, 2004). As mentioned qualitative and quantitative data were collected concurrently in this study and analysed separately before being

111

integrated into the discussion. Therefore, it is worthy to treat the issue of validity and reliability separately to ensure the credibility of both the qualitative and quantitative findings of this study.

5.7.1 Validity and Reliability of Quantitative Data

Reliability and validity are the two most fundamental and pervasive verification strategies that lie at the heart of good-quality research (Bajpai & Bajpai, 2014). To ensure the validity and reliability of instruments and to resolve any potential difficulties a small-scale pilot test was conducted.

5.7.1.1 Validity

Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure (Kothari, 2004). There are several ways of establishing validity including face validity; concurrent validity; predictive validity; construct validity; and convergent validity (Bryman & Bell, 2011). Content validity is the extent to which a measuring instrument provides adequate coverage of the topic under study and is commonly determined by an expert or expert panel (Kothari, 2004; Sheperis et al., 2010). However, "what is relevant, evidence often depends upon the nature of the research problem and the judgment of the researcher" (Kothari, 2004, p.74). In relation to this study, content and construct validity were employed.

To enhance the content, face and construct validity of the constructed questionnaire was reviewed by my supervisor and four lecturers in the field in terms of the comprehensive nature of the content, its clarity and lack of ambiguity in terms of its format, items, wording, and instructions. Based on their feedback, I made some changes in the format and wording of some questions. Furthermore, the instruments were reviewed through the pilot study and the result is presented in the following section

5.7.1.2 Reliability

Reliability refers to the extent to which a measurement is free from error, or how consistent the measurement would be if it were repeated (Dawson, 2017; Helms, Henze, Sass, & Mifsud, 2006). Items in the questionnaire were pilot tested to ensure the reliability of the instrument and to resolve any potential difficulties that may have arisen during the main study data collection process. Items internal consistency was checked by calculating Cronbach's alpha value (α) coefficient.

112

5.7.2   Pilot Testing

A pilot study was recommended while conducting research because it could uncover weaknesses or limitations in the research instrument and point out potential areas where the study might fail. This pilot testing was conducted to assess the feasibility of the proposed methodology, adequacy of data-gathering instruments, and data analysis strategies as well as to identify potential problems that may influence the success of the main research (Jihyun Kim, 2018; Rutherford-Hemming, 2018; Schreiber, 2012). The site and participant are parts of the main study and they are selected in the same inclusion and exclusion criteria of the main study. However, interview and questionnaire participants were not included in the main study.

5.7.2.1   Pilot Testing of Questionnaires

The pilot testing of questionnaires was conducted with randomly selected 30 ECCE teachers in the Amhara National Regional State, Ethiopia. Pilot participants were selected based on the same inclusion criteria as the main study and pilot participants were not included in the main study (Thabane et al., 2010). According to Teijlingen and Hundley (2011), the pilot study needs to be secure from contamination of the sample. In other words, participants who participated in the pilot study should not be part of the main study because the participants who are involved in the pilot study may respond differently from those who have not previously participated and they could be a threat to validity (Kim, 2018; Teijlingen & Hundley, 2011).

5.7.2.2   Reliability Analysis of the Piloted Questionnaire

The reliability and internal consistency of the questionnaires were assessed by calculating Cronbach's alpha (α) coefficient. Cronbach's alpha reliability coefficient α normally ranges from 0 to 1. If the coefficient of Cronbach's alpha is closer to 1, greater internal consistency of the items in the scale and Cronbach's alpha value ≥ 0.7 was acceptable. According to (Geroge & Mallery, 2003) rules of thumb, if Cronbach's alpha reliability coefficient is: "≥9 – Excellent, ≥8 – Good, ≥7 – Acceptable, ≥6 – Questionable, ≥5 – Poor, and ≤5 – Unacceptable" (p. 231). Even though the higher values of alpha are more desirable, depending on the particular research project or the estimation procedures used the summed calculated Cronbach's coefficient of 0.7 was acceptable (Bajpai & Bajpai, 2014; Taber, 2018). A high alpha value means that the items are measuring some

113

common factor(s) rather than unique features associated with individual test items or every item in an instrument is measuring something similar to some of the other items (Taber, 2018). The overall Cronbach alpha analysis was (Cronbach's α coefficient = 0.726), which indicates that the instruments are reliable. Meaning that items were adequate for the full-scale collection of data or the final study. The details of Cronbach's alpha result computed to test the reliability and internal consistency of the responses obtained from the respondents are presented in detail in appendix (E).

5.7.2.3 Piloting Observation Schedule

As mentioned in section 5.3, the observation schedule was adopted from the Global Guidelines for the Education and Care of Young Children in the 21st Century (GGA). There are many observation scales used to assess programme quality. However, the items of GGA observation scales are appropriate for the objectives of this study and very comprehensive including physical environment, curriculum and pedagogy, and parent and community participation. Hardin (2017, p.11) noted that "the international approach used to develop and establish the reliability and validity of the GGA makes it unique among the tools available to ECCE professionals and policy makers worldwide". GGA is a useful, reliable, and valid instrument that can be used effectively by stakeholders of ECCE programs in the evaluation of quality enhancements to their programs (Bergen & Hardin, 2015). This observation scale has 76 items across five subscales: a) Environment and Physical Space; b) Curriculum Content and Pedagogy; c) Early Childhood Teachers and Caregivers; d) Partnerships with Families and Communities and e) Young Children with Special Needs.

The structured observation schedule was pilot tested in five preschools, which were selected purposely based on their accessibility. A brief description of the sites is provided in the appendices (see Appendix I). As mentioned above the GGA has five subscales. After conducting the pilot study, I found that subscale five (i.e., Young Children with Special Needs) was not relevant to the objectives of my study. For this reason, only this subscale was discarded, and the rest of the scales were left unchanged. Furthermore, the reliability of this structured observation schedule was established using an interrater reliability analysis of Cohen's kappa. Kappa is one of the most commonly used measurements to express the agreement between two raters in a single number or observation (Mchugh, 2012; Warrens, 2015). Like most correlation statistics, the kappa interrater

114

reliability range from -1 to +1 (Warrens, 2015). According to Warrens (2015), Kappa results must be interpreted as values ≤ 0 indicating no agreement and 0 .01–0 .20 as none to slight, 0 .21–0 .40 as fair, 0 .41– 0 .60 as moderate, 0 .61–0 .80 as substantial, and 0 .81– 1 .00 as an almost perfect agreement" (Mchugh, 2012:279). To assess inter-rater reliability, the structured observation was submitted to lecturers in the faculty of education. Cohen's kappa interrater reliability analysis showed almost perfect agreement (Cohen's kappa = 0.834), as shown in the tables below. Thus, I ensured that the structured observation was reliable.

Table 5.2: Calculated value of interrater reliability of Kappa

Symmetric Measures			Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Measure of Agreement		Kappa	.834	.080	8.105	<.001
N of Valid Cases			62			
a. Not assuming the null hypothesis.						
b. Using the asymptotic standard error assuming the null hypothesis.						

5.7.2.4 Piloting Interview Protocols

The interview protocol was pilot-tested prior to the main interviews to make sure that the questions in the protocols had been phrased and structured in such a way as to generate valid information; to make sure that the questions asked were understood by the participants as well as to check the efficiency of recording devices and time management. The questions were piloted on two teachers and ECCE expert participants. The participants were selected purposefully based on their experience and educational level. Participants from the pilot study are purposefully excluded from the final study to prevent sample contamination. The reason for this is that the participants who are involved in the pilot study may respond differently from those who have not previously experienced it, and it could be a threat to validity (Kim, 2018; Teijlingen & Hundley, 2011). The following points were identified during the pilot study:

- Starting from the first day of contact, participants were happy about the objectives of the study and volunteered to be interviewed. However, they showed some reluctance to the conversation being recorded. In addition, regarding the question related to support and the role of supervisor and principal, I noticed that ECCE teachers replied only with positive

115

responses. The reason for this was that they had a suspicion of being exposed. I managed to get the participants to feel confident and managed to mitigate potential tensions at the time of the interview by sharing the prepared consent form of this study and full information on the objectives of the study with them.

- The other problem experienced in a pilot interview is the interviewee's lack of focus on the particular question and addressing the specific question as well as frequent interruptions from children.

- Initially, 35 minutes was set for an interview, the first interview took one and a half hours, and the second interview lasted one hour and 10 minutes. I noticed that the proposed time set was not enough to make an in-depth interview and to be focused on the questions. Furthermore, I developed guidelines for conducting interviews (see Table 5.2).

- I noticed that some questions were problematic because ECCE teachers were unfamiliar with certain words and concepts, like theory, philosophy and curriculum framework. Thus, I understood that some concepts and terminologies needed further clarification and rewording to enhance clarity before collecting data for the main study. Additional probing questions were needed in these cases.

- Initially, ECCE teachers, principals, supervisors, and experts at the Woreda level were proposed as key informants to be interviewed. However, the pilot study found that conducting interviews with principals and supervisors was not as significant because they do not have the training and relevant educational background, as well as they have a loose relationship with ECCE teachers in their work. Instead, I decided to include ECCE experts from the Ministry of Education and Regional Education Bureau.

- The pilot study also confirmed the efficiency and appropriateness of audio recording devices.

- Finally, to fill the gap and to ensure the credibility of the interview, I followed the following guidelines for conducting semi-structured interviews, as seen in the table below:

116

Table 5.3: Guidelines for conducting interviews

Things to keep in mind during the interview	Implementing guidelines
Obtain permission to conduct research and learn what is required by the institutions	Obtain ethical clearance from HSSREC University of the Western Cape.
The conversation should non-threatening /in a friendly manner, non-judgmental, being authentic and trustworthy,	Avoided emotional questions compared with another interviewee, make the interviews stress-free, and maintain two-way conversations in a relaxed atmosphere
Ask open-ended questions	Ask a relevant and meaningful open-ended question that invites thoughtful, in-depth responses
Probing when appropriate	Ask follow-up questions or incomplete responses with clarifying probes, watching and assess participants' responses
Be clear	Ask questions that are clear, focused, understandable, and answerable, the language used is familiar to informants
Gathering valuable data/Interviews must generate rich data.	select participants, purposefully based on their experience, maintain positive interaction with the interviewee, and create a hospitable environment to gain the interviewee's perspective, and expectation, on the topic under study.
Listen	Attend carefully responses, and let the interviewee know that they are been heard, responded appropriately and make sure that the responses they provide meaningful answers to that are questions asked
Be both empathetic and neutral	Show interest and offer encouragement nonjudgmentally, empathetic neutrally
Make transition	Help and guide the interviewee throughout the interview process
Distinguish types of questions	Questions should respect informants and presume they have valuable knowledge
Being prepared for unexpected	Maintain flexibility and responsiveness
Maintaining control and enhancing the quality of responses	Asking focused questions to get relevant answers, giving appropriate verbal and nonverbal feedback to the person being interviewed.

Adapted from Patton (2015, p.631).

These guidelines were very useful in conducting an engaging interview. The following section provides discussions about the measures taken and procedures used to ensure the trustworthiness of the qualitative findings.

117

5.7.3 Trustworthiness, credibility and dependability of qualitative data

Guba & Lincoln (1981) have adopted alternative measuring criteria parallel to the conventional quantitative assessment criteria (i.e. Validity and reliability) for judging the quality or goodness of qualitative research. Thus, the traditional positivist criteria of rigour, reliability, validity and generalisability are replaced with credibility, transferability, dependability and confirmability to assess the quality or goodness of qualitative research (Guba & Lincoln, 1981; Morse, 2015; Nowell et al., 2017). To ensure the validity of my qualitative research findings, I followed Guba and Lincoln's (1981) trustworthiness criteria. Each of these criteria is described briefly below.

5.7.3.1 Credibility

Credibility refers to "the extent to which a research account is believable and appropriate, with particular reference to the level of agreement between participants and the researcher" (Mills, Durepos, & Wiebe, 2010, p.243). To ensure the credibility of the findings, I employed prolonged engagement; persistent observation; triangulation of (sources, methods, and investigations); peer debriefing; member-checking (Denzin & Lincoln, 2018; Mills et al., 2010; Morrow, 2005; Morse, 2015). To maintain triangulation and corroborating evidence, as mentioned, I used different data collection methods: semi-structured interviews, structured observations, document sources and closed-ended questionnaires aiming to ensure the credibility of this study (Cohen et al., 2018; Korstjens & Moser, 2018; Morse, 2015; Patton, 1999). Viewing a phenomenon from multiple directions, helped me to clearly and accurately "locate" that phenomenon as well as to compare the consistency of the findings generated by different data collection methods (Patton, 1999; Rose & Johnson, 2020). Furthermore, to minimize bias and to cross-examines, the responses of the participants, data was gathered from different participants who are at different levels or positions i.e., ECCE teachers and experts (from the regional education bureau and ministry of Education) (Morgan & Ravitch, 2018).

To obtain an adequate representation of the "voice" understudy, the interview data were audio-recorded (Onwuegbuzie & Leech, 2007) and each interviewee was given enough time to share their views openly and honestly; the average face-to-face interview lasted 45 minutes. Observation took two successive days in each ECCE centre. This gave me sufficient time to identify key relevant issues and elements that were most relevant to the problem as well as to identify potential

118

distortions that stem from the researcher's prior formulations about an issue; and also to understand the intended and unintended distortions coming from participants (Cohen et al., 2018; Ezzat et al., 2020; Guba, 1982; Korstjens & Moser, 2018; Mills et al., 2010; Morse, 2015). Similarly, Creswell & Miller (2000, p.128) argued that "being in the field over time solidifies evidence because researchers can check out the data and their hunches and compare interview data with observational data". Thus, prolonged engagement is maintained. Furthermore, member-checking or respondent validation was employed to strengthen credibility. Interview transcripts and themes were checked by two volunteer participants (teachers T1 and T4) to correct factual errors and to obtain participants' confirmation about the accuracy of verbatim interview transcripts, as well as to offer respondents the opportunity to add further information (Cohen et al., 2018; Graneheim & Lundman, 2004; Petrova et al., 2016).

5.7.3.2 Transferability

Transferability refers to the usefulness, relevance, meaningfulness and applicability of research findings in other contexts (Lindberg et al., 2019). However, it is important to note that "the difficulty with qualitative research is situational uniqueness; the particular group studied may not relate to others and hence conclusions may not be transferable" (Creswell, 2007, p.204). Transferability can be achieved by thoroughly describing the process adopted for others to follow and replicate (R. Kumar, 2011). To this end, I provided a rich and extensive set of details about context and methodology (i.e., selection and characteristics of participants, data collection and process of analysis) to enable readers to make decisions about the applicability of the findings to other settings or similar contexts (Bush & Amechi, 2019; Creswell & Miller, 2010; Creswell, 2007; Korstjens & Moser, 2018). As previously stated, a mixed methods research approach was used as the research approach in this study, i.e. qualitative and quantitative data were collected to provide detailed descriptions and to ensure generalisation about the subject or phenomenon. Thus, the finding of this study would be transferable at both the national and regional levels (Amhara National Regional State).

5.7.3.3 Dependability

Dependability of the results can be ensured through the investigator's position, triangulation and audit trail (Guba, 1982; Korstjens & Moser, 2018; Krefting, 1991; Zohrabi, 2013). The point

119

here is that the interpretation should not be based on the researcher's particular preferences and viewpoints, but it is on the data (Korstjens & Moser, 2018; Schwandt, 2007). I thus established the dependability of the study through an audit trail. For audit trails, interview transcripts, raw data collected from observation notes, document records and individual interview records were stored for further validation (Korstjens & Moser, 2018; Schwandt, 2007). I followed, step by step thematic analysis suggested by (Braun & Clarke, 2006). Every step that was taken during the research process: how the data are collected, how it was analysed, how different themes were derived and how the results were obtained was thoroughly explained. Furthermore, the dependability of this study was also verified by my supervisor.

5.7.3.4   Confirmability

Confirmability is analogous to objectivity or neutrality in quantitative research and it is guaranteed by methodology (Guba, 1982). It is about the analysis or interpretations of the findings that are not figments of the researcher's imagination but derived from the data (Korstjens & Moser, 2018; Tobin & Begley, 2004) or the extent to which "data represent the participants' responses and are not shaped by the researcher's viewpoints, interest, motivation or biases" (Cope, 2014, p.89). Triangulation, audit trails, thick descriptions, member checking, peer debriefing, and negative/alternative explanations are also relevant for confirmability (Sultan, 2019). To maintain confirmability or objectivity, I was constantly reviewing the interview transcripts with audio recordings to eliminate any bias and/or error. Further details about triangulation were provided in relation to credibility and dependability. As such, the procedures and methods used are presented as thoroughly and transparently as possible. The ethical considerations for my study now follow.

5.8   Ethical Considerations

The ethics of science in research concerns what is wrong and what is right and confirms the conduct of generally accepted norms and values (Mouton, 2001). The researcher has an ethical obligation to make sure that the research procedures will not cause any physical or emotional harm to the participant or institution. As such, the researcher must abide by the standards of professionalism and honesty to respect and trust both research participants and the public at large (Ruane, 2005). Ethical issues were therefore considered in each phase of the study, starting with the development of data collection tools to the writing of the final report (Kaiser, 2009).

120

Obtaining ethical approval from ethics review boards is one of the first steps in the ethical procedure (Kaiser, 2009). In this study, I obtained ethical approval from the Human and Social Sciences Research Ethics Committee (HSSREC) at the University of the Western Cape before collecting data for both the pilot and the main study. Therefore, this study is compliant with the ethical requirements of the Human and Social Sciences Research Ethics Committee (HSSREC) of the University of the Western Cape. In this study, I followed certain ethical procedures and behaviours to protect the rights of participants. These include the right to privacy, informed consent, and confidentiality (Bradburn, Sudman, & Wansink, 2004).

5.8.1 Informed consent

Prior to the data collection process, participants were briefed on the objectives of the study. I further informed them that participation is completely voluntary and that participants have the right to withdraw from the process at any time without repercussions. In order to inform participants about the objective of the research; each of the questionnaires was distributed with an information sheet containing a description of the research project. I informed respondents that there was no right or wrong answer to the questions and this encouraged them to answer the questions freely and openly. Furthermore, the participants were assured that no negative consequences would result from this research study and all information disclosed would be used for research purposes only. Providing essential details to the participants during data collection is one of the considerations that might help to maximize informed consent (Saunders & Kitzinger, 2015) since participants need essential details about the research objectives and procedure as well as the need to know what they are being asked to participate in (Neuman, 2014). Once participants agreed to participate, each volunteer participant was kindly asked to sign the informed consent form (see Appendix A).

5.8.2 Anonymity and Confidentiality

The rights of privacy, anonymity, and confidentiality of the participants have been granted. Confidentiality refers to the protection of private information and it addresses one aspect of the broader notion of privacy (i.e. informational privacy) (Resnik, 2018). Identities of the participants and study sites were kept strictly confidential and no personal information was retained. To secure anonymity and confidentiality, participants remain anonymous or nameless and all identifying characteristics were changed or made anonymous using study-specific codes. The identities of

121

participants and the real names of the school were not included in the final report or presentation. This was addressed via a confidentiality agreement between the researcher and participants during the time of data collection, typically via consent form statements (Kaiser, 2009; Sieber & Tolich, 2013). Morse & Coulehan (2015) noted that assigning pseudonyms is a usual practice to change the names of study participants when publishing qualitative research.

Participants' privacy was respected as they were not forced to provide information that they did not wish to disclose. Prior to the interview, participants were informed that participation is completely voluntary and that they had the right to withdraw from the study whenever they felt uncomfortable. To protect the privacy of individuals and sites, information related to participants was stored securely in separate files with a protective password and discarded appropriately from the file once they are no longer needed (Kaiser, 2009; Neuman, 2014).

5.9   Conclusion

This chapter provided a detailed overview and discussion of the methodological issues that were employed in my study to gather evidence and answer the research questions. I sought to maintain a chain of evidence throughout the research process by providing detailed accounts of all the methodological approaches and procedures that I followed. It also explained the pilot study of the proposed methodology and data-gathering instruments as well as the main ethical considerations that were undertaken in the research. In the next chapters, the findings of quantitative and qualitative data were presented in chapters five and six respectively.

CHAPTER SIX

QUANTITATIVE DATA PRESENTATION AND ANALYSIS

6.1 Introduction

This study was conducted using a concurrent mixed methods research design. The qualitative and quantitative data were collected simultaneously and the data were analysed separately and integrated into the discussion chapter (Chapter 8). The aim of this chapter, Chapter six, is to present and analyse the quantitative findings obtained from the structured questionnaires and structured observations.

The chapter is divided into two sections. Section 1 deals with the data produced through the structured questionnaire, which focused on factors pertinent to curriculum continent and learning experiences including physical development, self-regulation, health, social, emotional, science, mathematics, and language and literacy. Section 2 deals with the data produced through structured observations, which focuses on pedagogical factors pertinent to indoor and outdoor learning environments. It also included other factors such as forming partnerships with families and communities, which are key to teaching and learning in early childhood education. First, I start by restating the research questions as a reminder of the questions that my study aimed to address.

The main research question of the study is, what are the curriculum implementation challenges that ECCE teachers face in the Amhara National Regional State of Ethiopia in ensuring the holistic development of young children?

The following subsequent research questions are raised to address the main question stated above.

- What is the nature of ECCE in the Amhara National Regional State in Ethiopia?
- To what extent does the ECCE curriculum address the holistic development of children?
- What is the nature of teacher training in early childhood education and how does this impact their ability to implement and deliver the curriculum?
- How do the curriculum, pedagogic practices, and assessment align to support the holistic development of children?

- To what extent does the physical environment support the holistic development of children?

- What is the nature of District, Community and Parental support in the implementation and delivery of the curriculum?

6.2 Section 1: Data presentation and Analysis of the Structured Questionnaire

In this section, I present and analyse data collected through a structured questionnaire to answer the research question (RQ2). The data obtained also helped to understand the appropriateness of the ECCE curriculum to address the holistic development of young children. The questionnaire was prepared on a 5 Likert type scale scoring 5 to "strongly agree", 4 to "agree", 3 to "undecided", 2 to "disagree", and 1 to "strongly disagree".

6.2.1 Analysis and Interpretation of Demographic Characteristics of Participants

The data was collected from preschool centres located in Amhara National Regional State and the site includes both rural and town areas. The questionnaires were distributed to 396 ECCE teachers, and of those 379 (95.7%) questionnaires were returned. Of the ECCE teachers who participated in the study, 54.6% were diploma holders and 45.4% were certified through certificates. Of these 95.3% were females and 4.7% were males. When we look at the total number of teachers, 128 (33.8%) of teachers were in the age range of 21-25 years old, almost half (48.8%) of teachers were 26-30 years old, and 51 (13.5%) were aged 31-36 years old. Very few 15 (4%) of the teachers are 36 years old and above. Concerning the teaching experience of preschool teachers, 175 (46.2%) of them have 1-5 years of teaching experience, 169 (44.6%) of them have 6-10 years, 33 (8.7%) of them have 11-15 years of teaching experience, and 2 (0.5%) of them have 16-20 years of experience. The table and analysis are presented in the appendices (refer to Appendix H).

6.2.2 Results pertinent to the appropriateness of curriculum content

In this section, eight scales will be discussed such as physical development, self-regulation skills, health, safety and nutrition, social development, emotional development, early science, mathematics, and language and literacy. Table 6.1 presents data relating to the physical development-gross and fine motor development skills.

Table 6.1: Physical Development-Gross and Fine Motor Development Skill

N	Items		Response					Total
	Content and learning experiences that:		SDA	DA	UD	A	SA	
1	Provide opportunities for physical activity of fine motor skills development	No	1	34	23	239	82	379
		%	0.3	9	6.1	63.1	21.6	100
2	Provide opportunities for physical activities of gross motor skills development	No	0	36	21	226	96	379
		%	0	9.5	5.5	59.6	25.3	100
3	Provide opportunities for sensory-perceptual development	No	12	47	63	147	110	379
		%	3.2	12.4	16.6	38.8	29.0	100
4	provide experiences to develop physical capabilities and cognitive abilities with confidence	No	3	25	14	254	83	379
		%	8	6.6	3.7	67.0	21.9	100
5	Promote children to build self-confidence and positive attitudes to physical movement	No	4	17	6	251	101	379
		%	1.1	4.5	1.6	66.2	26.6	100

Key: SDA= strongly disagreed, DA= disagreed, UD= undecided, A= agree and SA= strongly agree.

Physical activities are a means by which children gain control of their bodies, they become self-confident in what they do, and it enables them to feel physically active, safe, and healthy. For good physical experiences or to develop gross and fine motor skills, children need time, space and equipment, and safe indoor and outdoor activities (Essa, 2014). In this regard, teachers were asked to indicate their opinion about the extent to which curriculum content and learning experiences provide opportunities for the development of young children's physical skills.

The majority (84.7%) agreed with the statement in item 1; the curriculum and learning experiences can provide physical activity to develop fine motor skill development. The rest of them disagree (9.3%) and only 6.1% are undecided. Concerning activities to develop gross motor skills, 226 (59.6%) and 96 (25.3%) teachers agreed and strongly agreed, respectively. Whereas 36 (9.5%) teachers disagreed and 21 (5.5%) of them were undecided. At least 67.8% of teachers agreed that content and learning experiences are appropriate for sensory-perceptual development. Most of the teachers (67%) agreed that contents and learning experiences provide practice to develop physical capabilities and cognitive abilities with confidence. The overwhelming majority (92.8%) agreed that content and learning experiences promote children to build self-confidence and positive attitudes to physical movement.

The following table provides an analysis of content and learning experiences about self-regulation skills.

125

Table 6.2: Self-regulation Skills

N	Items		Response					Total
	Content and learning experiences that:		SDA	DA	UD	A	SA	
1	Provide opportunities to develop cognitive functioning control skills through make-believable play, private speech, puzzles, obstacle courses, do what I do, sand and water, and other symbolic systems	No	77	207	32	63	0	379
		%	20.3	54.6	8.4	16.6	0	100
2	Encourages children to develop physical or self-control skills through freeze games, stop and play now, balance, cooperative activities, and so on	No	82	220	13	50	14	379
		%	21.6	58.0	3.4	13.2	3.7	100
3	Enable children to develop selectively and sustained attention through buddy reading, shared activity, vocabulary, mind-reading games, make-believe play, taking turns reading and listening	No	55	231	19	58	16	379
		%	14.5	60.9	5.0	15.3	4.2	100
4	Facilitate emotional maturity to monitor, evaluate and modify emotions through private speech, freeze games, rhythm, role play, mousetrap, breathing exercises, peer model, and so on	No	60	216	21	74	8	379
		%	15.8	57.0	5.5	19.5	2.1	100
5	Allow children to make choices and decisions, accept challenges, describe their actions and efforts	No	67	193	26	83	10	379
		%	17.7	50.9	6.9	21.9	2.6	100

Table 6.2 shows that the majority of teachers reported that content and learning experiences are inadequate to provide opportunities for the development of self-regulation skills. In response to learning experiences that provide opportunities to develop cognitive functioning control skills, 74,9% disagreed that the efficiency of curriculum content and learning activities to provide specific activities to develop cognitive functioning control skills through make-believable play, private speech, puzzles, obstacle courses, do what I do, sand and water, and other symbolic systems. On the hand, quite a few (25%) of teachers agreed.

Most (79.6%) of teachers disagreed with the appropriateness of curriculum content and learning experiences to encourage children to develop physical or self-control skills through freeze games, stop and play now, balance, and cooperative activities. The majority (75.4%) disagreed with the statement that content and learning experiences enable children to develop selectively and sustained attention through buddy reading, shared activity, vocabulary mind-reading games, group music experiences and taking turns reading and listening.

In terms of assessing curriculum content and learning experiences to facilitate emotional maturity, monitor/evaluate and modify emotions through private speech, freeze games, rhythm, role play, mousetrap, breathing exercises and peer model, the majority (72.3%) of teachers disagreed.

126

A total of 68.6% of the teachers disagreed that curriculum content and learning experiences allow children to make choices and decisions, accept challenges, and describe their actions and efforts.

The following table provides an analysis of content and learning experiences about health, safety and nutrition.

Table 6. 3: Health, Safety and Nutrition

N	Items		Response					Total
	Content and learning experiences that:		SDA	DA	UD	A	SA	
1	Allow children to practice self-help, self-care and personal hygiene skills and good health habits when eating, drinking, toileting, washing and dressing	No	0	19	4	293	63	379
		%	0	5	1.1	77.3	16.6	100
2	Promote children to be aware of potential hazards and safety principles in their environment and everyday routines	No	2	33	6	248	90	379
		%	0.5	8.7	1.6	65.4	23.7	100
3	Enables children to acquire the necessary knowledge and skills about nutritious choices and concepts of food nutrition	No	12	108	25	195	39	379
		%	3.2	28.5	6.6	51.5	10.3	100
4	Enables children to acquire basic knowledge about concepts of body structure and function, body care, and grooming needs for activity and rest	No	6	32	9	274	58	379
		%	1.6	8.4	2.4	72.3	15.3	100

Teachers were asked to assess how well health, safety, and nutrition objectives and learning experiences were integrated into the curriculum. The overall analysis of the responses revealed that health, safety, and nutrition have received adequate attention in the ECCE curriculum. Table 6.3 shows that 93.9% agreed that content and learning activities allow children to practice self-help, self-care, personal hygiene skills, and good health habits when eating, drinking, toileting, washing, and dressing. The majority (89.1%) agreed that content and learning experiences are appropriate to promote children's awareness of potential hazards and safety principles in their environment and everyday routines.

Most (61.8%) of the teachers agreed that the content and learning experiences are adequate to enable children to acquire the necessary knowledge and skills about nutritious food choices and nutrition concepts. In contrast, quite a number (28.5%) of teachers disagreed. Furthermore, concerning body structure and function, a total of 72.3% responded that content and learning

127

experiences are adequate to acquire knowledge about basic concepts of body structure and function, body care, and grooming, need for activity and rest. The following table provides an analysis of content and learning experiences about social development.

Table 6.4: Social Development

N	Items		Response					Total
	content and learning experiences that:		SDA	DA	UD	A	SA	
1	Address children's social background i.e. promotes understanding of the history, cultures, values, beliefs, knowledge, and skills of the society	No	2	39	12	261	65	379
		%	0.5	10.3	3.2	68.9	17.2	100
2	Enable children to develop socially acceptable manners important in their socio-cultural context e.g. valuing relationships, demonstrating empathy, giving hugs, holding hands	No	127	194	30	22	6	379
		%	33.5	51.2	7.9	5.8	1.6	100
3	Enable children to develop a sense of personal responsibility (toward others, their environment and their actions)	No	103	223	11	35	7	379
		%	27.2	58.8	2.9	9.2	1.8	100
4	Enable children to develop manners to respect other's opinions, culture, liberty, freedom of choice, equality and privileges of others	No	110	224	15	30	0	379
		%	29.0	59.1	4.0	7.9	0	100
5	Enable children to master information and practice the skills that they need to function effectively in the society	No	82	235	12	47	3	379
		%	21.6	62.0	3.2	12.4	0.8	100
6	Enable to develop of pro-social skills and behaviour through cooperative/paired activities, taking turns reading and listening, story discussions, and play	No	81	191	40	57	10	379
		%	21.4	50.4	10.6	15.0	2.6	100
7	Enable children to understand and respond to social cues in a socially appropriate manner e.g., greetings, farewells, getting attention, Say "thank you," "please," and "excuse me, taking turns and making a queue	No	127	189	17	22	24	379
		%	33.5	49.9	4.5	5.8	6.3	100
8	Enable children to build positive and interactive relationships in their peer groups, teachers, and social circles	No	141	195	5	38	0	379
		%	37.2	51.5	1.3	10.0	0	100
9	Enable children to develop problem-solving skills e.g., handling an emergency, suggesting alternative solutions to negotiate with peers and resolving conflict with words	No	74	233	27	45	0	379
		%	19.5	61.5	7.1	11.9	0	100

Social and personality development emerges through the growth of social understanding, self-awareness, early conscience and cooperation, and the relationships that infuse these early achievements (Damon, Lerner, & Eisenberg, 2006). "How children feel about themselves and others affects the way he/she behaves and learns" (Lindberg & Swedlow, 1985, p. 43). As shown in the table above, a question was raised about the extent to which curriculum content and learning experiences are appropriate to promote young children's social development. The overall result indicates that social development received adequate attention in the ECCE curriculum. Table 6.4 indicates that the majority (68.9%) of teachers agreed that content and learning experiences are

128

appropriate to address children's social background, i.e., history, cultures, values, beliefs, knowledge, and skills of the society in which they live.

At least (84.7%) of teachers agreed that the ECCE curriculum content and learning experiences enable children to develop socially acceptable behaviour or manners important in their socio-cultural context. Many (58.8%) reported that the content and learning experiences enable young children to develop a sense of personal responsibility toward others, their environment, and their actions. The vast majority (88.1%) of teachers agreed that content and learning experiences are appropriate to develop manners such as respect for other people's opinions, culture, liberty, freedom of choice, and equality. The majority (83.6%) of teachers agreed that the contents and learning experiences are appropriate to enable young children to develop the skills required to function effectively in society.

A total of 71.8% agreed with the appropriateness of content and learning experiences to promote young children's pro-social skills and behaviour through cooperative or paired activities. The data reveals that 83.4% of the teachers agreed that content and learning experiences that enable young children to understand and respond to social cues in a socially appropriate manner e.g., greetings, farewells, getting attention, saying "thank you," "please," and "excuse me, taking turns and make a queue are addressed in the curriculum.

The overwhelming majority (90%) of the teachers agreed that content and learning experiences are appropriate that enable children to develop positive and interactive relationships in their peer group, engaging with teachers, and social circles addressed in the curriculum. Furthermore, the majority (61.5%) agreed that content and learning experiences promote children to practice social problem-solving skills.

The following table provides an analysis of content and learning experiences about emotional development.

Table 6.5: Emotional Development

N	Items	Response							Total
	content and learning experiences that:			SDA	DA	UD	A	SA	
1	Provide experiences to build positive self-esteem, self-image, appreciation and a sense of personal worth	No		3	45	24	218	89	379
		%		8	11.9	6.3	57.5	23.5	100
2	Provide opportunities to express a wide range of feelings, emotions and behaviour related to self and others using appropriate vocabulary and actions	No		83	197	29	50	20	379
		%		21.8	51.9	7.7	13.3	5.3	100
3	Provide experience to resolve negative feelings, sadness and anger through breathing exercises and mediation, calming words, reading stories, listening to soft music, working with clay etc.	No		75	162	31	83	28	379
		%		19.8	42.7	8.2	21.9	7.4	100
4	provide experiences to develop a sense of belonging, feelings of psychological safety and security	No		0	49	33	222	75	379
		%		0	12.9	8.7	58.6	19.8	100
5	provide experiences for the development of curiosity, engagement and a positive attitude toward learning	No		0	219	36	39	85	379
		%		0	57.8	9.5	10.3	22.4	100
6	provide experiences to foster self-confidence and competence in their abilities, achievements, and ideas as learners	No		98	183	41	50	7	379
		%		25.9	48.3	10.8	13.2	1.8	100
7	provide experiences to recognize and describe a wide range of feelings verbally or non-verbally e.g., sadness, anger, fear, and happiness	No		66	166	34	81	32	379
		%		17.4	43.8	9.0	21.4	8.4	100

Higher emotional processes, like other higher mental functions, are built on the foundation of more primitive affective reactions, which are eventually transformed by these more advanced social emotions (Kozulin et al., 2003). Early childhood environments that ignore emotions or create emotionally detached or harsh relationships with children have a negative impact on both children's later socioemotional development and cognitive competence (Hyson, 2004). The overall analysis revealed that content and learning experiences of emotional development are not adequately addressed in the curriculum.

Table 6.5 shows that although 81% of teachers agreed that content and learning experience allows young children to develop positive self-esteem, self-image, appreciation and sense of personal worth, many (73.7%) disagreed with the relevance of curriculum content and learning experiences to provide children with the opportunities to express a wide range of feelings, emotions and behaviour related to self and others using appropriate vocabulary and actions.

At least 62.5% of teachers stated that ECCE curriculum content and learning experiences are inadequate to provide experience to resolve negative feelings, sadness and anger through breathing exercises and mediation, calming words, reading stories, listening to soft music, or working with

130

clay etc. On the other hand, a mere 29.3% agreed that content and learning experiences provide children with experience to resolve negative feelings, sadness, and anger.

The data shows that 58.6% argued the curriculum provides an experience which enables children to develop a sense of belonging, and feelings of psychological safety and security for the young children. A total of 57.8% agreed that the ECCE curriculum content and learning experiences are appropriate to provide experiences to develop curiosity, engagement and a positive attitude toward learning for young children. The data further indicates that 74.2% disagreed that the curriculum content and learning experience provide young children with experiences to foster self-confidence and competence in their abilities, achievements, and ideas as learners. Quite a few 10.8% were undecided.

Many of the teachers (61.2%) disagreed with the appropriateness of content and learning experience to encourage children to recognize and describe a wide range of feelings verbally or non-verbally e.g., sadness, anger, fear, and happiness. On the other hand, 29.8% of teachers stated that curriculum content and learning experience encourage children to recognize and describe a wide range of feelings verbally or non-verbally. The following table provides an analysis of the content and learning experiences of early science experiences.

Table 6.6: Early years' Science Experiences and Activities

N	Items		Response					Total
	content and learning experiences that:		SDA	DA	UD	A	SA	
1	Inspires children to develop inquiry skills and scientific thinking using nature or science objects and materials, micro-life books, insect identity charts, a poster of natural creatures, and animal pictures	No	69	149	43	87	31	379
		%	18.2	39.3	11.3	23.0	8.2	100
2	Promote a cycle of scientific reasoning e.g., as 'Ask and Reflect,' 'Plan and Predict,' 'Act and Observe,' and finally, 'Report and Reflect, allow to describe both verbally and non-verbally what they see, hear, touch, feel and taste	No	51	169	44	78	37	379
		%	13.5	44.6	11.6	20.6	9.8	100
3	Provide opportunities to observe and investigate the change in the matter: explore states of change when substances are combined, heated, or cooled	No	86	194	41	58	0	379
		%	22.7	51.2	10.8	15.3	0	100
4	Provide opportunities for open-ended exploration and observation of living things for scientific thinking e.g. life cycle of plants, similarities and differences between living and non-living things, observing natural habitats	No	102	172	47	46	12	379
		%	26.9	45.4	12.4	12.1	3.2	100

131

5	Provide opportunities for hands-on science activities: to manipulate objects and experiment with cause and effect, trial and error and motion with teachers scaffolding using conceptual tools like magnifying glasses, magnates, rulers, thermometers, wheels, pulleys, swings etc.	No	94	192	30	62	1	379
		%	24.8	50.8	7.9	16.4	0.3	100
6	Provide opportunities to explore the natural environment indoors and outdoors e.g. characteristics of soil, sorting rocks, observing water as solid, liquid, and effects of sunlight and wind and the need for conservation with teachers scaffolding	No	111	183	31	41	13	379
		%	29.3	48.3	8.2	10.4	3.4	100
7	Provide opportunities to explore movement/motion: how and how things can be moved by, for example, blowing, throwing, pushing, pulling, rolling, swinging and sinking.	No	67	179	53	70	12	379
		%	17.7	46.7	14.0	18.5	3.2	100
8	Encourage to integrate of science activities with other activities across each day	No	114	209	11	45	0	379
		%	30.1	55.4	2.9	11.9	0	100

As shown in Table 6.6, the overall analysis revealed that early science is not prioritised as an important learning domain in early childhood care and education curriculum.

Many of the teachers (57.5%) disagreed with the statement that content and learning experience inspires children to develop inquiry skills and scientific thinking using nature or science objects and material, a micro-life book, insect identity charts, a poster of natural creatures, and animal pictures. Similarly, most of the teachers (58.1%) disagreed with the appropriateness of the content and learning experience to promote children a cycle of scientific thinking. The majority (73.9%) of teachers disagreed with the appropriateness of contents and learning experience to provide opportunities to observe and investigate change in matter: explore states of change when substances are combined, heated, or cooled.

A total of 72.3% reported that content and learning experiences are inadequate to provide opportunities for open-ended exploration and observation of living things for scientific thinking e.g. life cycle of plants, similarities and differences between living and non-living things and observing natural habitats. Most (75.6%) disagreed with the appropriateness of content and learning experiences to provide opportunities for hands-on science activities: to manipulate objects and experiment with cause and effect, trial and error and motion with teachers scaffolding using conceptual tools like magnifying glasses, magnates, ruler, thermometers, wheels, pulleys, and swings etc.

Many teachers (64.4%) disagreed with the appropriateness of content and learning experiences providing opportunities to investigate/explore movement/motion and how things can be moved by, for example, blowing, throwing, pushing, pulling, rolling, swinging and sinking. Quite a number (55.4%) of teachers reported that content and learning experience does not encourage integrating science activities with other activities across each day.

The following table provides an analysis of mathematics content and learning experiences.

Table 6.7: Mathematics

N	Items		Response					Total
	content and learning experiences that:		SDA	DA	UD	A	SA	
1	promote children to develop basic concepts of numbers and counting activities (counting, comparing, adding) through numeral games, number flow the leader, cardinal counting, tallying, number line hopscotch, timeline calendar, I have who has games, count objects by using1-to-1 correspondences and written number symbols	No	42	92	23	164	58	379
		%	11.1	24.3	6.1	43.3	15.3	100
2	promote children to acquire knowledge of operations and algebraic: understanding patterns, predicting, describing data how many, and comparing a collection of objectives more, less, the same or not the same	No	38	109	33	127	71	379
		%	10.1	28.8	8.7	33.6	18.8	100
3	Allow children to acquire knowledge of geometry and spatial concepts: fitting things together and taking things apart, rearranging and reshaping objects and materials	No	51	114	30	136	48	379
		%	13.5	30.1	7.9	35.9	12.7	100
4	Develop knowledge of statistics and probability: sorting, classifying, matching, representing and organizing attributes depending on colours, sizes and shapes, ordering objects according to one attribute	No	44	101	41	140	53	379
		%	11.6	26.6	10.8	36.9	14.0	100
5	Allow children to acquire knowledge of measurement and data: manipulating different measurement tools like size, mass, height, time, volume, and area, and making a collection with categories, order, sort and compare	No	24	132	26	141	56	379
		%	6.3	34.8	6.9	37.2	14.8	100
6	Integrate mathematics problem-solving activities and critical thinking across the day	No	21	198	37	110	13	379
		%	5.5	52.3	9.8	29	3.4	100

Like other learning domains, children need to have early experience with the concept and language of mathematics. In this regard, teachers are asked to indicate their argument on the appropriateness of content and learning experiences to provide opportunities for young children's mathematical thinking and problem-solving experiences.

133

As revealed in Table 5.8, a total of 58.6% of teachers agreed that content and learning experiences are appropriate to promote children's development of basic concepts of numbers and counting activities (counting, comparing, and adding). Whereas quite a few (35.4%) of teachers disagreed. It shows that 52.4% agreed that content and learning experiences are appropriate for children to develop basic information on operation and algebraic thinking. In contrast, there were quite a few (38.1%) that disagreed.

Many teachers (49.4%) agreed that content and learning experiences enable children to acquire basic knowledge of geometry and spatial concepts. However, there were quite a number (42.6%) of teachers disagreed. Many (50.9%) agreed about the appropriateness of content and learning experience to provide experiences in which children acquire basic concepts of statistics and probability. It is noteworthy that there were a few (38.2%) who disagreed.

Some (52%) agreed that content and learning experience enables children to acquire knowledge of measurement and data. In contrast, quite a few (41.1%) of teachers disagreed. At least 57.8% disagreed in relation to the integration of mathematical problem-solving and critical thinking activities across different areas of learning and daily routines, while a few (32.4%) agreed. The following table provides an analysis of content and learning experiences about language and literacy.

Table 6.8: Language and Literacy

N	Items		Response					Total
	content and learning experiences that:		SDA	DA	UD	A	SA	
1	provided opportunities to build aural and oral language: sustained conversations, have fun with words, increase the use of vocabulary, develop auditory discrimination	No	0	63	25	219	72	379
		%	0	16.6	6.6	57.8	19.0	100
2	Allow to convey and construct messages for a range of purposes in a variety of contexts using storytelling, buddy reading to comprehend previously learned material, and private speech to explain what they understand	No	8	48	19	228	76	379
		%	2.1	12.7	5.5	60.2	20.1	100
3	Develop phonological awareness skills: engage children in activities of identifying spoken and written language, discriminating words, clapping out the number of syllables, and onsets, rhyming songs, sound matching, reading storybooks and poems	No	5	204	23	95	52	379
		%	1.3	53.8	6.1	25.1	13.7	100
4	Provide opportunities to understand phonics and word recognition: isolate and recognize specific phonemes and letters in spoken word and rhyming songs, identification of letters of the alphabet using alphabet books, game names, charts, blocks, and puzzles, and read and write	No	0	180	32	54	113	379
		%	0	47.5	8.4	14.2	29.8	100

134

	children's names daily, practice sound-symbol correspondences							
5	Promote Comprehension and Collaboration: identify the elements of the story- what, where, when and why happened and who is the story about	No	41	118	17	156	47	379
		%	10.8	31.1	4.5	41.2	12.4	100
6	Provide opportunities to engage in reading and writing: work in pairs and take turns reading and listening to develop selective and sustained conversation.	No	43	106	36	137	57	379
		%	11.3	28.0	9.5	36.1	15.0	100
7	Promote vocabulary Acquisition and Use: generate or sort words that are similar in meaning, explore word relationships, props, topics, materials	No	62	167	46	78	20	379
		%	16.4	44.1	12.1	20.5	6.9	100
8	Develop concepts of print: identify simple punctuation, such as full stops and question marks	No	71	173	21	85	29	379
		%	18.7	45.6	5.5	22.4	7.7	100
9	Investigate symbols and pattern systems: recognize simple patterns and relationships, some letter names, for example, the letters in their name, copy simple patterns	No	34	116	43	148	38	379
		%	9.0	30.6	11.3	39.1	10.0	100

Language and communication development and use are one of the learning areas in Ethiopian early childhood care and education. Table 6.8 shows that 76% of teachers agreed that content and learning experience is appropriate to provide experiences for children to build aural and oral language.

The majority of teachers 80.3% agreed that content and learning experiences encourage children to convey and construct messages for a range of purposes in a variety of contexts. Only 12.7% of teachers disagreed with the stated statement. Most teachers (55.1%) disagreed with the relevance of content and learning experiences to acquire phonological awareness skills. Many (47.5%) disagreed with the appropriateness of content and learning experiences to provide opportunities for children to understand phonics and word recognition.

A question was raised with regard to the relevance of the curriculum in promoting children to comprehend and collaborate. A total of 53.6% of teachers agreed whereas quite a number of teachers (41.9%) disagreed. A total of 51.1% of teachers agreed that the content and learning experience provides opportunities for children to engage in reading and writing practice whilst quite a number (39.3%) disagreed.

Even though most (60.5%) of teachers disagreed with the appropriateness of content and learning experiences for vocabulary acquisition and use, there were a few (35.6%) that agreed. Most (67.3%) of teachers disagreed with the appropriateness of content and learning experiences for the development of concepts of print while a few (30.1%) agreed. A total of 39.1% of teachers asserted that content and learning experiences encourage children to investigate symbols and pattern

135

systems. However, similarly, 39.6% of teachers disagreed with quite a few (11.3%) remaining undecided.

To sum up, the analysis of the aforementioned scales revealed that curriculum content and learning experiences are inadequate to provide opportunities for the physical, social, emotional and aesthetic development of children. In particular, content and learning experiences of science, self-regulation, and emotional development were found inadequate to foster the holistic development of children.

6.3   Section 2: Data Presentation and Analysis of the Structured Observations

In this section, I present an analysis of data collected through a structured observation schedule. The structured observation was conducted to answer research question five (RQ5). The data obtained helped to understand the in-school factors (pedagogy, assessment, indoor and outdoor learning environments) and partnerships with families and communities. It is also used to triangulate and corroborate findings that were obtained through semi-structured interviews and document analysis. These observation rating scales were adapted from the Global Guidelines for the Education and Care of Young Children in the 21st Century (GGA). This observation scale has 62 indicators with a 5-point rating scale (excellent to inadequate) in four content areas (i.e., Environment and Physical Space, Curriculum Content and Pedagogy, Early Childhood teachers and Partnerships with Families and Communities). As mentioned in chapter five, section 5.5.3, I conducted observations in 25 preschools. The scales are: 5) Excellent = Always observed; 4) Good = Mostly observed; 3) Adequate = Sometimes observed; 2) Minimum = Occasionally observed; 1) Inadequate = Never observed. Key: the total number of observed preschools is 25 in number, and *f* represents the frequency.

The following section provides an analysis of the appropriateness of the learning environment for the holistic development of young children. Table 6.9 discusses the appropriateness of the environment and physical space.

Table 6.9: Environment and Physical Space

N	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Environment and Physical Space	f	%	f	%	f	%	f	%	f	%
1	The environment and physical space are clean and free from hazards, including unsafe equipment, pollution, and violence.	6	36			8	32	11	44		
2	The environment provides basic sanitation, safe and potable water, and good ventilation,	16	64			5	20	4	16		
3	teachers create a calm and peaceful social/emotional classroom	9	36			16	64				
4	The environment promotes good health practices (e.g., personal hygiene, including washing of hands, child sized-toilets).	16	64			5	20	4	16		
5	The environment provides children with a sense of well-being, belonging, security, and freedom from fear.	6	24					19	76		
6	Children and teachers experience times of laughter and joy throughout the day together.	5	20					20	80		

The National Guideline for ECCE states that the environment and physical space of preschools should be an attractive, pleasant and physically safe place for children. The location should be free from pollution and away from garbage sites and the setting of the physical space should allow for free movement of both children and adults (MOE, 2010, p.23). However, the overall analysis revealed that indoor and outdoor learning environments are inadequate and under-resourced to enhance the holistic development of children.

Table 5.9 shows that the majority (76%) of preschools have an adequate and good environment and physical space that is clean and free from hazards, including unsafe equipment, pollution, and violence. However, quite a number (24%) of the preschools are still found to be inadequate that have unclean spaces and unsafe playgrounds.

In terms of providing basic sanitation, safe and potable water, and good ventilation, most (64%) of preschools lacked potable water and basic sanitation facilities. With regard to the role of teachers in creating a stable and peaceful social/emotional classroom, most (64%) of the preschools were found adequate. Whereas (36%) of the preschools were found inadequate in creating appropriate settings to promote a calm and peaceful social/emotional learning environment. I noticed that most

137

preschools have a high teacher-to-child ratio; on average, there are more than 50 children, but some preschools have up to 80 children in one class. However, Ethiopian early childhood care and education standard states that the teacher-child ratio in preschool is 1:30 for three-to-five-year-olds and 1:40 for five-to-six-year-olds) (MOE, 2010, p.26).

With regard to providing good health practices; the majority (64%) of the preschools were found inadequate to provide (e.g., personal hygiene, including washing of hands, and child sized toilets). Most preschools lack a child sized toilet and water for hand washing; toilets are not appropriate, child sized, clean, and sanitation conditions are not maintained with adequate supervision. However, MOE recommends basic sanitation facilities to be available, including one latrine and water for hand washing (MOE, 2010).

The majority (44%) of the preschools' learning environments are worthy to provide children with a sense of well-being, belonging, security, and freedom from fear. Whereas (24%) of preschools were found inadequate to create a sense of well-being, belonging, security, and freedom from fear.

Most (80%) of the preschool children and teacher experience times of laughter and joy throughout the day together. It is also noticed that most preschool teachers interact in a warm, caring, empathetic, and supportive manner with children; teacher-child interactions are positive, pleasant and helpful. The following table offers an analysis of the extent of the indoor and outdoor environment to provide children with a stimulating environment.
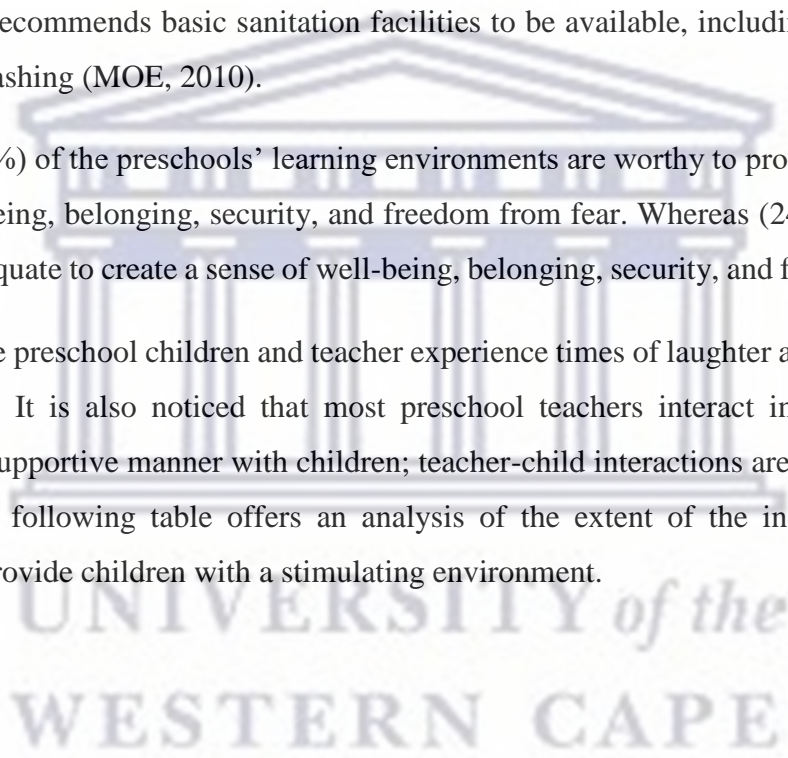
Table 6.10: Stimulating Environment

N	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Stimulating Environment	F	%	f	%	f	%	f	%	f	%
1	There are opportunities for frequent and positive child-child and child-adult interactions	6	24					19	76		
2	The environment stimulates children to play, explore, and discover	25	100								
3	There are opportunities for children to engage in active indoor and outdoor play.	21	84					4	16		
4	There is a balance of time between free play and structured activities.	21	84	4	16						
5	There are a variety of materials that promote problem-solving, critical thinking, and creativity for children with different abilities.	23	92					2	8		
6	The outdoor space and play equipment provide a variety of movement possibilities.	21	84					2	8		
7	The outdoor environment contains opportunities for extension of play, such as gardening and other activities in natural habitats.	25	100								
8	The space is effectively organized so that materials for play and artistic expression are readily accessible to the children.	23	92					2	8		
9	The indoor environment contains materials for children to construct their play things.	23	92					2	8		
10	The outdoor environment contains materials for children to construct their playthings	23	92					2	8		
11	Children co-participate in planning and organizing the environment.	23	92					2	8		

The Ethiopian National ECCE Guideline state that the preschool learning environment is expected to have "a variety of stimulating play and learning materials that promote not only simple but also higher thought processes, enhance creativity, provide adequate opportunity for exploration and discovery and interactions among children as well as between children and adults" (MOE, 2010, p.24). However, the majority of the learning environments were found inadequate to provide children with a stimulating learning environment.

The data revealed that in the majority (76%) of preschools, children have frequent and positive child-child and child-adult interactions. Whereas 24% of the preschools were observed to be inadequate to provide such opportunities (they do not have a variety of stimulating play and

139

learning materials). In addition, all the preschools were found inadequate to stimulate children to play, explore, and discover. Besides this, it is also noticed that the daily schedule or plan is not planned to provide opportunities for children to observe, explore, and discover or promote active engagement with people and objects in the environment.

The majority (84%) of preschool environments were found to be inadequate to provide opportunities for children to engage in active indoor and outdoor play activities. These environments were not well organized, properly structured, and arranged for different activities. In relation to the balance of time for free play and structured activities, the majority (84%) of the preschools observed were found to be inadequate (i.e. there is no balance between structured and unstructured; outdoor and indoor; self-directed and teacher-initiated learning opportunities, and individual, small group and large group activities). I observed that children have unrestricted free play time. In line with this, the daily schedule and annual plans were used as a source of information to evaluate these activities.

An overwhelming majority (92%) of the preschools were observed to be inadequate in providing a variety of materials that promote problem-solving, and critical thinking, and enhance creativity for children with different abilities. It is also noticed that the majority of the preschools' walls lack a variety of visuals (rich in colour, texture and shape) that will facilitate critical thinking. The majority (84%) of the preschools have open large outdoor spaces that can be used for a variety of activities. However, the outdoor environments were not properly arranged and organized to provide a variety of movement possibilities such as climbing, balancing, hammering, hopping, turning, pouring undertaking obstacle courses etc. Most preschools have similar playing materials like slides, swings, seesaws, etc.

All of the preschools' outdoor environments were found inadequate to provide children with opportunities for extension of play, such as gardening and other activities in natural habitats. Besides this, the majority (92%) of the preschools' outdoor spaces were not effectively organized and equipped with enough materials for play and artistic expression and the development of different skills.

Regarding the availability of materials in the indoor environment, the majority (92%) of the preschools were found inadequate or did not contain the basic materials for children to construct

140

their playthings. In addition, my field notes revealed that most of the preschools' indoor space is not well organised into different learning centres or areas of interest, and the children do not have the opportunity to choose materials. Furthermore, the floors are not carpeted, and the furniture (tables and chairs) is not child sized.

Moreover, the majority (92%) of the preschools' outdoor environments were found to be inadequate. They were not equipped with materials, apparatus, or tools to provide children with a wide variety of opportunities to construct their playthings and engage in active physical experiences. Very few (8%) of preschools have a good outdoor environment that provides an opportunity for children to construct their own playing. Most (92%) of the preschools, teachers and children were not co-participating in planning and organizing the environment. On the other hand, very few (8%) preschools encourage children to involve in planning and organizing the environment.

Following, in Tables 6.11 – 6.15 is an analysis of the curriculum content and pedagogical methods used in the Early Childhood centres that I observed.

Table 6.11: Curriculum Content

N	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Curriculum Content	F	%	F	%	f	%	f	%	f	%
1	A curriculum plan exists for fostering children's learning.							25	100		
2	Flexible, comprehensive plans are implemented that are oriented to individual differences/ the children, family, and cultural contexts			23	92			2	8		
3	The curriculum gives children the opportunity to master information and practice the skills that they need to function effectively in society							25	100		
4	The curriculum emphasizes content that is connected to real-world experiences.							25	100		
5	The children contribute ideas for planning daily activities.	23	92					2	8		

To answer this question, the policy documents (syllabus and ECCE policy framework) were reviewed. In the document review, I found that teachers are endorsed to use the curriculum as a guide and to use their creativity to incorporate developmentally appropriate content, concepts, and activities into their classroom (MOE, 2010). Despite this, the data revealed that the majority (92%)

141

of preschool teachers were found inadequate to implement flexible, comprehensive plans that are oriented to individual differences. Furthermore, it has been noted that the work of teachers is not very satisfying in planning comprehensive plans to foster the holistic development of young children. Furthermore, the curriculum was found good to give children the opportunity to master information and practice the skills that they need to function effectively in society.

Regarding children's involvement in planning daily activities, only (8%) of preschools have good practices, but the majority (92%) of preschool teachers were found inadequate to provide opportunities for children to contribute their ideas for planning daily activities. This implies that the daily schedule or plan is not flexible to meet individual needs or accommodate individual differences.

Table 6.12: Pedagogical Methods

No	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Pedagogical Methods	F	%	F	%	F	%	f	%	f	%
1	Teachers have a supportive teaching and caring relationship with children.							25	100		
2	Teachers use positive language when speaking to children.							25	100		
3	Teachers possess a basic understanding of pedagogical principles.	15	60	8	32			2	8		

Key elements of high teacher qualities are the ways in which teachers involve children, stimulate interaction with and between children, and use diverse scaffolding strategies (OECD, 2012b). In all preschools, teachers have a supportive teaching and caring relationship with children, and they use positive language when speaking to children. However, this data only reflects the situation during the time of observation, and it does not speak to history or practice, whether or not teachers use punitive discipline methods. The majority (60%) of teachers lack a basic understanding of pedagogical principles and most of the teachers are observed as inadequate in organizing indoor and outdoor environments setups. However, only (8%) of teachers perform very well and have a basic understanding of pedagogical principles. The following table presents the analysis of learning materials.

Table 6.13: Learning Materials

N	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Learning Materials	f	%	f	%	f	%	f	%	f	%
1	Teachers use local materials as resources for teaching and learning	15	60	8	32			2	8		
2	Curriculum materials and equipment are provided for all children that support creative learning experiences (e.g., art, dance) and maintain cultural integrity.	25	100								

The National ECCE policy Guideline recommended teachers use mainly locally available materials and the local environment for active learning. However, in most (60%) of the preschools, teachers were not seen using locally available or made materials as resources for teaching and learning. Conversely, in very few (8%) preschools, teachers have good practice using local materials as resources for teaching and learning. In addition, children in all preschools do not have access to curriculum materials and equipment that support creative learning experiences (e.g., art, dance, music/movement etc.) and maintain cultural integrity, as well as access to drawing materials such as papers, paint jars, fingerprint containers, crayon boxes, paintbrushes and so on. This implies that children do not have opportunities to work in their own interests and at their own pace. The following table provides insights into teachers' assessment practices.

Table 6.14: Assessment of Children's Progress

No	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Assessment of Children's Progress	f	%	f	%	F	%	f	%	f	%
1	Individual progress is shared with parents and families	15	60	8	32			2	8		
2	The children are engaged in self-evaluation	25	100								
3	Individual children's learning processes and achievements are monitored systematically	22	80					2	8		

Teachers have to monitor children's progress all the time to plan for the next stage of development and to identify any area of concern or take action and provide support (Curtis & O'Hagan, 2014). Teachers also have an obligation to provide a realistic overview of the child's progress and alert the parents to any possible concerns (Gordon & Browne, 2011). In this case, assessment results are means or tools for teachers to share their opinions and concerns about children with each other, with families, and with important agencies or specialists and work closely with the parents to reach

a solution. However, more than half (60%) of preschool teachers do not share individual progress with parents and families, parents do not have information about their children's learning progress, or parents do not have the opportunity to discuss their child's learning progress. In contrast, only (8%) of preschools have good practices of sharing individual progress with parents and families. In this regard, during the interview teachers also reported that parents did not come when they are called for a discussion. However, there was no supporting evidence to show the efforts of teachers to attract parents to such discussions. I could not find any evidence of how teachers communicate with children's parents.

Children in all preschools do not have the opportunity to engage in self-evaluation or peer assessment. The majority (80%) of preschools were observed to be inadequate in assessing and monitoring individual children's learning processes and achievements systematically. This implies that the child's assessment results were not obtained from multiple sources of evidence. In addition, the type and kind of assessments varied from school to school. Sample test papers, mark lists and feedback comments were analysed. I found these to be inappropriate to assess a child's actual potential and emergent skills.

Table 6.15: Evaluation of Programs

No	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Evaluation of Programmes	f	%	F	%	F	%	f	%	f	%
1	The programme is evaluated regularly with regard to its overall contributions and relevance to children and the broader society.	25	100								
2	The programme's ability to meet local, regional, national and international standards for excellence in education/care is evaluated comprehensively.	25	100								

Evaluation is an essential component of any programme since it provides insight into the effectiveness of the programme. With regard to monitoring of programme effectiveness, the National ECCE Policy Guidelines outline how regular monitoring of preschools will be conducted, and how the findings from the monitoring activity will be shared with the PTA and the school board. It appears from the data that regular evaluation does not take place. From the interview data, an expert interviewee from the Ministry of education reported that preliminary preparation has

144

been completed to conduct an evaluation. In addition, data from document analysis and interviewee's responses revealed that the National ECCE policy framework has not yet been revised since it has been developed in 2010. It, therefore, appears that the programmes run year after year without having sufficient evidence to indicate whether the programme is showing success or failure.

Tables 6.16 – 6.18 present an analysis of teachers' performance, personal and professional characteristics and ethical dimensions.

Table 6.16: Knowledge and Performance of teachers

N	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Knowledge and Performance of teachers	f	%	f	%	F	%	f	%	F	%
1	Teachers demonstrate knowledge of child growth, development, and learning and are able to apply this knowledge to practice.	20	80			3	12	2	8		
2	Teachers adapt the use of space, materials, and time to meet the needs of the children and the particular programme.	16	64			7	28	2	8		
3	Teachers communicate their professional knowledge to others.	23	92					2	8		
4	Teachers work collaboratively and in partnership with others.	19	76			4	16	2	8		
5	teachers reflect on their individual practices and make appropriate changes	23	92					2	8		

Table 6.16 shows that the majority (80%) of preschool teachers were found inadequate to demonstrate knowledge of child growth, development, and learning and are unable to apply this knowledge to practice. Only (8%) of preschool teachers have good practice. Furthermore, most (64%) of preschool teachers observed a lack of the necessary knowledge and skills to adapt the use of space, materials, and time to meet the needs of the children and the specific programme. The majority (92%) of preschool teachers do not have experience and opportunities to communicate their professional knowledge to others. Only (8%) of preschool teachers have good experiences. In regard to working collaboratively and in partnership with others, more than two-thirds (76%) of preschool teachers were observed to be inadequate. Teachers working collaboratively were rated as good in only 8% of preschools. Furthermore, the majority (92%) of teachers observed inadequate to reflect on their individual practices and making appropriate

changes. The following table provides insight into teachers' personal and professional characteristics.

Table 6.17: Personal and Professional Characteristics

N	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Personal and Professional Characteristics	f	%	F	%	f	%	f	%	f	%
1	Teachers exhibit personal characteristics that demonstrate caring, acceptance, sensitivity, empathy, and warmth to children.					4	16	21	84		
2	Teachers respond to children who are experiencing distress in a comforting, supportive, and timely manner.					4	16	21	84		
3	Teachers treat children with dignity and respect to support the development of their self-worth.					6	24	19	76		
4	teachers are advocates for children					6	24	19	76		

As shown in Table 6.17, during the observation, the majority (84%) of the preschool teachers demonstrate caring, acceptance, sensitivity, empathy, and warmth towards children. Furthermore, both the observation and field note data revealed that the majority (84%) of teachers respond in a comforting, supportive, and timely manner to children who are experiencing distress. Still, the majority (76%) of the teachers have better child-teacher interaction and treat children with dignity and respect to support the development of children's self-worth.

Table 6.18: Moral/Ethical Dimensions

N	Items	Inadequate		Minimum		Adequate		Good		Excellent	
		f	%	f	%	F	%	f	%	f	%
1	Teachers respect children, their culture, and family practices									25	100
2	Teachers show courage in acting on behalf of children and speak up when necessary.									25	100

With regard to the moral/ethical dimensions of teachers it was observed that in all of the preschools, teachers had maintained an excellent relationship with children. This relationship is manifested in respect for children, their culture, and family practices. Similarly, in all preschools, teachers show courage in acting on behalf of children and speaking up when necessary.

146

Tables 6.19 – 6.23 present the analysis of partnerships with families and communities.

Table 6.19: Programme policies

No	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Programme Policies	F	%	f	%	f	%	f	%	f	%
1	Programme policies promote partnerships with families and the community									25	100
2	Programme policies provide support for families, either directly or through links with other community resources (e.g., agencies, specialists, community leaders).	25	100								
3	Guidelines are established for parent participation and involvement in the programme.	25	100								
4	Ongoing discussions/ conferences with families about children's progress and other concerns are communicated	22	88					3	12		

In relation to programme policies, Ethiopia has a National Policy Framework and Guidelines for Early Childhood Care and Education. In the document review, I found that parental education is cited as one of the four pillars (MOE, 2010). Apart from this fact, during my observation, I could not find any policy document in any of the preschools to promote partnerships with families and the community and to provide support for families, either directly or through links with other community resources. Furthermore, as shown in Table 6.19, the ECCE programme policy has not yet been implemented. Furthermore, none of these preschools had parental involvement guidelines, except statements made in the national guidelines. Data from field notes show that families and other concerned bodies have open opportunities to be involved. However, parents and communities have very poor involvement.

With regard to communicating and conducting ongoing discussions/conferences with families about children's progress and other concerns, the majority (88%) of the preschools observed were found inadequate. There may be different reasons, but it seems that teachers are not fully aware of ways to initiate and promote parental participation. In addition, during the observation, supporting documents relating to parental participation was not found. In contrast, very few 3 (12%) preschools have maintained excellent ongoing discussions with families about children's progress

147

and other concerns. There seems to be no documentation that shows parents or families are empowered, encouraged and supported or whether their values and beliefs are respected.

Table 6.20: Moral/Ethical Responsibilities and Behaviours

N	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Moral/Ethical Responsibilities and Behaviours	F	%	F	%	f	%	f	%	f	%
1	The programme has procedures for the protection of children from hazards or abuse.	25	100								
2	Programme fosters self-esteem and self-confidence in all the children.					25	100				
3	Moral/spiritual/ethical experiences in the curriculum reflect and promote the values of individual families.	25	100								

MOE, in its ECCE National Policy Framework, highlights the issue of child protection. It has been stated that "in all the four pillars child rights and child protection will be a key element, especially in parental education; the Ministry of Women Affairs (MoWA) will take the lead in the development of implementation strategies on child rights and protection" (MOE, 2010, p.27).

However, observation data revealed all the preschools do not have specific precautions or programme procedures to protect children from hazards or abuse. This implies that the implementation and enforcement of these safety measures are ineffective. Similarly, as revealed in Table 6.20 the fostering of self-esteem and self-confidence in children does not receive sufficient attention. Similarly, the preschool curriculum reviewed was found inadequate to promote the moral/spiritual/ethical experiences or values of individual families.

Table 6.21: Training and Resources

N	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Training and Resources	f	%	f	%	F	%	f	%	f	%
1	Resources/Information is made available to families on aspects of child development and learning.	25	100								
2	Resources/Information is provided to family and community members about children's health care and nutrition.	25	100								
3	Educational materials and/or information sessions are suitable for the community, culture, and geographic location and are made available to families.	25	100								
4	Materials/strategies ensure the participation of families with diverse characteristics (e.g., cultural, linguistic, ethnic, or socioeconomic).	25	100								

The making available resources/information to families on aspects of child development and learning appears inadequate. According to the National ECCE guidelines, at the local level, health extension workers are responsible for providing resources or information to family and community members about children's health care and nutrition development.

Families and community members do not have access to resources or information about children's health care and nutrition in every sample preschool. Apart from this, supporting evidence such as minutes of meetings and training sessions on children's health care and nutrition were not found. Furthermore, during the time of observation, prepared educational materials were not found in all preschools. So, it is not possible to evaluate whether or not the materials/ strategies or information sessions are suitable to ensure the participation of families with diverse characteristics (e.g., cultural, linguistic, ethnic, socioeconomic, or geographic location).

Table 6.22: Transition of Children from Home to the ECCE centre

No	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Transition of children from home to the programme	f	%	F	%	F	%	f	%	f	%
1	Families can visit the preschool programme.	20	80			2	8				
2	Information on expected child behaviours in the programme and child achievements in the curriculum is disseminated to families.	25	100								
3	Connections between home and the programme are encouraged and maintained.	25	100								

From the field notes it is observed that preschools are open for parents and families to visit. However, the majority (80%) of parents/ families do not have experience in visiting the preschool programme. On the other hand, it was observed that (8%) of parents had adequate experience in visiting the preschool programme. Moreover, in all sample preschools, information on expected child behaviours in the programme and child achievements in the curriculum is not disseminated to families. This is demonstrating that most preschools do not have ongoing discussions or conferences with families about children's progress and other concerns. Likewise, encouraging and maintaining connections between home and school (EECE centre) was found inadequate. The following table provides an analysis of family and community participation.

Table 6.23: Opportunities for Family and Community Participation

No	Items	Inadequate		Minimum		Adequate		Good		Excellent	
	Opportunities for Family and Community Participation	f	%	f	%	f	%	f	%	f	%
1	Opportunities are provided for families and community representatives to observe programme activities.							25	100		
2	Collaboration is established with families and community representatives for programme planning, management, and evaluation.	22	88					3	12		
3	Families and community representatives participate in the decision-making process.	22	88					3	12		
4	Parent/family volunteer opportunities to assist in the classroom and contribute expertise are provided (e.g., making materials, and leading activities).	25	100								
5	Support is provided for families in need.	25	100								

As indicated in Table 6.23, families and community representatives have the opportunity to observe programme activities at any time. However, families and community representatives have poor experiences in visiting programme activities. In addition, it is observed that collaboration with families and community representatives for programme planning, management, and evaluation is not yet established in the majority (88%) of the preschools. Correspondingly, the participation of families and community representatives in the decision-making process was found inadequate in most (88%) of the preschools. Furthermore, the observation data revealed that in all of the preschools, parents or families were not involved in volunteer opportunities to assist in the classroom and contribute their expertise (e.g., making materials, and leading activities). Moreover, there were no supporting documents found that could indicate whether or not families in need were provided with any support.

6.4   Conclusion

This chapter presented the quantitative data obtained through a structured questionnaire and structured observations to address (RQ2) and (RQ5). The analysis focused on both contextual factors (curriculum content and learning experience, partnership with family and communities) and pedagogical factors (the indoor and outdoor learning environment, pedagogical practices and approaches, pedagogical relationships, and personal and professional characteristics of teachers).

This chapter's findings revealed that the content and learning experiences of the curriculum are inadequate to provide opportunities for children in all domains of learning: physical, social, emotional, cognitive and aesthetic development. For example, as evident from participant responses, content and learning experiences such as science, self-regulation, and emotional development were found inadequate to foster the holistic development of children. The majority of teachers disagreed with the appropriateness of curriculum content and science learning experiences to provide children with the opportunities to develop inquiry skills and scientific thinking; promote a cycle of scientific reasoning; observe, explore, and investigate, and provide hands-on science activities.

Curriculum content and emotional development learning experiences were found to be insufficient for developing curiosity, engagement, and positive attitudes toward learning; recognising and expressing a wide range of feelings, emotions, and behaviours verbally or nonverbally; and

151

fostering self-confidence and competence. In addition, curriculum content and learning experiences in language and literacy were found inadequate to provide children with the opportunities to develop phonological awareness skills, understand phonics and word recognition, and promote vocabulary acquisition and use.

Furthermore, the quantitative findings revealed that the majority of preschools have adequate physical space and play areas. However, the findings revealed that both indoor and outdoor learning environments are inadequate and under-resourced and thus cannot provide an attractive, pleasant and stimulating learning environment that will enhance children's holistic development. The pedagogical data presented in this chapter revealed that the majority of teachers lack a basic understanding of pedagogical principles, and knowledge of child growth, development, and learning.

The structured observations revealed that teachers lack the necessary knowledge and skills to systematically assess and monitor children's learning progress. In addition, it appears that teachers lacked the necessary knowledge and skills to organise stimulating indoor and outdoor spaces. In addition, they demonstrated an inability to adapt the use of space, materials, and time to meet the individual needs of children. On the other hand, the findings reveal that teachers have a supportive teaching and caring relationship with children and treat children with dignity and respect and use positive language when speaking to children. The findings revealed poor family and community partnerships, and a lack of collaboration with families and community representatives in the decision-making processes like planning, management and evaluation. I now turn to Chapter seven, to present the qualitative data, which were structured to answer all research questions.

152

CHAPTER SEVEN

QUALITATIVE DATA PRESENTATION AND FINDINGS

7.1   Introduction

In chapter six, I presented the quantitative data obtained through structured questionnaires and structured classroom observation to derive the quantitative findings. The purpose of this chapter, Chapter seven, is to present the qualitative data which was extracted from the following data sets, namely semi-structured interviews with two ECCE education experts and four purposefully selected ECCE teachers, together with document sources and classroom observation field notes. This is done to explore each of the research questions and to triangulate and corroborate these findings with the quantitative findings of Chapter six.

The interview transcripts were analysed using thematic analysis. This chapter, Chapter seven, is divided into two sections. The first section profiles the interview participants offering the demographic characteristics of these participants. This is then followed by a presentation of the qualitative data to derive the qualitative findings.

7.2   Section 1: Demographic Characteristics of interview participants

As mentioned, face-to-face semi-structured interviews were conducted with purposefully selected ECCE experts and teachers. For anonymity, the interviewees and study sites were given pseudonyms names in the form of letters RPA and T, as shown in Table 7.1. Names with RPA are (e.g. rural preschool A, RPB= rural preschool B, UPC=urban preschool C and UPD = urban preschool D); and names with T1, 2, 3 and 4 are teachers (e.g. RPA-T1 is a teacher from rural preschool A); and a name with MOE-Ex1 is an ECCE education expert at the Ministry of Education, EB-Ex2 is an ECCE education expert at the Regional Education Bureau. QR is used to indicate the research question. The following table (Table 7.1) describes the profiles of participants who participated in the semi-structured interviews.

Table 7.1: Participants' Profile

Participants	RPA-T1	RPB-T2	UPC-T3	UPD-T4	MOE-Ex1	EB-Ex2
Sex	male	female	Female	Female	Male	female
Age	26	31	29	51	48	37
Teaching/working Experience	4	9	7	30	22	13
Educational level	Certificate+	Diploma	Diploma	Certificate	MA	MA
Field of study	ECCE	ECCE	ECCE	ECCE	Educational Psychology	Educational Psychology

As shown in Table 7.1, four ECCE teachers and two ECCE experts (one from the Ministry of Education and one from the Regional Education Bureau) participated in the interviews. Out of the six interviewees, two were males and four of them were females. Since participation was entirely voluntary, no attempt was made to balance the genders. In regard to teaching experience, PRA-T1, RPB-T2, UPC-T3 and UPD-T4, who are teachers have varying years of teaching experience ranging from a minimum of 4 to a maximum of 30 years, respectively. While expert participants, MOE-Ex1 and EB-Ex2 had 22 and 13 years of working experience, respectively. Expert participants held MA degrees in educational psychology; two of the teachers held diplomas in ECCE and one teacher held a certificate in ECCE whilst the other, at the time of the interview, was studying towards obtaining a diploma in ECCE.

7.3 Section 2: Data Presentation and Analysis of Qualitative data

As mentioned, the qualitative data collected through semi-structured interviews, document sources and field notes were organised into themes and sub-themes based on the research questions and then analysed using thematic analysis introduced by Braun & Clarke (2006). The themes and sub-themes that developed during the thematic analysis of the interview transcripts are presented in a separate section (see Appendix F). Following, the data of the qualitative strand of the study are presented based on the research questions.

7.3.1 Research Question One: What is the nature of ECCE in the Amhara National Regional State in Ethiopia?

This question was aimed at assessing the theoretical foundation and approaches that frame Early Childhood Care and Education curriculum in Ethiopia. It is also intended to determine teachers'

154

understanding of the curriculum and curriculum policy. After the thematic analysis of the interview transcripts, five themes emerged. These were the ECCE curriculum theory in Ethiopia, the ECCE curriculum approach, curriculum integration, teachers' understanding of the ECCE curriculum and curriculum policy, and issues relating to access and participation.

7.3.1.1   Theme 1: Nature of Early Childhood Care and Education

Theme 1.1: Early Childhood Care and Education Curriculum Theory Ethiopia

The ECCE curriculum is influenced by divergent theories of learning and development and contrasting images of young children (Lim & Genishi, 2010). Thus, understanding the nature of early childhood care and educational philosophy is critical for designing, planning, and implementing objectives and content that promote young children's holistic development. Ethiopia has developed a National Policy Framework for Early Childhood Care and Education; the aim is to ensure that all children have the right to a healthy start in life, be nurtured in a safe, caring and stimulating environment and develop to their fullest potential (MOE, 2010f). As part of the document review, I looked at various policy documents to understand how the ECCE curriculum is framed. In this respect, the document analysis revealed that the Ethiopian ECCE curriculum was framed by a constructivist learning theory framework drawn from Piaget's theories of how children learn. In supporting this, MOE-Ex1 stated:

> As far as I know, in our education system, we follow a constructivist theory, not only for preschool education but also for all (KG to Grade 12). However, this question was asked in every workshop, platform, and everywhere. They ask, what philosophy do we follow? But, nothing has changed. (MOE-Ex1, 21st June 2021).

He further added that the reason for choosing constructivist theory is not different from the primary school curriculum; the aim is to promote a child-centred active teaching approach and encourage teachers to use a variety of instructional methods. On the other hand, MOE-Ex1 does not agree with the constructivist learning theory. Instead, he suggests 'eclecticism' as a suitable theory for framing the early childhood care and education curriculum. As he puts it:

> However, there are different theories for children. So, the ECCE curriculum should be derived and prepared from various theories. Eclecticism, in my opinion, is a better theory for early childhood education. For example, there are behaviourists, cognitivism, humanistic......and others. All are needed. Thus, when the curriculum is prepared, it should draw from all those different theories

155

of learning that should be considered in designing early childhood education curriculum (MOE-Ex1, 21st June 2021).

The teacher participants, however, appeared not to have the knowledge and understanding of ECCE curriculum theory, as is evident from their interview responses:

> (RPA-T1): "we do not have any policy documents and we do not have training".

> (RPB-T2): "I don't know the policy and philosophy of the curriculum and we do not have the document".

> (UPC-T3): "I'm not familiar with the curriculum's policy, and we don't have a policy document."

> (UPD-T4): "I don't know much about the philosophy of the ECCE curriculum and I don't get any training".

From the quotation above, it appears that teachers have a lack of knowledge about curriculum theory, which could create a gap in how they practice, and how they support children's growth, development and learning. The lack of knowledge could also lead to poor curriculum implementation.

Theme 1.2: Early childhood Care and Education Curriculum Approach

The design and approach of curricula vary greatly, it can be teacher-directed or child-initiated, child-centred, or content-centred. However, approaches to curricula need not be prescriptive; rather, they provide a framework for ECCE and schools to use in developing a local curriculum that meets the needs of children, parents, extended families, and the community (Shuey et al., 2019). As stated in the National ECCE Policy Framework of 2010, the curriculum is framed in a developmentally appropriate way drawing on a play-based approach (MOE, 2010). An analysis of interviews with teachers and experts revealed that the ECCE curriculum follows a developmentally appropriate practice based on a child-centred teaching approach. The excerpts below show the responses of the interviewees.

Expert interviewee MOE-Ex1 noted that:

> …we follow developmentally appropriate practice based on constructivist theory. The concept of developmentally appropriate practice is preferred because it helps to plan how a four-year-old can develop a concept or what a six-year-old child can do based on the idea of what he/she can do. Developmentally

156

appropriate practice is the appropriate approach to teaching young children. Children's development is interdependent and complementary so that the curriculum is developed to foster these interconnected aspects of child development (MOE-Ex1, 21st June 2021).

Teacher participants indicated that ECCE curricula followed a child-centred approach. Teachers expressed the importance of child-centred learning for active learning. Following, are some of their responses:

(RPA-T1): "I used both a child-centred and a teacher-centred method interchangeably. A child-centred approach is good for active learning".

(RPB-2): "In my belief, a child-centred approach is easy to teach young children. In the child-centred approach, children will engage more in the activities, and the relationships between children and teachers will be better".

(UPC-T3): "In my knowledge, children can learn best through active experiences with people, materials, events, and ideas, rather than through direct teaching or sequenced exercises".

(UPD-4): "To the best of my knowledge, child-centred has many benefits. For instance, it is important to include children's needs, to increase children's participation, it gives opportunity them to learn from their peers and to try out things".

As indicated in the extract above, teachers mentioned that they understand the concept of child-centredness and practised it. My observations, however, reveal that teachers' lesson plans, classroom arrangements, and overall classroom setup do not support child-centred and developmentally appropriate practices. One can therefore infer that teachers do not have a basic understanding of developmentally appropriate practices and have difficulties in practicing a child-centred curriculum approach.

Theme 1.3: Curriculum Integration

An integrated curriculum is a single document that allows children to pursue learning holistically. It involves learning experiences that promote all aspects of development rather than dividing the daily schedule into discrete times, such as math, reading, physical education, or social studies (White & Coleman, 2000). According to the National ECCE policy, the aim is to provide an integrated, quality, developmentally appropriate and culturally responsive service for the holistic

157

development of all children (MOE, 2010). However, the analysis of interview responses shows a lack of curriculum integration. The responses of the interviewees are depicted below:

Expert interviewee MOE-Ex1 was unsure about the extent of curriculum content integration. As he puts it:

> We follow an integrated approach. How far it is effectively integrated? I doubt. I can't say it is fully integrated. It is difficult to integrate. Integrated means, that one content or theme contains all things (mathematics, language, social and science etc.). It is difficult to say it is fully integrated" (MOE-Ex1, 21st June 2021).

Expert interviewee EB-Ex2 also mentioned that the curriculum follows an integrated approach and stated that:

> We use an integrated curriculum approach and pedagogically it gives emphasis to child-centred approach. In my opinion, it is a good approach. For example, while teaching mathematics, use stories to teach mathematics. The curriculum outlines all activities. For example, it outlines what the teacher teaches first-week, the first day, first week, the second day - which story, which game to teach, which art/content to teach ... All in detail (EB-Ex2, 7th June 2021).

Teachers' interview responses indicate that teachers do not understand the notion of curriculum integration. They reported that:

> "In my opinion, it is not integrated" (RPA-T1)

> "I am not sure, it is difficult for me to evaluate" (RPB-2)

> "I do not know exactly, the concept of integration" (UPC-T3)

> "It is not integrated. But I cannot conclude" (UPD-4).

I reviewed the ECCE National Policy Framework (2010), the ECCE syllabus, teacher's guide, and teacher's lesson plans. In the document review, as depicted in table 7.2, I found six domains or areas of learning; each of the learning domains is presented separately into discrete learning areas within a particular theme.

Table 7.2: The learning domains stated in the National ECCE policy, curriculum and teachers Guide

National Policy Framework	ECCE curriculum	Teacher guide/syllabus
The programme will cater to the acquisition of basic skills (pre-reading, pre-writing, counting, and arithmetic) in preparation for the child's formal schooling. Social-emotional competence, including self-regulation, intrinsic learning motivation and the ability to cooperate with other students are some of the benefits that children may gain from attending preschool (MOE, 2010B:21)	1) Preschool education that assists the development of a healthy physique and emotional growth, 2) Improvement of language use, 3) Development of basic arithmetic skills, 4) Social, communal and personal development, 5) Developing knowledge about the surroundings and 6) Development of creative and affirming skills (MOE, 2014:8).	1) Body parts and sensory development, 2) language development and use, 3) development of basic math skills, 4) personal, social, and emotional development, 5) development of environmental knowledge and skills, and 6) Development of creativity and appreciation skills (MOE, 2017: xii)

From the table (Table: 7.2), one can derive that there seems to be no conceptual relationship within or between these learning domains. Furthermore, teaching strategies, curriculum content, and learning experiences are not planned in an integrated manner. Furthermore, neither the curriculum nor the teacher's guide provides direction to teachers on how to plan integrated learning activities, which could infer that there is a misalignment between what is suggested by the National Policy Framework and the planned and implemented curriculum. Teachers, as is evident from their interview responses, lack the knowledge and training to plan activities in an integrated manner. From expert responses, one can infer that curriculum integration has not been studied either at a national or regional level. Furthermore, as shown in the table, there is a lack of coherence in stating the main learning domains between the National Policy Framework, the ECCE syllabus and the teachers' guide.

Theme 1.4. Teachers' understanding of ECCE policy and curriculum

According to the interview responses, all teacher participants were unfamiliar with the ECCE curriculum policy and have not received any training on it. The following extracts attest to this:

> (RPA-T1): "except teacher's guide, we do not have any policy documents and we do not have training".

(UPD- T4): "We do not have the national policy document. Except for my reading. I didn't receive any training".

In my observation and document analysis, I noticed that almost all preschools do not have access to the National Policy Framework, ECCE guidelines, and ECCE syllabus. This implies that there is a lack of a shared frame of understanding between the curriculum (planners or experts) and teachers (implementers). If teachers do not have a better understanding and conceptualisation of the curriculum, it may have an impact on how they teach and assess children's learning. It may also result in misinterpreting the intention of the policy, resulting in neglecting the basic learning needs of children and, ultimately, leading to the unsuccessful implementation of the curriculum.

Theme 1.5. Access and participation

As mentioned in Chapter two (see Section 2.3), the government of Ethiopia has implemented various initiatives to increase access and improve the quality of ECCE. For instance, in its ESDP (VI 2020/21), the government is committed to providing free and compulsory preschool education, especially for the most disadvantaged children, and to upgrading ECCE teachers' training from certificate to diploma (MOE, 2021a). However, access and participation remain challenging issues in Ethiopia. The national preschool gross enrolment rate is currently 36.7% (2020/21) down from 45.4% in 2019/2020 (MOE, 2021b). This implies that more than 63% of young children lack access to ECCE. Similarly, in 2021, the regional gross enrolment rate in the Amhara region was 39.9% (ANRS, 2021). Meaning that more than 60% of children still do not have access to preschool education. In this respect, EB-Ex2 stated:

> …regional gross enrolment remains extremely low. There are so many challenges in expanding access to ECCE. For example, most kindergartens are private and O-classes are mostly found in urban areas, parents do not pay attention and child-to-child is stopped due to management difficulties. ECCE requires a big investment (EB-Ex2, 7th June 2021).

Similarly, MOE-Ex1noted that:

> Although, there is some improvement in national gross enrolment. It is a field of education that has received little attention until now. Still, needs greater attention and improvement because there are children who do not have access to early childhood education (MOE-Ex1, 21st June 2021).

Interviewee RPA-T1 also thought that parents are not willing to send their children due to the physical condition of the school. He stated that: "some parents had previously registered their

160

children here. However, after seeing the school condition, they return their children to private kindergarten". Other teacher participants concurred by saying:

> (RPB- T2): "I don't think many children will be enrolled because there is not enough preschools in this area. Some parents do not send children; they do not have interest"
> (UPD- T4): "Personally, I don't think that most of the children have access to ECCE".

Teacher participant responses show that the main challenges to gaining access to ECCE are lack of investment, lack of trained teachers, inappropriate learning environments, poor facilities of preschools, lack of parental awareness, geographical location or home school distance. The 'O' class is far from children's homes and many of them are confined mainly to urban areas.

7.3.2 Research Question Two: To what extent does the ECCE curriculum address the holistic development of children?

In the thematic analysis of the interview transcripts, seven themes emerged, which will be discussed in this section. These themes were: social development, self-regulation skills, early science experiences, appropriateness of curriculum for holistic development, recommendations to improve the ECCE curriculum, support and monitoring of curriculum implementation and challenges relating to curriculum implementation.

7.3.2.1 Theme 2: Appropriateness of curriculum content

Theme 2.1: Social development

The ECCE curriculum should be responsive to the needs and culture of the children and families. Interviewees were asked to describe to what extent the values, cultures, and expectations of families and society are addressed in the curriculum. In this regard, the analysis of interview responses showed that the curriculum content and learning experiences are appropriate for the development of important social values, rules and manners in today's society. Almost all interview participants held similar views and said that curriculum content and learning experiences in social development are better than other learning areas and allow children to practice social development skills to function effectively in society. The responses of the interviewees are shown in the excerpts below:

161

RPB- T2: In my opinion, it is better than other learning areas. It enables children to understand and develop community norms and rules. For example, discipline, forgiveness, greeting, respecting others, accepting the command of a father and mother, and having the experience of interacting with others (RPB-T2, 6th May 2021).

Similarly, interviewee UPD- T4 noted that

In my view, it is not far from the culture of society. It allows children to learn society's norms, appropriate manners, and rules, like discipline, greeting, respecting the elderly, giving thanks, and so on. We also prepare cultural play materials that support teachers (UPD- T4, 27th May 2021).

Furthermore, interviewee (UPC- T3) suggests including modelling behaviour and historical sites.

She further added:

Learning activities encourage children to know their family, relatives, and neighbours' family roles. However, the curriculum does not encourage children to learn about famous people [modelling behaviour] and historical sites.

Expert interviewees support the teachers' responses; however, they are more optimistic. For instance, MOE-Ex1 explained that:

Fundamentally, not just for preschool, but for any curriculum design that is based on the values and culture of society. The preschool curriculum syllabus is initially prepared by the Ministry of Education, and then Regional Education Bureau translate and adapt it into their own context (mother tongue and cultural context) by keeping the standard (MOE-Ex1, 21st June 2021).

The above quotes indicate that the ECCE curriculum content and learning experience are responsive to the values and culture of children and society. To ascertain the appropriateness of content and learning experiences to enhance children's social development, I reviewed the ECCE syllabus and teacher guides. My document analysis confirmed interview responses. However, as the interviewee (UPC-T3) stated, the curriculum does not encourage children to learn about famous people, historical sites, and stories of the past through modelling behaviour and field trips/visits.

Theme 2.2: Self-regulation skills

In addition to school readiness, it is imperative to address children's self-regulation skills since failure to learn academic skills may be due to the children's lack of self-regulation skills (Bodrova & Leong, 2005). Children who are good self-regulators will realise greater academic success than

162

those who cannot self-regulate in the later elementary grades (Riva & Ryan, 2015, p.69). Teachers and expert interviewees held different views. Analysis of teachers' interviews revealed that content and learning experiences are inadequate to foster young children's self-regulation skills. The responses of the interviewees are shown in the excerpts below:

> (RPA-T1): "There is a social development domain. But, I don't think, self-regulation skills are sufficiently addressed";

> (UPC- T3): "In my view, self-regulation skills are not well addressed. The content and activities of the curriculum are not appropriate to facilitate self-regulation skill".

Expert interviewees, on the other hand, reported that content and learning experience are adequate to foster the development of children's self-regulation skills. For instance, EB-Ex2 noted that "…the purpose of the programme is to prepare children academically and psychologically for formal education. So, self-regulation skills are one objective addressed in the curriculum". Similarly, MOE-EX1 said that "yes, self-regulation skills are addressed in the curriculum".

Drawing on my observations of the teacher's guide, syllabus, and textbooks, I found that self-awareness and self-regulation content was captured under the personal social and emotional learning domain. However, the content and learning objectives are not supported by relevant learning activities and methods of teaching that will enhance children's self-regulation skills such as taking turns, number games, scaffolding, buddy reading, freeze games, play plans, pattern movement, private speech, and movement songs & dances and so on. Furthermore, I reviewed different lesson plans and observed the outdoor environment and the children's outdoor activities. Here I found that in teachers' lesson plans, there seem to be no learning activities that allow children to practice self-regulation skills. In addition, the outdoor playing activities are not designed and appropriate to promote physical self-regulation skills. Synthesis of the above extracts may lead to the conclusion that self-regulation skills are not given adequate attention in the curriculum and that teachers do not plan and teach in a deliberate and planned manner to facilitate self-regulation skills.

Theme 2.3: Early science experiences

Another sub-theme that emerged during the interviews was the appropriateness of the curriculum to provide first-hand science experiences for children i.e. to observe, explore, explain, report,

163

interact, and evaluate. The National Guidelines for Early Childhood Care and Education clearly state that "adequate opportunities for exploration and discovery should be made available" (MOE, 2010d). In this regard, ECCE experts and teacher interviewees held different views. All of the teacher interviewees felt that objectives and learning activities are not relevant to providing opportunities for early science experiences for children. On the other hand, ECCE experts reported that objectives and learning activities are related to children's prior experience and encourage children to observe and explore in their daily routines. The responses of interviewees are shown in the following extracts:

Interviewee RPA-T1 expressed that:

> In my opinion, the curriculum has its inadequacies. Activities in the curriculum do not provide opportunities to observe and explain. The school environment is not ideal to provide such opportunities for children; It is not adapted to children's routines. For example, mathematical ideas are not related to children's daily routines or prior experience (RPA-T1, 28th April 2021).

Other teacher participants concurred by saying:

> (RPB- T2): "the curriculum itself doesn't encourage science. If we want to do this, we do not have the resources or facilities"

> (UPD- T4): "In my opinion, the curriculum has limitations. To be honest, most of the activities are done in the classroom i.e. we have never had field trips. even the textbook or teacher's guide does not encourage science".

On the other hand, MOE-Ex1 noted that:

> Learning activities are related to a child's prior experience and early science. But, it is the commitment of the teacher, if teachers are properly trained, they can teach using any material, even by painting stones, ... they can make learning experience real and concrete (MOE-Ex1, 21st June 2021).

Similarly, EB-Ex2 stated that "the curriculum was adapted to the local context and encouraged children to observe and explore". As indicated in the experts' quotation teacher competency (their commitment and training) are determining factors in adapting the curriculum to children's prior experiences and science teaching. Data drawn from the document analysis revealed that early science does not receive adequate attention in the ECCE curriculum. The curriculum is not adequate to encourage children to observe, explore, interact, experiment and pursue science inquiry skills. As evident from observation data, the environment is not inviting and nurturing and

164

is not intentionally planned to foster children's science learning. Furthermore, my field notes, based on my observations, revealed that the teachers also lack the knowledge and experience to engage children in scientific inquiry and investigation.

Theme 2.4: Appropriateness of curriculum for the holistic development

Interviewees were asked to express their thoughts and experiences on the appropriateness of ECCE curricula for the holistic development of young children. The analysis of the interview transcripts revealed that teacher interviewees and expert interviewees held different views and experiences on the appropriateness of the curriculum for the holistic development of children. ECCE expert interviewees mentioned that the ECCE curriculum is adequate for ensuring children's holistic development. The following excerpts show the responses of the interviewees.

Interviewee MOE-Ex1 stated:

> We follow a developmentally appropriate practice curriculum. It has a minimum learning competency and the contents are designed to achieve children's holistic development. It integrates all developmental areas, such as children's cognitive, social, emotional, and physical development (MOE-Ex1, 7th June 2021).

Interviewee EB-Ex2 shared the views of MOE-Ex1 and reported a lack of resources and the lack of trained teachers as challenges to fully implementing the curriculum. As she puts it,

> The main purpose of the curriculum is to prepare children for formal education. So, it is appropriate for children's holistic development. The curriculum includes six core areas of learning: language, math, social relations, physical knowledge of the surroundings and creative skills. However, we do not yet fully implement the curriculum. We are not in a position to implement the curriculum. We do not have resources, particularly trained teachers and resources (EB-Ex2, 7th June 2021).

The extracts quoted below illustrate teachers' views concerning the appropriateness of the curriculum.

> (RPB- T2): "I don't think it is appropriate for children's holistic development. For example, important tradition, culture, and values of the society, like locally known arts, folklore, puzzles, poems, stories are not included".

In supporting this, UPC-T3 stated:

> In my opinion, the social, physical, cognitive, and language domains are addressed. However, I do not feel that the ECCE curriculum is comprehensive to support children's holistic development; especially morals/spiritual, science,

165

art, creativity; etc. not included. ... it does not promote alphabet learning and phonological awareness [identifying letter names, sounds, and shapes], particularly in stages one and two. It is not allowed to teach English, but we teach. The curriculum does not have an alphabet chart (UPC-T3, 18th May 2021).

Interview UPD-T4 also held similar views and stated that content and learning experiences are inappropriate for children's age. She stated that:

When we look at the curriculum as a whole, it is good. In my evaluation, some areas of development are not sufficiently addressed. Even, some tasks and concepts are beyond young children's age. For example, in mathematics, there is addition and subtraction of two-digit numbers. This is not appropriate for children at this level. There are also repetitions of contents (UPD-T4, 27th May 2021).

The teacher respondents all pointed to the limitations of the ECCE curriculum in addressing the holistic development of young children. To ascertain the appropriateness of curriculum content, I reviewed the National Policy Framework, the syllabus and the teachers' guide. I found that the policy recognises the need to provide a comprehensive, integrated, quality, developmentally appropriate, and culturally responsive curriculum which is geared towards the holistic development of all children (MOE, 2010f). As outlined in the syllabus, there are six broadly defined learning domains, such as the development of a healthy physique and emotional growth; improvement of language use; development of basic arithmetic skills; social, communal and personal development; development of knowledge about the surrounding and development of creative and affirming skills. However, apart from this general statement, my document analysis reveals that neither the policy document, the syllabus, nor the teacher's guide mentions or specifies holistic development and set strategies that will guide teachers in designing lessons.

In essence, the synthesis of the aforementioned themes and sub-themes (themes 2.1 to 2.4) revealed that curriculum content and learning experiences are inadequate to provide opportunities for the holistic development of children. Some developmental areas are not adequately addressed in the ECCE curricula; especially early science, self-regulation, emotional and physical development, and learning experiences were inadequate and lacked breadth and depth. For further improvement, participants provide their suggestions and comments as is evident in the following theme.

Theme 2.5: Recommendations to improve the ECCE curriculum

Interviewees were asked to provide their suggestions on how the ECCE curriculum will be improved in the future. The analysis of the interview transcripts revealed that almost all of the interviewees thought that the ECCE curriculum should be revised. The following quotes express the views of ECCE teacher participants:

> (RPA-T1): suggest including "games and fairy tales that are familiar to children's culture as well as objectives and activities to practice self-regulation and emotional skills".

> (UPC-T3): suggest to "emphasise contents like science, music, art and craft, physical education, and self-regulation and to integrate language (Amharic) learning with indigenous knowledge 'Geeze', especially Abugida".

UPC-T3, further noted that "the Geeze alphabet of 'Abugida' is pedagogically an important approach that can help children easily master the alphabet, sound, and shape of letters". UPD- T4 felt that integrating content with children's home experiences is important and that the curriculum should include science, geography, history, creativity, painting and self-regulation, music, and art.

Expert interviewee (MOE-Ex1) also agreed on curriculum improvement and suggest the need to conduct research and evaluate the curriculum. He stated that:

> Of course, there is no perfect curriculum; by its nature curriculum is a dynamic process, it be evaluated and revised. Still, now we do not conduct curriculum evaluation. So, further research and evaluation are needed. The Early Childhood Care and Education policy was developed in 2010, but still not revised (MOE-Ex1, 21ˢᵗ June 2021).

In contrast, EB-Ex2 expressed:

> I do not believe the current curriculum in use is problematic. Before we speak about revision or curriculum improvements, the planned curriculum has to be first implemented because improvement comes after proper implementation. I think you also agree with this. We do not have the resources, trained teachers to implement curriculum (EB-Ex2, 7ᵗʰ June 2021).

In her opinion, she attributes the problem to a lack of trained teachers and facilities. As interviewee (EB-Ex2) mentioned, "there may be challenges in the process of curriculum implementation. However, in one way or another, the planned curriculum is being implemented on a full scale". Overall, interview and document analysis indicate the inadequacy of curriculum content to provide

167

opportunities for young children's holistic development. Therefore, it appears that the ECCE curriculum needs further improvements.

Theme 2.6: Support and Monitoring of Curriculum Implementation

Support and monitoring are essential ingredients for the effectiveness of early childhood care and education, as well as children's learning. In order to improve teachers' performance and competencies, the teaching and learning processes should be continuously and timely monitored. Analysis of teachers' responses revealed that preschool teachers did not receive instructional supervision from Woreda Education experts. As teachers reported, most often they get supervision from cluster supervisors and primary school principals. However, teachers claimed that the support was not ongoing, insufficient, and not focused on improving the teaching-learning process. In support of this, their responses are shown in the excerpts below:

> (RPA-T1): "I have been here for four years. Sometimes, the primary school principal and supervisor support us, but it is insufficient. Honestly, I do not think they have the necessary knowledge and experience in preschool education".

> (UPC- T3): "We never get support from education experts. To some extent, we get supervision from the primary school principal and cluster supervisor. Their support is mainly focused on the administrative process, but they do not give us classroom supervision".

Interviewee UPD- T4 has been working for more than 30 years in ECCE and had strong complaints about the support provided by education experts. As she puts it:

> Education experts do not have enough training in preschool education. For example, the checklist they give us is the same as the primary school; and they ask us to report the score/results of the children by classifying them as higher, medium and lower achievers. I strongly oppose this, because it is not right to classify children based on their competency. They struggle to give me efficiency. Please, take this as a serious issue (UPD- T4, 27th May 2021).

In supporting teachers' responses EB-Ex2 agreed that support provided for preschools was insufficient due to a lack of enough trained experts. He stated that:

> There is a shortage of experts. For example, at the regional level, there is only one focal person. Similarly, in the Zone Education Department, there is only one focal person. Whereas some District Education Offices have only one focal person, while others do not have one at all. I can say confidently that we do not have the capacity to support, monitor, and follow up on the implementation of the curriculum because most teachers, principals, and educational experts are

168

not trained in preschool education. So, we do not have the full potential to implement the curriculum (EB-Ex2, 7th June 2021).

Similarly, MOE-Ex1 noted, "there is a shortage of ECCE experts and finance". Based on the above quotation, it is possible to conclude that the performance and competencies of teachers, the teaching and learning processes, as well as the effectiveness of the programme, are not continuously monitored and evaluated.

7.4 Curriculum implementation challenges

From further probing participants were asked what challenges they face in the process of curriculum implementation. The synthesis of participant responses revealed a number of challenges, namely: a lack of sufficient support from the district education office; lack of resources and materials; lack of moral support and incentives; poor school facilities; teachers' turnover; a very high teacher-child ratio; lack of trained teachers and assistant teachers; lack of training opportunities and incentives; lack of parent and community involvement; poor coordination; and lack of instructional support, are continually mentioned. The excerpts below show the responses of the interviewees.

> (RPA-T1): We face many problems. For example, we do not have play facilities, there is lack of instructional materials and resources to prepare instructional media, at least coloured paper, marker, there is lack of space/room to store teaching aids, high number of children. We do not have enough support from the district (RPA-T1, 28th April 2021).

Another teacher participant concurred by saying:

> (RPB- T2): There are many challenges, for instance, we do not have assistance and cleaners, lack of instructional materials, shortage of teachers and classrooms, feeding rooms, and restrooms, child-size desks or chairs, high teacher-child ratio, we have more than 68 children in one class. More importantly, we do not have moral support from the community, even literate people, even children's parents do not respect us. There is no incentive or empowering system for better-performing teachers (RPB- T2, 6th May 2021).

> (UPC- T3): We have a shortage of materials; We do not have materials like children's books, picture books, lack of classroom, cupboard and shelves, cleaner, assistant teacher, large class size, I have 56 children; in each class, there are more than 50 children, in Kg one, 27 males and 23 females, and KG two, 33 male and 24 female children, teacher's turnover and lack of parental support (UPC- T3, 18th May 2021).

169

Similarly, EB-EX2 said that:

> There is a shortage of ECCE experts in each Zone and Woreda. Most Woreda education leaders do not pay proper attention to ECCE; instead of hiring trained teachers, they hire untrained teachers by contract. They complained about a lack of funds, but this is not the case (EB-Ex2, 7ᵗʰ June 2021).

Furthermore, my observations reveal that teachers are responsible for many roles, such as feeding, caring, and cleaning children, because they do not have caregivers or assistance, which could be inferred that teachers spend more time on routine activities or non-teaching and learning activities. Having less time to pay attention to instructional activities.

7.4.1 Research Question Three: What is the nature of teacher training in early childhood education and how does this impact their ability to implement and deliver the curriculum?

During the thematic analysis of the interview transcript, five themes emerged, which will be discussed further in this question. These themes were: teachers' certification, teachers' pedagogical knowledge, teachers' competency and skills, in-service training, and the attitude of teachers to their profession.

7.4.1.1 Theme 3: Nature of early childhood care and education teachers training in Ethiopia

Theme 3.1: Teachers' preparation and pedagogical knowledge

Teaching is essentially a learned profession; he/she must understand the structure of the subject matter, the principle of conceptualisation, and the principle of inquiry to answer the following questions: what are the important ideas and skills in this domain? and how are new ideas added and deficient ones dropped by those who produce knowledge in this area? (Shulman, 1987). Almost all of the interviewees held strong negative perceptions and complaints about the pre-service teachers' training course. Interviewee UPD-T4 opted not to respond since at the time of the study she was not part of this training. Other teacher participants concurred by saying:

Interviewee RPA-T1) stated:

> I do not feel my pre-service training is appropriate for ECCE teachers because courses are not related to the teaching of children. I don't think trainees are qualified in ECCE. Most of us are not happy, most commonly they use lecture method (RPA-T1, 28ᵗʰ April 2021).

Similarly, RPB- T2 stated:

> …I am not feeling good about the courses; assessment strategies and teaching methods of teachers are not related to teaching children. The duration of the programme is too short and we have a lot of loads. The time allocated to the course is not enough, most of the courses are provided in blocks. In my view, teachers don't have sufficient preparation (RPB- T2, 6th May 2021).

UPC- T3 felt that preservice training is not appropriate and related to children's learning. As she puts it:

> If you do not mind me it is boring, it does not motivate me, particularly the course and instructional approaches of teachers are not appropriate and related to children's learning. For example, physics, chemistry and biology are not relevant to teaching young children. I don't feel preservice training equips me with knowledge of various teaching and assessment of children. The teacher's approach and preparation are not good. I can tell you, many teachers are unhappy concerning the training. We do not have enough reference books; due to the short duration of the programme, we have a lot of course load. (UPC- T3, 18th May 2021).

The analysis of the teachers' interviews revealed that most of the teachers perceived their preservice training as being inadequate and does not prepare them with the pedagogical knowledge to teach young children. In support of teachers' responses, expert interviewee MOE-Ex1added that:

> Preservice training is very determinant, even if the curriculum is well developed. We cannot effectively implement it unless we have a well-trained teacher. Preschool teachers are expected to have not only academic knowledge, but also knowledge of child development and psychology (in art, music, folklore, psychology, and more…). Some trained teachers are not having good competency to teach because the training programme does not prepare them. In general, all our preschool teachers are not qualified or trained in ECCE (MOE-Ex1, 21st June 2021).

Likewise, EB-Ex2 explained that:

> Teacher training colleges have certain limitations: for instance, they did not have a well-developed curriculum. The course content, organisation, and structure of the lessons are similar to the primary school teacher training courses. So, the training courses have to be revised and include appropriate pedagogy. In short, preschool teachers' training curriculum is not aligned or related to children's curriculum (EB-Ex2, 7th June 2021).

171

From the above quotes, it is possible to conclude that there are definite problems with initial teacher preparation which could impact the delivery of the curriculum and what happens in terms of teaching and learning within the preschool classroom.

Theme 3.2: Teachers' Content Knowledge and Performance

Teaching young children needs an understanding of both the dynamics of child development, as well as one's content area knowledge (Lantolf & Poehner, 2014). The synthesis of teacher responses revealed that the preservice teachers' courses were inadequate to provide the required competency, knowledge, skills, and motivation to teach young children and to deliver and implement the curriculum effectively. Teachers continuously claim that training courses are unrelated to the learning and development of young children. Interviewees describe their views in the following extracts.

Teacher RPA-T1 said that preservice training is not intended to train preschool teachers. As he puts it:

> I graduated with a certificate. I am currently pursuing my diploma training in the summer. But, I think certificate teachers' training is better than diploma teachers' training. The training I receive is not intended to train preschool teachers. It is designed to train primary school teachers. For example, among the courses I took, only English and art courses, which I am sure will be useful for teaching children. In spoken language, for example, we practised by imitating children's voices. Art is also extremely beneficial because it is practical. I learned how to paint with locally available materials. This has benefited me now (RPA-T1, 28th April 2021).

This view was echoed by other teacher participants:

> (RPB- T2): I do not think that my preservice training course provides me with the basic knowledge and skills to teach young children. Most of the courses are similar to primary-grade trainer teachers, especially, mathematics, biology and physics courses that are not relevant to teaching children. If I were not trained in a certificate before, it would be difficult for me to teach children (RPB- T2, 6th May 2021).

> (UPD- T4): "I am not part of the new teachers' training programme. But, as I told you, my colleagues and friends who are currently in training have complained. I also observe some problems with novice teachers teaching".

172

One of the fundamental problems, according to the expert interviewee EB-Ex2, is a mismatch between the ECCE curriculum and preservice training curriculum and courses. As mentioned, the pre-service training courses' content, organisation, and structure of lessons are similar to the primary school teacher training courses. Interviewee EB-Ex2 further stated:

> …teachers training colleges have certain limitations; they did not have a curriculum to train preschool teachers. If we look at the course level, most preschool teachers' training course content, organisation, and structure of the lessons are similar to the primary school teacher training courses. It was not a game-based, training approach does not prepare ECCE teachers for teaching young children. One of the main problems is a mismatch between the ECCE curriculum objectives and preservice training curriculum and courses. So, I do not think that ECCE teachers gain basic knowledge in their preservice training to teach young children. What we found in our observation after graduation preschool teachers' teaching approach is similar to that of primary school teachers. In short, preschool teachers' training courses are not related to children's curriculum (EB-Ex2, 7th June 2021).

From the above quotation, it can be concluded that the preservice training curriculum and course content is not relevant to preschool teachers' training and appear unrelated to children's learning and development. There is also a mismatch between the ECCE curriculum and training courses. It appears that preservice training courses lack breadth and depth and are not designed around the competencies that will promote children's learning and holistic development.

Theme 3.3: In-service training

In-service training bridges the gap of insufficient preparation in preservice training and keeps teachers up to date with new knowledge and technology, which in turn leads to improved learning for all students (Eun, 2008). This signifies the need for adequate in-service professional development. However, the analysis of interview participants revealed that preschool teachers in Amhara National Regional State do not have access to in-service professional development opportunities. Even at the national level, there are no established guidelines for ECCE teachers' in-service professional development. In other words, in-service professional development is not part of ECCE in Ethiopia. Teacher participants noted by saying:

> (RPB- T2): "Firstly, we do not have in-service training. I can't comment on it. I didn't attend any training".

(UPC- T3) "We all do not participate in induction. We heard that other schools have received short-term training, but, still, we do not get any training.

In supporting the response of teachers, MOE-Ex1 stated that "still, we do not have an in-service training programme for ECCE teachers. It is mainly the responsibility of the Regional Education Bureau. The Minister of Education's role and responsibility is to provide training for trainers". Furthermore, EB-Ex2 agreed on the need for professional development and stated a lack of in-service training. As she put it:

> There is no formally structured in-service training for preschool teachers. But I understand that continuous professional development is a critical pathway to the development of teachers' knowledge and skills. Education Bureau has provided short-term training. But the training is not enough and has not yet addressed all preschool teachers. I doubt its continuity because the training is funded by the non-governmental organization (EB-Ex2, 7th June 2021).

The extract above reflected the inadequacy of short-term training, as well as the fact that such training if in existence is not funded by the government. From the synthesis of the interview responses, it is possible to conclude that in-service training or continuous professional development is not a priority in ECCE.

In essence, analysis of themes 3.1 and 3.2 revealed, preservice training is inadequate in terms of preparing teachers with necessary pedagogical content knowledge, competency and skills as well as providing rich, meaningful educational experiences in child development and learning. Furthermore, as evident in the synthesis of previous sub-themes (theme 3.1 to 3.3), lack of facilities and resources for trainees; lack of well-developed preservice training curriculum; teacher trainers' inadequate preparation, assessment strategies and pedagogical approach; short duration of the course and workload were identified as the challenges of preservice teachers' training. How teachers feel about their profession is discussed in the next section.

Theme 3.4: Attitude of teachers to their profession

In the course of the interview, teachers were asked how they felt about the teaching profession. The findings indicate that many teachers are dissatisfied with their teaching profession. As evident in teachers' interview responses, this is due to negative attitudes of the community toward the teaching profession, a poor government support system, and teachers' salaries. The following

174

excerpt shows how teacher interviewees expressed their views on their profession. RPB- T2 stated that:

> I have been teaching kindergarten for nine years (six in private and three in public). I don't know, how to explain it to you, but teaching young children is not an easy task. However, teaching a child is a thrilling experience. Parents and community attitudes are too discouraging. They do not respect us; they view us as jobless, weak, and others. So, I am not happy with my profession (RPB- T2, 6th May 2021).

Similarly, RPA-T1 stated:

> I like my profession, but, the present situation does not encourage me especially, government support, community and parent attitudes don't encourage us to stay in the profession. We do not have resources and facilities. For instance, caregiver or assistance, cleaner and so on (RPA-T1, 6th May 2021).

Interviewee UPC-T3 stated that she had no intention of entering the profession. As she puts it:

> I am not happy. Let me tell you the truth. I joined this profession because I could not get any job and I did not want to be unemployed. My salary is not enough for me. Unfortunately, if something goes wrong related to teachers, parents blame and insult teachers, they do not respect teachers, and community perception is not supportive (UPC-T3, 18th May 2021).

Interviewee (UPD-T4) mentioned that she enjoys her job. However, she mentioned the community's misconceptions about ECCE teachers and low salary payments. As she put it:

> I am excited to tell you about my profession; I enjoy it. My work experience is a witness to this. I have been teaching for 30 years. Do you think that I'm dissatisfied with my job? Until now, the community has had a stereotyped attitude toward early childhood education. They do not see it as a single large programme or institution. They do not consider early childhood education as a profession. In general, the community and the government are not encouraging. If you look at the salary of teachers, it is insignificant. I have been serving for 30 years. Do you know how much they paid me? It is 3,137 birrs in gross (UPD-T4, 27th May 2021).

Furthermore, the synthesis of interview responses and my observations revealed that teachers have a problem with job insecurity because many of them were hired on contract. Teacher retention seems to be a serious problem in many preschools, which could be inferred that the preschool working environment is not conducive to inviting and retaining qualified teachers.

To sum up, teacher preservice training, professional development, and working conditions are pivotal to improving ECCE service provision by improving teachers' instructional strategies,

which in turn enhance child development. However, as is evident in the analysis, these areas are often neglected and lack policy intervention. The following section provides an analysis of the alignment of curriculum, instruction, and assessment for the holistic development of children.

7.4.2 Research question four: How does the curriculum, pedagogic practices, and assessment alignment to support the holistic development of children?

There are various dimensions of alignment, however, it is not the scope of this study to unpack these various types of alignments. The main aim of this question is to assess how curriculum or content, instruction or teaching and assessment fit together to ensure young children's holistic development. In the thematic analysis of interview data, the following themes and sub-themes emerged that will be discussed in this section, namely: teachers' pedagogical approaches, integration of play-based learning in the curriculum and assessment strategies.

7.4.2.1 Theme 4: Alignment of Curriculum, Pedagogy and Assessment

Theme 4.1: Teachers' Pedagogical Approaches

Curriculum and pedagogy are the most frequently cited tools to guide teachers to improve their instructional strategies and enhance child development (OECD, 2012b). Curriculum can provide clear guidance and purpose through explicit pedagogical guidelines (OECD, 2012), and pedagogical approaches enhance the smooth accomplishment of the curriculum programme (Mohanty, 2014). Aligning these with appropriate assessment strategies will, therefore, provide coherence and continuity, which in turn contribute to a child's holistic development. As evident in the analysis of themes (1.1 and 1.2), the early childhood care and education curriculum is framed by constructivist learning theory and child-centred play-based pedagogy based on developmentally appropriate practice.

I reviewed teachers' lesson plans and conduct classroom observations to observe teachers' pedagogical practices. However, my observations and document review revealed that child-centred techniques are not well practised; instead, the traditional lecture approach or direct instruction is the teacher's default teaching method, and a high child-teacher ratio is identified as a contributing factor. It is apparent in the analysis of theme 2.8 that most preschool classrooms are overcrowded and above standard. According to the standard, the "teacher-child ratio is 1:30 for

176

three-to-five-year-olds and 1:40 for five-to-six-year-olds (MOE, 2010d). The following extracts illustrate the interviewee's pedagogical choices and practices. In reviewee, RPA-T1 stated that:

> Most of the time, I used a play-based approach. Usually, before I start to teach, I ask children what they want to learn. Play in our context is divided into two: teacher-guided and child-initiated, or free play. I also used demonstration techniques. For example, let me do first, then let us do together, and finally let them do alone (RPA-T1, 28th April 2021).

 Other teacher participants concurred by saying:

> (RPB- T2): "mostly, I use lecture methods, free-play, and sports games. However, the number of children is not manageable for active learning".

> (UPD-T4): "our pedagogical approach is play-based. We mostly used free-to-play, role-play, team games, movement games, sports games, and so on. For example, we use the thief versus police play-game, acting like a farmer and his role".

From the quotation above, it is possible to infer that teachers do not use different pedagogical approaches that will support children in developing and extending their academic and social capabilities, emerging skills, and individual learning styles, such as modelling, questioning, and scaffolding, amongst other things. As evident in the analysis of sub-theme (3.2 and 3.3), this could be due to inadequate preparation in preservice training and lack of in-service professional training. The following theme discusses how play is integrated into the curriculum.

Theme 4.2: Integration of play-based learning in the curriculum

In relation to the aforementioned sub-themes, teacher and expert interviewees held different views. Most of the teachers stated that play is not adequately integrated with content and teaching methods. Furthermore, teachers' interview responses indicated that children have two play sessions per day, and teachers also claimed that a lack of toys and distorted views of parents towards play are their main challenges. The responses of teachers are illustrated below.

> (RPA-T1): "children have two play sessions in a day. We teach them in the classroom for 25 minutes per session." But, I don't think so; play is not well-matched with learning activities, and even poems and stories are not attractive to children" (RPA-T1, 28th April 2021).

> (UPC- T3): "learning through play give children an opportunity to share their ideas, express their feelings. However, many of learning activities are not play-based".

177

Similarly, RPB- T2 pointed out that parents and supervisors do not have a positive attitude toward play. She expressed that:

> In my opinion, play is not integrated. Children have free play time sessions. Parents do not think that children are learning while they play outside the classroom. Not only parents but also supervisors do not support learning through play. We do not have toys or playing materials (RPB- T2, 6th May 2021).

Likewise, UPD-T4 said that play was not properly integrated with learning activities, especially in mathematics and language.

> Yes, teaching through play is very important. The preschool classroom is not like primary school; children want to learn more through fun and joy. But, we do not have enough playing materials. In my opinion, play is properly integrated into lessons, especially in mathematics and language (UPD-T4, 27th May 2021).

Furthermore, the interviewee UPD- T4 stated that the curriculum does not pay attention to locally known games. She stated that:

> The curriculum does not integrate play, specifically traditional games. For example, there are locally known traditional games such as "Geteba," "Dibosh," and "Sego-maksego" that are important for teaching mathematics and social skills (UPD-T4, 27th May 2021).

UPD- T4 further added,

> These traditional games are naturally an integrated and interactive play method and are important to teach mathematics, and self-regulation because the games involve counting and thinking as well as allowing children to play by taking turns. For instance: 'sego-maksego' is important for the development of self-regulation, and body control, because the game involves jumping and rotating and playing by taking turns. Similarly, 'Geteba' is also important for mathematics and logical thinking because the game involves counting and playing by taking turns (UPD-T4, 27th May 2021).

UPD-T4 points to the value of local traditional games and how it is used in teaching and learning. The expert interviewees also outlined the value of a play-based approach to learning but felt that the effective implementation of this approach was largely dependent on the competency, skill and creativity of the teacher. For instance, interviewee MOE-Ex1 stated:

> Play is the main pedagogical approach in the curriculum because it provides a holistic approach to learning. Children should be taught more often through play and the curriculum. It takes into account the development of the intellectual, emotional, and social development of children, i.e., holistic development. However, it may depend on the competency of teachers (MOE-Ex1, 21st June 2021).

178

Interviewee EB-Ex2 held similar views and pointed out that the types of games are not entirely fun for children. She stated that:

> Play is the main pedagogical approach. Play necessitates a teacher's commitment, ability, and creativity. However, in my opinion, many of the games may not create fun or joy for children because they are educational games (EB-Ex2, 7ᵗʰ June 2021).

To ascertain the integration of play, I reviewed the syllabus, teacher's guide, and teachers' lesson plans. I also observed outdoor learning activities. Through the analysis of the syllabus, I found a list of instructional media that teachers used in their lessons. However, apart from the directions in the teachers' guide and National Guideline to use play as a pedagogical approach; play as a teaching method is not explicitly indicated in the syllabus for the corresponding content and objectives. In my observations, I noticed that children have unguided free outdoor play opportunities.

As it was observed in teachers' lesson plans, play is not planned in an integrated manner and their daily activities/schedules do not reflect play as a pedagogical approach. In addition, children's involvement in planning was not observed. Instead, teachers use play as time for relaxation and taking a break. This indicates that children do not have the opportunity to participate or share their ideas or interests in planning daily activities. Being unable to involve children in planning may limit children's motivation and interest. Based on the above analysis, I conclude that play is not adequately integrated into the curriculum. Indeed, teachers do not intentionally plan play that will provide children with meaningful experiences for their social, emotional, physical, and cognitive development.

Theme 4.3: Assessment of children's progress

Assessment in early childhood education is an ongoing process and an important technique to identify whether or not children need more or less assistance, as well as determining the primary language most likely to be the most effective for support (Leong & Leong, 2009). If this is the case, assessment must be done skilfully, integrated with instruction and curriculum, and based on what children can do independently as well as their collaborative work skills (Krogh & Morehouse, 2014). In response to question four, interviewees were asked what assessment strategies they use to assess children's learning progress as well as the motivation behind this choice. Drawing from my document analysis, Ethiopian National Guidelines for Early Childhood Care and Education

179

(ECCE) set the general direction of how children will be assessed. It states that the assessment of children should be holistic, focusing on all the aspects of their development; continuously using appropriate methods; tests should not be used as a basis for promotion, retention, selection or labelling the child, and assessment results must be appropriately communicated to parents (MOE, 2010a). In this respect, interview responses and document analysis revealed that there is a lack of alignment between assessment, curriculum, and pedagogical practices, including misalignment or contradiction with the National Policy's intention. There is also a lack of assessment frameworks or guidelines that teachers can use. The following themes offer an analysis of teachers' assessment practices.

Sub-category 4.3.1: Types of assessment

As indicated in the teachers' responses, teachers use different assessment methods and procedures and held different views about the purpose of child assessment. This may be due to a lack of common assessment frameworks or guidelines and recording forms, as well as inadequate training. In the document review, it was found that the curriculum itself does not provide clear assessment strategies/procedures for how and what children will be assessed. The following extracts illustrate the types of assessment teachers used to assess children's learning progress.

> (RPB-T2): "We do not have assessment guidelines. No, we do not use a similar assessment format with other preschools. In our school, most commonly, we used, oral question, quiz, and tests."

> (UPC-T3): "We don't have any standards or assessment guidelines. We use assessment formats that are prepared by us. For example, we use test, quiz, questions and answers, writing, homework, and so on".

Interviewee UPD-T4 a head teacher stated:

> We use different continuous assessment formats both formal and informal assessment. For stages one and two, we use informal assessments such as oral questions, observation, and demonstrations, or practical tests like writing and homework. For stage three, we use formal assessment such as tests, quizzes, multiple-choice, demonstrations, and homework (UPD-T4, 27th May).

From the quotes above, it is possible to infer that teachers are not well versed in continuous assessment strategies that will enhance children's holistic development, such as portfolio assessment, dynamic assessment, observation, anecdotal records, checklists, rating scales, interviews, work sampling, children's self-evaluations, and so on. In addition, in my observations,

180

I noticed that most of the teachers lack the commitment to continuously assess, observe and keep a recording of children's progress and performance, as well as behaviour over time. It appears that teachers' assessment strategies and procedures are inappropriate to assess broad domains of children's learning and development (social, emotional, physical, and cognitive).

Sub-category 4.3.2: Purpose of assessment

The synthesis of interview responses revealed that teachers' continuous assessment strategies are mainly focused on children's academic achievement and assessment results are used to rank children, instead of using assessment results to guide instruction. In this regard, the interviewees' responses are depicted as follows:

> RPA-T1: I use assessment to know how well the child understands the lesson that I teach. At the end of the year; we give ranks, especially for stage three (KG3) children because they complete stage three and transfer to grade one. I don't know the word emerging skills (RPA-T1, 28th April 2021).
>
> RPB-T2: In reality, the purpose of the assessment is to determine how much children have learned. I use assessment to check whether or not a child understands the lesson. Yes, especially for stage three children, I use test results to rank them because stage three children are at the transition stage to primary school. We also prepare a report card for them [stage 3]. I do not know, the word emergent. It is new to me (RPB-T2, 6th May 2021).
>
> (UPC- T3): "I use assessment to know how well children understand what they have learned".

Interview (UPD- T4) also concurred with other teacher responses and stated that:

> We use assessment to evaluate how children understand the lesson learned and to plan future lessons. We continually take ongoing assessment out of 5% and finally a score out of 100. Yes, at the end of the year, we rank and reward children based on their results, especially in stage three. Finally, at the end of the year, we will prepare a report card for the children. Normally, this is not allowed. This is due to parents' pressure, parents forced us to do this especially by comparing it with private kindergarten. Parents do not believe their children are learning unless they see the results" (UPD- T4, 27th May 2021).

As implicit in the preceding themes and above quotations, teachers use formal assessment, i.e., paper and pencil tests, or assessing children using numbers and assigning marks and grades rather than assessing through regular and periodic observations. Meaning that assessment strategies are

181

used to judge children's performance as correct or incorrect, which overlooks a child's holistic development. It appears that there is a misalignment between National Policy intention and teachers' actual practice, i.e., the policy statement is not translated into effective implementation. I observed a shortage of facilities such as print and photocopy facilities, shelves and filing cabinets to document and file children's progress in all preschools. Therefore, based on the analysis of the preceding themes, it can be concluded that appropriate assessment procedures have not been implemented that would help assess a child's holistic development and emerging skills. However, teachers seem to have misunderstood the purpose of assessment. How teachers communicate children's progress with parents was discussed under the parent and school communication sub-theme.

Theme 4.3.3: Alignment between curriculum content, instruction and assessment

The most important aspect of assessment lies in linking learning and curriculum and putting curriculum, instruction, and assessment into an interlocking bundle which makes sense for teachers' instruction and children's learning (Hatch, 2010). As shown in the teachers' quotation, teachers openly stated that they do not have enough knowledge about curriculum alignment. The responses of teachers are presented below.

> (RPA-T1): "I do not do this before. I do not have any training on this [alignment of curriculum content, instruction, and assessment]".

> (UPD- T4): "We prepare our assessment based on the objectives that we teach. But, I do not have enough knowledge".

On the other hand, expert interviewees stated their expectations about instructional alignment. However, as can be seen from their response, it is possible to infer that their response is not based on factual data. It is completely different from actual classroom practice as shown in teachers' responses. The statement below illustrates their responses.

> (EB-Ex2): "it is expected, there should be an alignment between objectives, and assessment process".

> (MOE-Ex1): "it has an alignment because there is a set of objectives and expected outcome (minimum learning competency), the assessment is set to assess objectives against expected outcomes".

To ascertain assessment procedures, I reviewed the National Policy and the syllabus. In this respect, except for statements in the National Policy, I could not find assessment guidelines or frameworks in the curriculum. Furthermore, analysis of the above themes (4.3.1 and 4.3.2) revealed that teachers use continuous assessment results to determine only the academic aspects or current performance of children. If this is the case, teachers will not have the opportunity to assess their instructional processes.

Again, the data revealed that teachers' assessment strategies and procedures are inappropriate to assess broad domains of (social, emotional, physical, and cognitive) learning and development of children. This also leads to the conclusion that teachers' assessment practices overlook a child's holistic development. Overall, the synthesis of the above themes and sub-theme from (4.1 to 4.3) revealed that there is a misalignment between national policy intention and teachers' actual practice including a lack of instructional alignment between curriculum content, pedagogical approach and assessment. The next section provides an analysis of the appropriateness of the learning environment for children's holistic development.

7.4.3 Research question five: To what extent does the physical environment support the holistic development of children?

The main aim of this question was to assess the appropriateness of the physical environment for the holistic development of young children, i.e., how the indoor and outdoor learning environments are organised and structured and how activities are integrated to ensure the holistic development of young children.

7.4.3.1 Theme 5: The physical environment and holistic development

Theme 5.1: Outdoor Learning Environment

The environment outside of the classroom has enormous potential and can serve as a valuable and multipurpose learning arena; children's curiosity will be stimulated and reinforced with an engaging, dynamic, user-friendly environment (Krogh & Morehouse, 2014). In this regard, Ethiopian ECCE guidelines state that outdoor equipment should be well-maintained, clean, and developmentally appropriate; provide ample opportunity for creativity and development of different skills, as well arranged in an organised manner to allow for accident-free play (MOE,

183

2010d). The analysis of interview and observation data revealed that many of the preschools have adequate playground areas. However, in terms of resources and organisation, my observations reveal that almost all of the observed preschools' outdoor learning environments are not well organised and structured to enhance children's learning through interactive participation, exploration, inquiry, and investigation, and are poorly resourced. In confirming this, the responses of the teachers are illustrated below.

> (RPA-T1): "The outdoor environment has enough space for play. But, it is not conducive. It is not well prepared to support children's learning. As you see, the toys are broken, not yet repaired. It is not clean, there are also various thorny plants. There are no toys, or materials for fine and gross motor development. Toilets are not good for children" (RPA-T1, 28th April 2021).

Interviewee RPB-T2 also reported that preschools do not have separate playing areas and stated that:

> We do not have a separate playing area; we share it with the primary school. It is not properly fenced. We have only swing and merry-go-round playing. This is also broken because primary school students use it. The toilet is not appropriate for children, not child size (RPB-T2, 6th May 2021).

> (UPC- T3): "we have enough outdoor play areas. It is free of hazards; it is clean; it is safe; and it is properly fenced. But, we do not have outdoor playing materials that will support a variety of playing activities".

Compared with other preschools, UPD- T4's preschool is well-resourced and conducive to children's learning. As she puts it:

> The outdoor learning environment has a total of 425 square meters. In my opinion, to the minimum, it is enough. The physical environment (both outside and inside) is clean, safe, healthy, comfortable and convenient for children. The outdoor environment is properly fenced and has sufficient materials for children's individual and group play with a variety of toys and materials for fine and gross motor development (UPD- T4, 27th May 2021).

From the field notes, it was observed that children have the opportunity for unguided free outdoor play, however, they do not have to play with materials, and daily activities are not planned and structured to stimulate and reinforce children's curiosity or to sustain children's in outdoor observation, comparison, exploration, and investigation in all aspects of their physical and social world. Furthermore, my observation and field note data revealed that in terms of space, many of the preschools have large open outdoor environments. But, in terms of material, resource, aesthetic

184

and sensory characteristics most preschools are under-resourced. It is possible to conclude that the outdoor learning environment is inadequate for providing natural play space and a stimulating learning environment for children.

Theme 5.2: Indoor learning environment

Both outdoor and indoor learning environments are instrumental in determining how and what children learn (Krogh & Morehouse, 2014) and facilitating children's physical, personal, social, emotional and cognitive aspects of learning. Analysis of interview responses revealed that indoor space is not inviting, flexible, and well-furnished to promote young children's learning. Interviewees stated that chairs are not child sized; the floor is cracked and bare; there is a lack of display pictures and maps, learning centres and restrooms; and the toilet and materials are insufficient. The following extracts illustrate the teachers' responses. RPA-TI expressed that

> The indoor space is also not well furnished; the chairs are not child sized. There is also a shortage of materials, reference books, and materials for display like pictures, and maps for mathematics and science activities. There is not enough classroom and restroom; We only have three classrooms, each of which has more than 50 students. We do not have assistant teachers, caregivers, or cleaners. We do everything (RPA-T1, 28ᵗʰ April 2021).

Similarly, interviewee RPB-T2 stated:

> The walls of classrooms are not wail painted; children's chairs are not child sized; the floor is cracked, there are no carpets; displacing materials and pictures. But, we have some fitting blocks. We prepare some locally available materials, such as Masinqo, Washint, Kebero, Krar, Tsenatsil, and so on, as well as a shopping centre where they can play buyer and seller (RPB-T2, 6ᵗʰ May 2021).

Likewise, interviewee UPC-T3 also reported that indoor environments are not conducive to children's learning. As she puts it:

> The indoor environment is not conducive for children, the floor is cracked, there are no carpets, displacing materials or pictures. Yes, we have potable water and classrooms. We tried to paper instructional materials, but it is not enough. We have a shortage of materials, like markers and paper. We do not have, learning centres, restrooms, and the toilet is not child sized. The education office does not allocate a budget (UPC-T3, 18ᵗʰ May 2021).

On the other hand, interviewee UPD-T4 reported that:

> Our indoor learning environment was also good; we tried to make our classrooms attractive. We have reading corners to ensure children's interest.

However, materials are insufficient. To solve the shortage of materials, we prepare instructional materials or teaching aids. I think our preschool is better than the others (UPD-T4, 27th May 2021).

In general, the synthesis of teachers' responses above indicates that the indoor learning environment in three of the preschools observed is inadequate to create a good learning environment, which is necessary for the holistic development of young children. One of the preschools, which is situated in an urban area and where UPD-T4 is the head teacher, has an art corner, reading corner and toy corner, and a well-structured outdoor learning environment with appropriate materials for fine and gross motor stimulations. The classrooms are uniquely set up and well organised; the materials presented to children and the manner in which they are displayed are attractive to children. In this preschool the teachers are experienced and have good aesthetic awareness; indoor and outdoor learning environments are aesthetically pleasing and attractive to children. Similarly, in preschool where RPB-T2 is employed, I observed teachers' creativity, especially in teaching mathematics. To practice children's buying and selling activities, they prepare a model shop, which is similar to learning centres and fun for children. They also prepare traditional music-playing materials like Masinqo, Washint, Kebero, Krar, Tsenatsil, etc. This helps children to learn about their culture and to become familiar with the material, as well as develop effective social skills.

Furthermore, as shown in the responses of teachers, most of them claimed that shortage of materials and facilities (i.e., playing materials, instructional materials, assistant teachers, learning corners, child sized chairs and high teacher-child ratio) and lack of financial support are the challenges they face in organising an effective learning environment. However, as indicated in the preceding quotation (RPB-T2 and UPD-T4), it is possible to infer that teachers' initiation, creativity and commitment can create a significant difference in the use of the indoor learning environment. To sum up, in certain cases the indoor and outdoor learning environments were found inadequate to provide natural play space and create an emotional and stimulating learning environment for children, which is necessary for their holistic development.

186

7.4.4 Research question six: What is the nature of District, Community and Parental support in the implementation and delivery of the curriculum?

One of the key elements of this research was assessing the level of district, community, and parental support for curriculum implementation and delivery. During the thematic analysis, the following six themes emerged, which will be discussed in this section: financial support, community and parental involvement, collaboration with other sectors and stakeholders, parent and school communication, and challenges related to community participation.

7.4.4.1 Theme 6: District, Community and Parental support

Theme 6.1: Financial Support

Teacher respondents perceive that the government does not pay adequate attention to preschool education as it is not properly financed by the district education office. Teacher participants concurred by saying:

> (RPB- T2): "The government allocated a budget for the primary school based on the number of students. But there is no budget allocated for preschool. We get stationery materials from primary schools, but it is insufficient".

> (UPC- T3): "In my opinion, the government did not pay enough attention to early childhood education. Woreda Education Office has allocated an operating budget for the primary school. But they did not allocate any budget for preschool".

In supporting teachers' responses, expert interviewee EB-Ex2 stated that Woreda education leaders do not allocate a budget to the preschool and do not hire trained teachers. As she puts it:

> The Woreda Education Office does not allocate budget to the preschool. The Regional Education Bureau does not have a system to directly fund districts or schools unless we get support from organisations. Apart from this, most Woreda education leaders do not hire trained teachers. This indicates that they were not paying attention to the programme (EB-Ex2, 7 June 2021).

The analysis of interview transcripts and selected documents revealed that most preschools face a serious budget shortage. They received very limited financial support from the government. In confirming the interviewees' response, a previous MOE report states that a budget shortage is a common problem faced by the O-class programme, which requires government's immediate attention (MOE, 2018b). I reviewed the 1994 education policy and the new Education

187

Development Roadmap to get some views on financial support from a policy perspective. In the document review, I found that ECCE is not considered a top priority. For instance, the 1994 Education Policy states that "viewed from the perspective of Ethiopia's economic capacity, the opening of kindergartens involving massive expenditure cannot be a top priority, as regular universal primary education has not yet been achieved" (MOE, 1994, p.77).

According to the 2010 National Guidelines for Early Childhood Care and Education, managing and financing responsibility is left to Kebele or District Administrative ECCE implementing committee (MOE, 2010d). In the new Education Development Roadmap, I could not find any statement or Act pertaining to an ECCE budget or financial support for ECCE. This confirms the expert interviewee EB-Ex2 quote above. The synthesis of the above arguments may lead to the conclusion that the root cause of this problem can be traced back to the Education Policy because it was not revised by considering the current situation of the country and community at local level.

Theme 6.2: Community and parental involvement

Regarding community involvement, teacher and expert interviewees have varied responses. Teacher interviewees stated that they do not have a strong relationship with the community. They have complained about the community not being actively involved in school activities and direct communication with them (teachers). One of the teachers interviewed (UPD-T4) mentioned that other than the children's parents, the rest of the community did not feel a sense of ownership. On the other hand, expert interviewees stated that there is high community involvement and participation. The responses of interviewees are presented in the following excerpts.

Interviewee RPA-T1 stated that they have better partnerships with children's parents and that they do not have strong partnerships with the community. He said:

> In my opinion, our relationship with our parents and community is poor. Our relationships with children's parents are better, but most of the parents are not actively involved in school activities. No, we do not have any collaboration with other organizations. No, we don't have families, community representatives, or parent-teacher associations (RPA-T1, 28th April 2021).

Similarly, interviewee RPB-T2 had the following to say:

> Our relationship with the community is too weak. However, children's parents have to be appreciated. They are willing to support the school and each of the

children's parents pays 50 birr per month. We also get stationary material support from the primary school. No, we do not have community representatives (RPB-T2, 6th May 2021).

Likewise, interviewee UPC-T3 also mentioned that:

We do not have a strong relationship with the community. But we have a strong relationship with the children's parents. For example, each parent pays 100 birr per month for caregivers and a janitor's wage, as well as for the purchase of various materials. We have community representatives and parent-teacher association, but they do not come when we call them for a meeting. We do not have collaboration with other sectors or organizations (UPC-T3, 18th May 2021).

Interviewee UPD-T4 also stated that except for children's parents, the rest of the community does not feel a sense of ownership. As she puts it:

I cannot say that my school has an effective community participation programme. Except for children's parents, the rest did not feel ownership. But, we have good cooperation with children's parents. Each parent pays 120 birr per month. Parents come and communicate with the school only when their children enrol. We do not have cooperation with other organizations. We have parent-teacher associations; we meet with them quarterly (UPD- T4, 27th May 2021).

On the other hand, an expert interviewee EB-Ex2 stated that communities are actively involved. She stated that community involvement is enormous and that most of the "O" classes are community-based and run by community support; they also hire contract teachers, build and maintain classrooms, raise money, buy carpets and chairs, and so on. She pointed out that there is a problem with the documentation and reporting of community involvement. As she puts it:

Communities are volunteer and actively involved. For example, most of the O-classes are community-based and run by community support. They hired contract teachers, build and maintain classrooms, by raising money, buy carpets and chairs and so on. So, the community involvement is very big. Furthermore, the community asked the government to hire trained preschool teachers permanently. However, we have not properly organized the community. Their contribution is not properly documented and reported in terms of money, kind, labour (EB-Ex2, 7th June 2021).

During my observations and discussions with teachers, I noticed that the parents and community do not have direct communication and the opportunity to develop a shared vision and mission statement and implement programme activities together. However, Kebele or District administration collects money from the community for building classrooms and hiring contract teachers, showing some financial support from these communities. Furthermore, the data revealed

189

that in many preschools, especially in urban areas, parents paid a minimum of 50 Birr to a maximum of 120 Birr per month for preschool. Teachers cited parents' monthly fees as a good example of active parental involvement. This reveals that teachers do not consider the long-term consequences, because parents may not send their children to school due to school fees. In other words, it may be disadvantageous for economically disadvantaged children. I inferred from the response above that teachers did not properly understand what constitutes parental involvement and the significance of building better relationships with parents.

Theme: 6.3: Collaboration with other sectors and stakeholders

As outlined in the Ethiopian National Policy Framework one of the policy objectives is to promote and strengthen partnerships and collaboration among all stakeholders for the effective delivery of services and programmes to young children. As indicated in the teachers' quotations in the above theme (6.2), most preschools do not collaborate with other sectors and stakeholders and community representatives. Teachers' efforts have not been observed to pursue parent and community active engagement and participation, as well as stockholders' involvement.

Theme 6.4: Parent and school communication

The National Guidelines for Early Childhood Care and Education clearly state expected community involvement and teacher-parent relationships. It suggests teachers regularly share information on the child's progress with parents; to share clear and comprehensive information about the preschool with all parents (MOE, 2010d). Analysis of teachers' responses revealed that teachers do not have regular formal communication with children's parents. They only formally communicate and share information with parents at the end of the year. Teacher interviewee's responses are presented as follows:

> (RPA-T1): "most frequently, we communicate with parents by sending notes or letters. But, we do not have parental conferences because they do not come when we call them".

Interviewee RPB-T2 also stated that she had a good relationship with her parents, but it was clear from her response that she did not have regular formal meetings with the parents. As she puts it:

> We have a very good relationship with the children's parents. We have a parent conference once a year, but, informally, we meet with parents when they come

190

for payment or to pick up or drop off their children. I also sent a letter (RPB-T2, 6th May 2021).

(UPC-T3): "We have formal and informal discussions with the children's parents. In our school, we have parental conferences twice a year. We meet with parents monthly when it comes to payment. I usually use notes or letters to call them".

Compared to other preschools, UPD-T4 has a better parent-teacher relationship, and she stated that they have quarterly meetings with parents and sometimes did home visits. As she puts it:

We have a quarterly meeting with parents. If there is something urgent or if the problem is serious, I send a letter, note, or phone call. For example, if the child is absent for consecutive days, I will call the parents by phone or go to the child's home (UPD-T4, 27th May 2021).

From the above extracts, it is possible to conclude that parental communication is not planned and scheduled and parents do not have regular opportunities to discuss and share their child's progress with teachers. Through my document review, except for one preschool (UPD-T4), I could not find any minutes relating to parent and teacher discussions. It appears that parents are not regularly informed about their children's progress, which in turn could affect the effective implementation of the curriculum and the provision of holistic development of children.

Further probing to ascertain how the programme supports parent and community partnerships and the availability of parental involvement guidelines revealed that there are no established parental and community involvement guidelines. Teacher interviewees concurred by saying:

(RPB- T2): "No, we don't have a guideline for parental or community participation. We do not have formally scheduled to communicate with the community or parents. Personally, I don't do anything".

(UPD- T4): "No, we do not have guidelines. But, we have formal communication quarterly (every three months)"

The absence of formal parental and community guidelines could make it more challenging for teachers to educate parents and provide information about ECCE, as well as expand their knowledge and strengthen their partnerships with parents and communities. An expert interviewee EB-Ex2 supported the teachers' responses by stating that parental education is structured with adult education and does not have a separate framework or set of guidelines. She stated that:

191

> There is no separate guideline for preschool education. However, the framework was created through adult education, and parents learn about preschool education in an adult education programme (EB-Ex2, 7th June 2021).

As outlined in the National Guideline for ECCE, parental education is provided informally through adult literacy classes, Kebele meetings and during weekly faith-based sessions in churches and mosques by preschool teachers, and Kebele Health Extension workers (MOE, 2010d). From the synthesis of participant responses, the following factors were identified as possible reasons for poor parent and community partnerships: lack of awareness; lack of time and prioritisation; inadequate support of Keble or District Administrative; lack of formal structure, coordination, and accountability for parental education. Perceptions as to what constitutes parental involvement also appear vague.

7.5   Conclusion

This chapter presented and analysed the qualitative data derived from various data sets of the study. The focus of the chapter was to assess contextual findings of policy, curriculum design, parent and community partnerships and pedagogical findings of teacher training, pedagogical approach, and indoor and outdoor learning environments to triangulate with quantitative findings presented in chapter five. The chapter revealed that a significant gap exists between National Policy intention and actual programme implementation.

Despite sound policy development, government involvement was limited and significant gaps and challenges still exist in allocating sufficient financial resources, expanding access and quality ECCE service, developing specific guidelines and integrating curriculum. In the analysis, it was found that the early childhood curriculum is seen as inadequate to offer early childhood teachers many opportunities to address the children's holistic development that is being seated at a national level.

As evident in the analysis, there is a misalignment between the curriculum content pedagogical approach and the teacher's assessment procedures. Its findings revealed that poor parent and community partnerships and parent and teacher partnerships are not intentionally planned and scheduled. Indeed, teachers, parents and communities do not have direct communication and the opportunity to develop a shared vision and mission statement and implement programme activities

192

together. It was also found that preservice training was inadequate to adequately prepare teachers and provide the required competency, knowledge, skills, and motivation to teach children and to deliver and implement the curriculum effectively.

The next chapter, draws together the quantitative findings of Chapter six and the qualitative findings of Chapter seven, to offer a detailed discussion of the results.

CHAPTER EIGHT

DISCUSSION OF THE RESULTS

8.1 Introduction

The purpose of this chapter is to discuss the results of the study. In chapter six, I presented the quantitative findings, which focused mainly on contextual challenges or out-of-school factors such as policy, curriculum theory, teacher training and preparation that affect ECCE. Then in chapter seven, I presented the qualitative findings, which mainly focused on pedagogical challenges or in-school factors and related challenges such as teachers teaching and pedagogical approaches; alignment of curriculum, pedagogy and assessment, and the indoor and outdoor environment. It also discussed the importance of parent and community-school partnerships.

This chapter has two main sections. The first section is devoted to a discussion and interpretation of the contextual or external (out-of-school) factors, followed by the second section, which deals with the discussion and interpretation of the pedagogical or internal (in-school) factors used to explore the curriculum implementation challenges faced by ECCE teachers in ensuring the holistic development of young children in the Amhara National Regional State of Ethiopia.

8.2 Contextual or Out-of-School Factors

This section is devoted to a discussion of the contextual findings that impact ECCE in the Amhara National Regional State of Ethiopia.

8.2.1 A Policy Perspective -the lack of multisectoral coordination and collaboration

Policies and policy frameworks are critical levers for ensuring equitable and high-quality services to parents and vulnerable children; building effective coordination systems; maximizing the use of resources; establishing ECCE indicators, databases, evaluation and monitoring systems, and action research programmes (Vargas-barón & Vargas-barón, 2005). In this regard, to guarantee the survival, care and holistic development of children from prenatal to seven years, Ethiopia has developed a comprehensive early childhood development policy framework with its Strategic Operational Plan in 2010 (MOE, 2010a). In its policy statement, the Government of Ethiopia recognises the importance of early childhood care and education (ECCE) as a critical period that

194

requires due attention and a great deal of investment. The ultimate aim is to "ensure all children the right to a healthy start in life, be nurtured in a safe, caring and stimulating environment and develop to their fullest potential" (MOE, 2010b, p.16).

As discussed in Chapter two, to enhance a holistic programmatic approach and to get all concerned bodies involved, the provision of ECCE is a shared responsibility of different ministers of the Federal Government, such as the Ministry of Education (MOE), the Ministry of Health (MOH), and the Ministry of Women, Children and Youth Affairs (MOWCYA). The Ministry of Education is the lead ministry for policy planning and is responsible for the formal teaching of young children (from age 4 to 6). Similarly, ECCE implementing committees are established in each District or Kebele, which are composed of different heads of government bodies (MOE, 2010b). The findings revealed that there is very loose coordination and collaboration between the National Steering Committee (three lines of ministers), the district ECCE implementing committee, and the Woreda and Regional ECCE Technical Committees. Thus, the structure of coordination for the implementation of the intended ECCE services has not yet been established.

The policy was implemented without adequate multisectoral coordination. This lack of multisectoral coordination was pointed out by an expert interviewee (MOE-Ex1) who noted that "the lack of coordinated or single management is a major problem because the ECCE programme was run by different departments and ministers". This divided administration creates challenges in the administration and provision of quality ECCE service. Hence, the implementation of policy was left to only ECCE teachers, who do not have decision-making powers. Belay (2018, p.195), found that there is a lack of collaboration among the three-line ministries (i.e. Ministry of Education, Ministry of Health, and Ministry of Women and Children's Affairs); the partnership becoming division of labour rather than a joint enterprise". Furthermore, previous MOE reports revealed that structurally, the vertical links of the programme are not clearly delineated at policy level (MOE, 2018). The lack of multisectoral coordination may be a contributing factor to the lack of funding, limited access, and poor quality ECCE services to which I turn next.

According to OECD (2021), governance and funding are among the five policy levers that are instrumental for the foundation for all other policies to support quality in ECCE such as curriculum and pedagogy; workforce development; monitoring and data; and family and community

195

engagement. The qualitative findings revealed that most preschools face serious budgetary problems, funding for ECCE is still limited and it is not the government's top priority. The findings showed that the responsibility for managing and financing ECCE is left to the Kebele or District Administrative ECCE implementing committee. In addition, ECCE committees lack coordination and collaboration to mobilize and raise the necessary funds for the provision of quality ECEE services. On the other hand, analysis of the interviews revealed that the parents and communities participated in building and repairing classrooms, either by contributing material or labour.

However, the findings revealed that public funding (in terms of finance) is limited, and the community does not allocate operational budgets for necessary facilities. Participant teachers strongly complained that, unlike primary schools, the government does not allocate an annual budget for preschools based on the number of children. In supporting this expert interviewee (EB-Ex2) said that most Woreda education office leaders do not prioritise ECCE, they hired untrained teachers by contract and do not allocate an annual budget for preschool. Therefore, it is possible to conclude that despite the recognition and adoption of ECCE policy, ECCE is not the government's top priority. For instance, the policy statement outlined that "from the perspective of Ethiopia's economic capacity, the opening of kindergartens involving massive expenditure cannot be a top priority, as regular universal primary education has not yet been achieved" (MOE, 1994, p.77).

In 2018, the government adopted a new Education Development Roadmap. However, through document analysis, I could not find any act or law regarding the financing of early childhood care and education. This study reaffirms recent findings conducted in Ethiopia, Liberia, and Mainland Tanzania by Kim et al. (2022, p.1), which found "that despite the policy intentions formed by public interests and global pressures, government commitment is not aligned with the allocation of sufficient financial resources by each of the governments, which is extremely low in all three countries to realise their targets in ECCE". Furthermore, previous reports of the Ethiopian Ministry of Education showed that a shortage of budget is a common problem faced by the O-class programme, which indeed requires the immediate attention of the government (MOE, 2018). Similarly, the study by Wangila (2017) shows that the lack of funding is not a new challenge and that there is a lack of government goodwill in terms of funding ECCE programmes, which leads to ineffective implementation. Thus, without supplementary funding and management support

196

from the government, young children in rural and poor urban areas may have access only to low-quality services (OECD, 2006).

ECCE is a powerful policy tool to reduce inequalities and help all children have strong foundations for learning and well-being (OECD, 2021). According to UNESCO (2021), access to pre-primary education is a right for all children. To improve access and quality of ECCE the government of Ethiopia made a considerable effort and the issue of ECCE is addressed in the National Policy. For instance, as outlined in Education Sector Development Plane (ESDP-VI, 2020-2024), the government is committed to providing free and compulsory preschool education for children aged from 5 to 6 years and to upgrading ECCE teachers' training from a certificate to a diploma (MOE, 2021a). This is a new policy directive because ECCE was not free and compulsory before the development of ESDP-VI. Furthermore, to increase children's access and participation, various delivery modalities, such as "O" classes, child-to-child, and accelerated learning readiness, were implemented. More specifically, to increase the participation of rural children, the Ministry of Education encourages regional governments to open "O" classes in each primary school in the country (MOE, 2021a).

Following the implementation of these modalities, ECCE has shown progressive improvement in gross enrolment over the previous years. However, access and participation remain a challenge in Ethiopia; it is still disadvantageous to rural children and economically disadvantaged parents. Instead of steadily improving, the rate of participation is declining. Through document analysis, it was found that National Gross Enrolment Rate remains extremely low and more than 63% of young children lack access to ECCE. Furthermore, the National Gross Enrolment Rate was 36.7% (2020/21) a decrease of 6.5% from 45.4% in 2019/2020 (MOE, 2021b). Correspondingly, in 2021, the gross enrolments in the Amhara region were 39.9% (ANRS, 2021). This implies that more than 60% of young children do not have access to early childhood care and education. Kim, Hailu, Rose, Rossiter, & Teferra (2020, p.111), confirmed by noting that "there is huge variation in enrolment growth and pre-primary coverage across regions and age-appropriate enrolment". Even after the massive expansion, inequalities in access to pre-primary education remain a challenging issue in Ethiopia (Kim et al., 2020). The qualitative and quantitative analysis showed that poor funding, lack of trained teachers, teachers turnover, inappropriate learning environments or poor facilities of preschools, lack of parental awareness, geographical location (homes school distance;

197

'O' class being far from children's homes and confined to urban areas) are some of the main challenges to access and participation. Furthermore, the current war in northern Ethiopia is also another cause and challenge for low national ECCE gross enrolment. Similarly, a study by the OECD (2017) shows that parents' low interest, lack of knowledge, and lack of time to participate in ECCE add to low access and participation. In sum, this finding revealed that there is still a significant gap in policy planning and programme implementation to expand access, address inequalities, improve the quality of ECCE services, and enhance young children's holistic development. This is due to a lack of government commitment and poor coordination among different stakeholders.

8.2.2   Contextual challenges relating to ECCE curriculum

8.2.2.1 The need for an alternative ECCE curriculum framework

Next to policy, the curriculum is one of the other critical components for ensuring young children's holistic development. Curriculum theory provides frameworks for conceptualisations of how children learn and develop, guidance for how teachers work, and sets out specific goals, principles, guidelines, values, and contents that children learn, as well as a pedagogical approach and assessment strategies (OECD, 2021; Wood, 2020). However, theories of curriculum frameworks can vary greatly, especially in the field of early childhood education, where there is a wide range of theories that shape curricular approaches and models for young children. Some models are closely guided by educational policies that serve specific groups of children, while others attempt to be more inclusive and serve children with a full range of learning abilities and interests (Lim & Genishi, 2010).

Ornstein & Hunkins (2018) argue that theories help teachers to clarify education's goals, select suitable content, teaching and learning processes, and the experiences and activities that schools should emphasize. The curriculum is also a powerful agent of the education policy that contributes to the realisation of the type of required society (UNESCO, 2017). Therefore, to foster and nurture a country's most valuable resource, its children, an early childhood curriculum based on relevant theory and supported by appropriate resources are required (Smith,1996).

The qualitative and quantitative findings revealed that Ethiopia has adopted the constructive learning theory based largely on the ideas of Piaget, as a theoretical framework for early childhood care and education. It was again found that the ECCE curriculum follows developmentally appropriate practices based on a child-centred teaching approach. According to McLachlan, Fleer, & Edwards (2010), a learner-centred approach based on constructivist theories of learning drawn on Piaget's theories of how children learn through active participation is common in contemporary early childhood education around the world. Similarly, Mueller & File (2020) state that the constructivist approach based on developmentally appropriate practice (DAP) is the brand of the National Association for the Education of Young Children (NAEYC), and as a brand, it has been adopted (sometimes co-opted) by countless programmes, policies, and products in the US and around the globe. However, the age and stage view of child development and learning or US benchmarks for the developmentally appropriate practice where progression is measured against traditional European development (e.g. Piaget), has been criticised (Fleer, 2015).

In light of this, Wood (2020, p.323) argued that "developmental psychology does not explain the variations that lie in wider dimensions and intersections of diversities, such as cultures, ethnicities, languages, gender, disabilities, sexualities and social class". In addition, the qualitative findings also revealed that teachers lack basic theoretical knowledge and understanding of the curriculum and the learning theory of developmentally appropriate practice. Therefore, teachers' perspectives on how children learn and develop, as well as their pedagogical choices, are bound up in their personal beliefs and knowledge. As a result, they are unable to identify and provide effective and successful learning and development experiences for children. To be effective with children, teachers need to have a thoughtful philosophical understanding of how children develop, learn and understand (Gordon & Browne, 2011). As emerged from the analysis of interviews, participants had similar complaints about developmentally appropriate practice. For instance, one of the expert interviewees (MOE-Ex1) suggests eclecticism as a theoretical framework for the early childhood care and education curriculum in Ethiopia. As he so eloquently expressed:

> …however, there are different theories for children. So, the ECCE curriculum should be derived and prepared from various theories. Eclecticism, in my opinion, is a better theory for early childhood education. For example, there are behaviourists, cognitivism, humanistic…and others. All are needed. Thus, when the curriculum is prepared, it should draw from all those [different theories of

learning should be considered in designing early childhood education curriculum] (MOE-Ex1).

From this quote, it is apparent that there is a need for an alternative theoretical framework. Previous studies suggest that the sociocultural theory explanation of learning is a viable alternative theoretical framework for ECCE curriculum, pedagogy, and assessment to those universal theories of development that have traditionally colonised how we think about the development of young children (Edwards, 2003; Fleer, 2015; Smith, 1993, 1996). From a theoretical perspective, Vygotsky's theory of child development invites teachers to think in a localised and more specific way about children's development- who they are, what they bring, and how they relate to and experience their social and material environment (Fleer, 2015).

Furthermore, from a sociocultural perspective, teaching and learning are viewed as an interactive, collaborative, dynamic, and dialogical process, and the importance of home-school connections is recognised (Eun, 2010; Vygotsky, 1978). Moreover, as discussed earlier in chapter four, Vygotsky's theoretically constructed concepts, such as scaffolding, ZPD, mediation, and dynamic assessment, essentially have better instructional implications on teacher-child interaction, the use and selection of teaching methods, and assessment strategies. In light of this, Edwards (2009) notes that a sociocultural theory is an appropriate theoretical approach for culturally and linguistically diverse communities, like Ethiopia, which is a multi-ethnic and multilingual country.

8.2.2.2 Misalignment between the intended/planned curriculum and implemented curriculum – misconceptions about an integrated approach to the curriculum

The overall analysis of the qualitative and quantitative findings revealed that there is a significant gap or misalignment between the intention of the policy or the planned curriculum and the implemented curriculum. In its National ECCE Policy, the Minister of Education proposed to provide an integrated, quality, developmentally appropriate, and culturally responsive service for the holistic development of all children (MOE, 2010). There appears to be a lack of understanding as to what an integrated curriculum entails. Through the analysis of the documents (the National Policy, ECCE curriculum syllabus, and teacher's guide), I found six areas of learning in the ECCE syllabus and textbooks. Analysis of the findings revealed that each of these learning domains is presented separately in distinct learning areas or subjects such as language and use; mathematics;

200

sensory and physical development; personal, social and emotional development; and knowledge about the environment. As evident from the findings, these learning areas or domains and their contents and learning activities are not planned in an integrated fashion to support young children's holistic development. Furthermore, the document analysis revealed that the proposed teaching strategies were inappropriate for the corresponding contents and learning experiences. Moreover, the document analysis revealed that there is a lack of coherence and consistence between the National Policy Framework, the ECCE curriculum, and the ECCE syllabus.

As evident from the analysis of qualitative findings, teachers did not have training in curriculum integration and they lack the skills and knowledge necessary to plan and teach children in an integrated fashion. For instance, teacher interviewee (UPC-T3) openly said that "I do not know exactly, the concept of integration". This indicates that teachers plan and teach curricular activities on their experience and understanding without appropriate theoretical knowledge about curriculum integration. Previous research conducted by the OCED shows that the main challenges that most OECD countries face regarding curriculum are: "a) defining goals and content; b) aligning them with the school-level framework; c) communicating it to relevant staff when it is created or revised; d) implementing it effectively; and e) evaluating its contents and its implementation" (OECD, 2012, p.11).

According to Darling-Hammond et al. (2020), cognitive, social, and emotional competencies develop within a complex system of contexts, interactions, and relationships; what happens in one domain influences what happens in others. The central educational implication of the integrated approach is to support the interrelated (cognitive, social, and emotional competencies) development of a child and to realise his/her maximum potential (Darling-Hammond et al., 2020; White & Coleman, 2000). An integrated curriculum approach addresses learning experiences that promote the holistic development of young children (social, emotional, physical, cognitive, language, and creative) rather than focusing on cognitive and separating the day into discrete times, such as math, reading, physical education, or social studies (Essa, 2014). An integrated curriculum emphasises the interconnectedness of all learning areas in meeting the basic learning needs of children. A meaningful curriculum is multidimensional and integrated that encompasses many content areas and learning experiences such as intellectual, physical, spiritual/moral, emotional, social, and aesthetic (Darling-Hammond et al., 2020; Mohanty, 2014).

201

From a theoretical perspective, the sociocultural theory of Vygotsky advocates an integrated approach to the field of early childhood education (Smith, 1993). In the sociocultural view, learning is conceived to be an inherently social activity and children's development occurs through the change in the systemic interrelationships among the diverse functions or domains, rather than the individual development of specific functions or domains (Eun, 2010; Mueller & File, 2020; Smith, 1993). The sociocultural view provides a more comprehensive picture of child development, which takes into account a system of interrelated factors (Mueller & File, 2020).

In addition, an analysis of interviews and documents revealed that the National Policy has not been revised since its inception, in 2010 (Table 6.2). Furthermore, the qualitative findings revealed that up until the time of data collection, the monitoring of programme implementation or evaluation of curriculum implementation, including teachers' pedagogical practices and competency, had not yet been conducted. In other words, the overall effectiveness and relevance of the programme to children and society, as well as its ability to meet local, regional, national, and international standards, have not been evaluated. This experience suggests that the programme runs year after year without having sufficient evidence of whether it is showing success or failure.

Previous studies show that better data systems and monitoring of curriculum implementation can help assess and strengthen programme effectiveness, establish facts, trends, and evidence about whether children have equitable access to high-quality ECCE and are benefiting from it, as well as help parents, make informed decisions about their choice of services (OECD, 2012; Shuey et al., 2019). In this regard, knowledgeable and strong school leadership (e.g., principals and administrators) are instrumental in effective programme implementation and providing high-quality service for children (OECD, 2021). For an effective integrated approach, teachers need to have adequate knowledge of curriculum integration, which I found not to be the case.

8.2.2.3 Contextual challenges pertinent to the appropriateness of ECCE curriculum content and learning experiences in promoting the holistic development of young children

The qualitative and quantitative findings revealed that the ECCE curriculum content and learning experiences are inadequate to support children's holistic development. As outlined in the National Policy Framework, "providing a comprehensive, integrated, quality, developmentally appropriate, and culturally responsive service for the holistic development of all children" is the main mission

202

and concern of the National ECCE Policy of Ethiopia (MOE, 2010b). However, despite increased attention and recognition, this finding revealed that neither the policy document, the curriculum syllabus, nor the teacher's guide mentioned or clearly define what holistic development is. Neither does it set out strategies that will help teachers in designing lessons that promote the holistic development of young children.

The analysis of data revealed three areas where the curriculum content and experiences were found inadequate in promoting the holistic development of young children, namely in self-regulation skills, emotional development and early science experiences. A discussion on each of these areas follows.

a) Self-regulation skills

Self-regulation is a key developmental accomplishment in the preschool years and the primary goal of the curriculum is self-regulation (Hyson, 2008). In addition, self-regulation encompasses the regulation of emotions, behaviours, and attention (Rademacher & Koglin, 2018). It is a deep, internal mechanism that underlies the mindful, intentional, and thoughtful behaviours of children (Bodrova & Leong, 2005). According to Hyson (2004), children do not gain these abilities (self-regulation) automatically. To achieve appropriate emotional control and self-regulation, young children require many opportunities to practice (Hyson, 2004). Thus, one of the necessary components for meeting these skills is content and learning experiences.

The qualitative and quantitative findings revealed that content and learning experiences related to self-awareness and self-regulation are not adequately addressed in the ECCE curriculum. Furthermore, document analysis (teachers' lesson plans) revealed that teachers had not intentionally planned to learn activities that would facilitate the development of young children's self-regulation skills through make-believable play, private speech, puzzles, delaying gratification, do what I do, and other symbolic systems. In addition, the indoor and outdoor playing activities are not properly structured or planned to promote the development of physical self-control skills.

Researchers noted that pre-schoolers level of self-regulation can predict their social-emotional and behavioural development and cognitive processes (Hyson, 2008; Rademacher & Koglin, 2018). Zhanga, Hub, Renc, & Fan (2017, p.368), also noted that "self-regulation enables children to focus

their attention, monitor their progress, inhibit automatic impulses, shift to more appropriate learning strategies, and is thus foundational for learning in many academic domains". Therefore, it appears that self-regulated learning should become part of the ECCE curriculum and daily routines. This study emphasised that the preschool curriculum should focus on self-regulated competencies and that teachers should integrate these competencies into their work. Furthermore, as a pedagogical approach, this finding suggests that dramatic or make-believe play, mediation, and scaffolding contribute to children developing symbolic thinking and self-regulation (Elena Bodrova & Leong, 2018; Leong & Bodrova, 2009). Leong & Bodrova (2009) noted that make-believe play supports the development of self-regulation; children create an imaginary situation, take on and act out roles, and follow a set of rules determined by these specific roles and this inherent relationship exists between the roles children play and the rules they need to follow when playing these roles.

b) Emotional development

According to Hyson (2004), early childhood professionals believed that children's emotions are central to their lives and should be central to the curriculum. However, in recent years, these beliefs have been eroded, and the emphasis has shifted to cognitive skills, which have been identified as important for success in school (Hyson, 2004). The quantitative findings revealed that ECCE content and learning experiences are insufficient for providing opportunities for young children's development of emotional competencies. As evident from the analysis of the findings, content and learning experiences are inadequate for providing children with the opportunities to express a wide range of emotions and behaviours related to self and others using appropriate vocabulary and actions (refer to Table 5.5, item 2).

In supporting this analysis, findings from various documents (ECCE curriculum, syllabus and teacher lesson plan), also revealed that content and learning experiences related to emotional development are not integrated and designed to practice emotional expressions of feelings such as negative feelings, sadness, and anger through breathing exercises and mediation, calming words, reading stories, listening to soft music, or working with clay, etc. Furthermore, analysis of observations and field notes revealed that teachers' pedagogical approach, assessment strategies, indoor and outdoor activities, and teacher-child interaction were not appropriate for meeting

204

children's emotional needs or providing pleasurable social interaction. It was also found that daily schedules and routines are not properly planned in an integrated manner to practice emotional expressions.

Previous findings have shown that early childhood programmes often feel pressured to adopt a curriculum that is solely focused on mastery of cognitive skills and detached from relationships between teachers and young children (Hyson, 2004). According to (Damon, Lerner, & Eisenberg, 2006), emotional development is a more salient feature of social interaction compared to most encounters with objects including the emotions that precede social interaction and the changes in emotions that arise from interactive activity. If young children receive emotional support in their early years, it gives them the courage to seek out and adapt to new learning situations, it reinforces their right to express their feelings, and it encourages them to work cooperatively with peers and adults (White & Coleman, 2000).

c) *Early years' science experiences*

As clearly outlined in the National Guidelines for early childhood care and education, adequate opportunities for exploration and discovery should be made available for young children (MOE, 2010a). Despite this statement, analysis of the qualitative and quantitative findings revealed that the early science learning domain is one of the most neglected learning domains. As evident from the analysis of qualitative and quantitative data, content and learning experiences related to science are inadequate to promote children's scientific reasoning and thinking. Opportunities to observe and investigate; opportunities for open-ended exploration and observation of living things; hands-on science activities such as manipulating objects and experimenting with cause and effect; and exploring the natural environment indoors and outdoors, do not form part of the curriculum.

Furthermore, participant teachers unanimously expressed that early science learning experiences are not prioritised as an important domain of learning in early childhood care and education curricula. In supporting this, analysis of observation and documents revealed that teachers' lesson plans or daily schedules do not integrate science concepts and activities to engage children in scientific activities that allow them to observe, explore, explain, classify, evaluate and report etc. In addition to the lack of knowledge and understanding of preschool teachers about science

205

teaching, the lack of resources and materials are some of the major challenges in providing an early science experience for young children.

In support of this study's findings, Kutluca (2020, p.160) showed that "teachers did not have sufficient knowledge about science teaching and that their pedagogical content knowledge tended to change according to professional experience". Previous studies show that early science experiences encourage children to ask questions, think more critically, experiment, develop their reasoning skills, and read and write (Kutluca, 2021; OECD, 2012). Early science skills are also highly conducive to engaging other readiness skills (e.g., recognizing patterns of similarities and differences by classifying objects, recording observations and predictions, measuring, counting, and drawing; sharing findings; working in small groups; reading relevant stories) (Greenfield, Jirout, Greenberg, Maier, & Fuccillo, 2009; Hong, Torquati, & Molfese, 2013). Therefore, children's scientific knowledge needs to be identified and nurtured at the grass-root levels (Kumar & Whyte, 2018).

8.2.3 Contextual Challenges Related to Preservice and In-service teacher training

This section presents challenges related to initial teacher training, more specifically, teachers' preparation and pedagogical content knowledge, teachers' competency and skills, and in-service training needed to enhance young children's holistic development.

8.2.3.1 Inadequate teacher training programmes

According to Bowman, Donovan, & Burns (2001), the knowledge and skills of teachers are among the most important factors in determining the learning and development of young children. To provide high-quality service, ECCE requires comprehensive initial education programmes, ongoing professional development and supportive working conditions (OECD, 2021; Saracho & Spodek, 2007). Researchers noted that high-quality education and training of teachers are hypothesized to promote stable, sensitive, and stimulating interactions in ECCE settings (OECD, 2012; Saracho & Spodek, 2007). The analysis of qualitative and quantitative findings revealed that preschool teachers lack pedagogical content knowledge and sufficient preparation to enhance young children's holistic development. This is mainly due to the inadequacy of teachers' preservice training programmes. The qualitative findings showed that the teachers' preservice training

206

programme (curriculum and course content) is inadequate to prepare teachers and provide them with the required pedagogical content knowledge, competency, and skills (i.e., to provide teachers with rich, meaningful theoretical knowledge about early childhood development and learning). As evident from the qualitative analysis, there is also a mismatch between the ECCE curriculum objectives and the teachers' preservice training programme. In support of this, an expert interviewee (EB-Ex2) stated that the preservice teachers' training curriculum is inadequate to prepare preschool teachers because the organisation and structure of courses are not related to early childhood care and education curriculum. As she puts it:

> Teachers' training collages have certain limitations; they did not have a curriculum to train preschool teachers…, most preschool teachers' training course content, organisation, and structure of the lessons are similar to the primary school teacher training courses. It was not a game-based, training approach does not prepare ECCE teachers for teaching young children. One of the basic problems is a mismatch between the ECCE curriculum objectives and the training programme. So, I do not believe that ECCE teachers gain basic knowledge from the training. In short, preschool teachers' training courses are not related to children's curriculum (EB-Ex2).

Torbeyns, Verbruggen and Depaepe, (2022), found a lack of teachers' pedagogical content knowledge related to theoretical and practical opportunities to learn during teacher preservice training. In Ethiopia, for the past several years, preschool teachers have been trained at the certification level. Currently, the government has decided to expand and upgrade preschool teacher education. However, preschool teacher training is limited to two years of academic training at the college level, and they are certified with a diploma. In addition, analysis of documents revealed that teachers do not have defined professional profiles and standards. Still, the majority of the teachers are untrained. It appears that this may be seen as a contributing factor to teachers' lack of pedagogical knowledge and inadequate preparation.

According to Novianti and Febrialismanto (2020), teachers' pedagogical content knowledge is the capability of the teacher to address the learning needs of children, which consists of planning, preparation, and assessment of students' learning outcomes. Novianti and Febrialismanto (2020) argue that pedagogical content knowledge is crucial for early childhood teachers; it is not only about the content, but it also determines the teachers' teaching performance. Therefore, to facilitate

207

young children's learning and development, particular attention is needed to align teachers' training with ECCE curricula and build pedagogical content knowledge and skills.

Teaching young children requires specialised pedagogical skills and content knowledge in a variety of subject and development areas (Lantolf & Poehner, 2014; OECD, 2021). Content knowledge is the teacher's understanding of the subject taught, including theories, concepts, and principles that the teacher blends and serves in the classroom (Novianti & Febrialismanto, 2020). Therefore, building a robust base of knowledge across a variety of subjects, skills and commitment of teachers are key for ECCE teachers to successfully cope with the challenges of their practice (OECD, 2021). In this regard, the qualitative findings revealed that preservice teacher training courses are insufficient to provide teachers with the required competence to effectively deliver and implement the curriculum.

As evident from the analysis of structured observation, teachers lacked a fundamental understanding of pedagogical principles, as well as the competency to adapt plans, space, materials, and time to meet the diverse needs of young children and assess their learning and development (item1, 2 of Table 5.16). Furthermore, my observation data also show that teachers lack the necessary competency to create realistic learning opportunities that will meet the diverse needs of children. It was observed that there is a gap in teachers' abilities to involve children, stimulate interaction with and between children, and use a variety of scaffolding strategies. Furthermore, teachers perceived themselves as insufficient and lacking knowledge about children's learning and development. These experiences confirm that preservice teachers' training courses lack breadth and integration with the ECCE curriculum and children's learning and development and are inadequate to equip teachers with relevant competency for the teaching of young children.

According to Lillvist et al. (2014), the dimensions of general pedagogical competence, specific content competence, and play competence are important aspects of teacher competence that teachers have not acquired in their preservice training. Similarly, recent findings show that teachers' knowledge and the quality of early childhood teacher education are to a large extent dependent on the quality of initial teacher training or teacher trainers (Novianti & Febrialismanto, 2020; OECD, 2012). As a result, it appears that teacher education colleges play an important role

in providing teacher trainees with a solid theoretical foundation as well as time and experience to reflect on the competencies (personal and professional) required of an early childhood teacher in the Ethiopian preschool context. On the other hand, participant teachers repeatedly mentioned that preservice training courses are similar to primary teachers' training courses. However, if it is properly integrated, it may not be a major challenge because there is a suggestion from previous studies on the need to integrate preschool courses with primary courses to ensure a smooth transition from preschool to primary school (OECD, 2012, 2017b).

8.2.3.2 The lack of in-service professional development training opportunities

According to Darling-Hammond (2017, p.301), "teacher learning is not complete when teachers leave preservice preparation; in many ways, the most powerful learning is just beginning as teachers enter their first classroom assignments". The qualitative and quantitative findings revealed that preschool teachers in the Amhara National Regional State do not have access to in-service professional development opportunities. There is no structured induction and mentoring system for preschool teachers. Overall, it was again found that in-service professional development is not part of early childhood care and education in Ethiopia. For instance, one expert interviewee said that "there is no formally structured in-service training for preschool teachers" (EB-Ex2). According to Sheridan, Edwards, Marvin, & Knoche (2009), accountability for outcomes is high, but resources to support preschool teachers' professional development are limited. This is true in Ethiopian preschools, according to my data; the government needs to provide a high-quality ECCE service, but this is unlikely because teachers do not have opportunities to keep up to date with new knowledge to meet the needs of children.

The lack of in-service training opportunities may limit teachers' opportunities to constantly analyse the effectiveness of what they do, reflect on their current practice, make adaptations when things are not going well, and continually explore new alternatives and opportunities for improvements (Guskey, 2000). Researchers noted that preservice training alone is insufficient and that ongoing teachers' professional development is necessary to fill the gap of insufficient preparation in preservice training and transfer knowledge and skills to practice; keeping teachers up-to-date with new knowledge to meet the needs of children; providing them with a well-integrated learning experience and allow them to share their expertise in a variety of ways (Darling-Hammond, 2017;

209

OECD, 2012, 2021; Sheridan et al., 2009). In addition, in-service training would create a conducive environment for improving curriculum pedagogy and practices, as well as teaching instructions and critical reflections (Keung & Cheung, 2019).

Therefore, it appears that the government (both the Ministry of Education and the Regional Education Bureau) has still to identify the right training strategies and develop a system, standards, and materials for preschool teachers' in-service training. From a theoretical perspective, this study suggests sociocultural theory as a framework to frame preschool teachers' professional development. According to Shabani (2016), grounding the models of professional development in Vygotsky's theoretical framework will provide a number of sound predictions about how teachers' professional development will be realised in actual educational contexts. For Shabani (2016), the concepts of mentoring, involvement, and peer coaching models are closely related to Vygotsky's revolutionary concepts of mediation, ZPD, and scaffolding, and are vital for sketching, designing, and implementing early teachers' professional development.

8.2.3.3 ECCE teachers' attitude towards their profession

Teachers' job satisfaction and good working conditions are crucial factors to attract and retain qualified teachers to the profession. These teachers tend to be more positive to carry out their tasks, as well as to enhance the possibilities to positively interact with children, give them enough attention, and stimulate their development (Baluyos, Rivera, & Baluyos, 2019; Jorde-bloom, 1988; OECD, 2012, 2021). The qualitative findings revealed that the majority of preschool teachers are dissatisfied with their jobs and have a negative attitude toward their profession. As highlighted in the teachers' responses, teachers' negative attitudes and dissatisfaction are related to their inadequate preparation in preservice training, the unsupportive attitudes of parents and the community towards the teaching profession, a poor government support system, a lack of resources or facilities, and especially low teachers' salaries. This finding is consistent with the finding of Hoot, Szente, & Mebratu (2004, p7), who found that "as in many countries of the world, teaching young children in Ethiopia is considered among the lowest rungs of professions. Thus, comparatively low salaries result in little interest in teaching as a career path". Furthermore, Novianti & Febrialismanto (2020 p.405) has shown that "much often, early childhood teachers are underestimated compared to other teachers who teach at the formal level of education, although

210

their role is just as important as other teachers in teaching and enhancing student ability". Similarly, the OECD (2012) found that the ECCE sector is usually associated with relatively poor working conditions and poor compensation leading to high turnover rates.

In brief, this section was dedicated to the contextual challenges (out-of-school factors). Three main findings were discussed, namely the lack of multisectoral co-ordination and collaboration, challenges relating to ECCE curriculum and the lack of quality preservice and in-service teacher training. Following I turn to the pedagogical challenges (in-school factors) that influence ECCE.

8.3   Section 2: Pedagogical challenges or in-school factors

This section is devoted to a discussion of the pedagogical findings that impact ECCE in the Amhara National Regional State of Ethiopia.

8.3.1   Misalignment between curriculum, pedagogy and assessment

Curriculum and pedagogy are powerful tools to shape interactions within ECCE settings (OECD, 2021). The curriculum sets the principles and goals that ECCE teachers use to foster children's development, learning and well-being, while pedagogy refers to the strategies and techniques implemented by teachers to offer these opportunities (OECD, 2021). Putting curriculum, instruction, and assessment into an interlocking bundle makes sense for teachers' instruction and children's learning (Hatch, 2010).

8.3.1.1 Teachers' lack of understanding of ECCE policy and ECCE curriculum

For effective delivery and implementation of curriculum, teachers must have a thoughtful understanding of the curriculum content, and instructional approaches (Ornstein & Hunkins, 2018). Knowing about policy and curriculum is critical; it helps teachers in establishing common learning priorities, ensuring pedagogical continuity, providing guidance in their practice on how to enhance children's learning and well-being, manipulating the educational environment, and make daily decisions in the classroom setting by taking into consideration the backgrounds and learning styles of their children (OECD, 2012; Ornstein & Hunkins, 2018; Wood, 2020). It is also important for informing parents about what the ECCE centres do and what they as parents can do at home (OECD, 2012). The qualitative analysis revealed that teachers lack basic knowledge about

211

the early childhood care and education curriculum (ECCE) and are unfamiliar with the ECCE policy. Furthermore, teacher participants mentioned that they did not have any training about ECCE policy and curriculum. For instance, (RPA-T2) interviewee said that "I don't have a clear understanding of the ECCE policy and curriculum, and I do not have any training". Furthermore, qualitative findings revealed preschool teachers do not have access to materials resources (such as a National Policy Framework, ECCE guidelines, and a curriculum syllabus). This was supported by an analysis of structured observation, which revealed that the majority of the observed preschool teachers had difficulties in planning daily and weekly lesson plans, assessing children, and organising indoor and outdoor learning environments (Table 5.9). This implies that teachers are insufficiently informed about the curriculum theory and policy and they also lack a shared frame of understanding and up-to-date information between the curriculum (planner or experts) and teachers (implementers). This lack of understanding of the curriculum may have an impact on how teachers teach and assess children's learning in line with the intention of the curriculum and children's developmental needs. Furthermore, the misunderstanding of the intention of the policy will result in neglecting the basic learning needs of children, and ultimately, the curriculum will fail to be effectively implemented.

Consistent with this, Novianti and Febrialismanto (2020) found that kindergarten teachers still have a problem implementing curriculum and describing it in the form of daily, weekly, and monthly lesson plans. According to Sofou & Tsafos (2010), the problem is related to a lack of appropriate guidance and professional development. In this regard, Ornstein & Hunkins (2018) suggest that in-service training or staff development is necessary for teachers who lack a deep understanding of curriculum and its creation. However, analysis of the qualitative findings revealed that in-service training is a missed opportunity in Ethiopia's early childhood care and education (sub-theme 3.4).

The quality of educational work is linked to the curriculum and teacher understanding of curriculum as a curriculum maker or developer (Alvesad & Duncan, 2006; Sofou & Tsafos, 2010). Hence, early childhood teachers need to have a clear understanding of the curriculum and be equipped with a roadmap of what needs to be taught because they ultimately decide the fate of the curriculum (Hatch, 2010; Sofou & Tsafos, 2010). Similarly, Novianti and Febrialismanto (2020) state that teachers should keep on learning and practicing to enhance their knowledge of the

212

curriculum. Thus, preparing teachers to implement and use a curriculum as part of initial education programmes is crucial to ensuring good curriculum implementation and appropriate pedagogical practices (OECD, 2021). To this end, how teachers will be supported in their role as curriculum implementers is an important question for the Regional Education Bureau and Ministry of Education.

8.3.1.2 Teachers pedagogical practices

Early childhood pedagogy is concerned with how children learn and develop; how adults and children interact (Stephanie Wall, 2015). Early childhood pedagogy also needs to operate from a shared frame of reference (a mutual learning encounter) between the teacher, the young child, and his/her family (Moyles, Adams, & Musgrove, 2002). As evidenced in the findings of the previous section, Ethiopia adopted a child-centred and play-based approach based on developmentally appropriate practices, as a pedagogical approach. However, analysis of the qualitative findings revealed that child-centred techniques are not well practised. Instead, in most of the observed pre-schools, teachers most commonly use teacher-centred approaches like whole-class teaching or direct instruction. There seems to be a mismatch between the objectives of the policy and teachers' pedagogical practices.

Previous findings showed that whole-class teaching methods are not appropriate to encourage children's efforts, model and demonstrate, create challenges and support children in extending their capabilities, collaborate with them through guided practice, and move from where they are now to where they can be with help (Bowman et al., 2001; Miller, 2016). Moreover, as indicated in the findings of the previous section, ECCE teachers lack basic theoretical knowledge about developmentally appropriate practice and pedagogical content knowledge to teach children using various pedagogical approaches such as modelling, questioning, and scaffolding, amongst other approaches.

According to Daniels et al. (2007), the traditional lecture approach is insufficient for developing and extending children's emerging skills, academic and social capabilities, and individual learning styles, and collaborating with them through guided practice. The central tenet of Vygotsky's theory was that learning leads the developmental process (Edwards, 2003) and good learning is that which is in advance of development (Vygotsky, 1978). Drawing from socio-cultural perspectives,

213

"instruction would be completely unnecessary if it merely utilised what had already matured in the developmental process and if it were not itself a source of development" (Vygotsky, 1987 cited in Daniels, Cole, & Wertsch, 2007, p.310). Moreover, Vygotsky (1978, p.89) argued that learning or instruction, "which is oriented toward developmental levels that have already been reached is ineffective from the viewpoint of a child's overall development, it does not aim for a new stage of the developmental process but rather lags behind this process".

One of the key roles of an effective teacher is to plan a lesson and organise the learning environment in ways to pursue educational goals for each child (through teacher-initiated and child-initiated activities) (Bowman et al., 2001; OECD, 2012). For Mligo, Mitchell and Bell (2016, p. 89) meaningful teaching and learning should emphasise "the holistic nature of children's learning and development, the importance of developing autonomy, intrinsic motivation and self-discipline through the encouragement of child-initiated, and self-directed activity, the value of first-hand experiences and the crucial role of children's development". They further assert that these ideas should be translated into practical activities in the classroom context.

However, analysis of classroom documents (teachers' lesson plans and classroom observation) revealed that teachers do not provide children with the opportunities to participate or share their ideas or interests in planning lessons and daily activities. This may limit children's motivation and interest in learning based on the assumption that learning is more powerful when children make their own choices. Classroom observations revealed that learners were less engaged in the learning process. An over-reliance on a teacher-centred approach does not give room for interactive discussions and "limits assessments of individual children because of the difficulty of making close follow-ups of each child. Teachers may not be able to discover the weaknesses of the children or areas children did not understand in the course of learning and are therefore not able to find a way of making a point clear" (Mligo, et al., 2016, p. 89).

The notion of "zone of proximal development" (ZPD) provides an attractive metaphor for designing instruction and analysing learning and helps teachers understand how to identify a child's perfect window of instruction so that teaching will have the optimal effect on a child's development (Bodrova, 1997). "The zone of proximal development permits us to delineate the child's immediate future and his dynamic developmental state, allowing not only for what already

214

has been achieved developmentally but also for what is in the course of maturing" (Vygotsky, 1978, p.38). Furthermore, the metaphor of scaffolding involves simplifying the learner's role rather than the task (Bowman et al., 2001). In scaffolding instruction, children can even operate beyond their optimal level with teacher scaffolding, in which a teacher more fully participates in the child's activity by providing instruction through prompts, clues, modelling, explanation, leading questions, discussion, joint participation, encouragement, and control of the child's attention (Miller, 2016). As the data revealed this is seldom the case given that teacher-directed approaches dominate in most centres observed. In addition, teachers might find working within the ZPD and designing scaffolded lessons a challenge in overcrowded classrooms. My observation data showed that a high teacher-child ratio is a big challenge in the majority of pre-schools. On average, each observed pre-school contains more than 50 children in one class. This was in contrast with the standards of National and Regional Policy. As stipulated in the policy document, the standard of "teacher-child ratio in the preschool is 1: 30 for three-to-five-year olds and 1:40 for the five-to-six-year olds" (MOE, 2010a).

8.3.1.3 Integration of Play-based Learning in the Curriculum

For young children, play is their work, and from a play-based approach, they gain significant learning outcomes (Hyson, 2004). As play managers, teachers need to take an active role in balancing spontaneous play, guided play, directed play, and teacher-directed play (Nouro, 2014). Despite statements stated in the national guideline, the qualitative findings revealed that play is not adequately integrated into the curriculum and learning activities as a pedagogical approach and that it is not explicitly linked to the corresponding content and objectives. It was also found that locally known traditional games such as "Geteba," "Dibosh," and "Sego-maksego" have not received adequate attention in the curriculum. As discussed in chapter seven, these traditional games are important for teaching mathematics, logical reasoning and self-regulation skills. Similarly, the previous finding by Demeke (2006) showed that in Ethiopia, the valuable ingredients of the traditional system of education did not get any place at all in ECCE curriculum.

Moreover, as evident from the analysis of documents (teachers' lesson plans), there is a lack of teacher competency to integrate play and to choose different teaching strategies to maximize every child's opportunity to learn. Instead, teachers used play as a means of relaxation and a break, and

215

their support, intervention, or participation in children's play was not observed. In other words, as a pedagogical method, play is not intentionally planned and integrated with learning activities in teachers' lesson plans in a way to provide children with meaningful experiences for their social, emotional, physical, and cognitive development. Moreover, the lack of playing materials and the negative attitude of parents towards play are some of the major challenges that teachers faced. This finding is in agreement with the finding of Angela Anning, Cullen, & Fleer (2004), who claimed that achieving quality play remains a challenge for teachers; they often have difficulties understanding their role, assessing the outcomes of play, and balancing adult-directed activities with children's self-initiated activities.

From the lens of sociocultural theory, "play is not spontaneous but is instead contingent on players abiding by a set of rules" (Elena Bodrova & Leong, 2007, p.129). Vygotsky affirms that symbolic play or dramatic play plays a very important role in the development of abstract thought because, in make-believe play, children soon become able to think about meanings independently of the objects they represent (Mellou, 1994). The sociocultural theory also encourages children's use of cultural tools and symbols, the co-construction of events, and the use of social and cultural discourses in play scripts (Angela Anning et al., 2004). Therefore, to create an appealing play environment, enhance the flow of play, and maintain children's engagement, play has to be intentionally planned and structured (Keung & Cheung, 2019).

8.3.1.4 Misalignment between teachers' assessment practices and policy intention

Ethiopian national policy guidelines for early childhood care and education clearly stated that the assessment of children should be holistic, focusing on all the aspects of their development; should be continuous, using appropriate methods; and assessment results must be appropriately communicated to parents and must not be used to label the child or as a basis for promotion, retention, or selection (MOE, 2010a). Despite the general direction and expected objectives of the policy, the findings revealed that there is a significant gap and misalignment between teachers' assessment practices and the policy intention. The qualitative findings revealed that teachers' assessment strategies are inadequate to assess young children's holistic development such as cognitive, and physical well-being or motor, social and emotional development.

As evident from the analysis, teachers most commonly used paper-and-pencil assessment procedures to assess what children know or judge children's academic performance as correct or incorrect using numbers and assigning marks or grades instead of assessing children's progress over time. For instance, interviewee (UPD- T4) said that "we continually take an ongoing assessment out of 5% and … at the end of the year, we rank, and reward children based on their assessment results, especially in stage three". Not only does this clearly contradict the National Policy objectives, but such assessment practices also have negative emotional consequences and will create negative feelings about learning. If a child fails to achieve, it thus results in undermining the child. Hence, it leads to the conclusion that teachers' assessment practices overlook children's holistic development. Previous studies suggest that assessment of children's progress need not have harmful emotional consequences (Hyson, 2004).

Assessment results need to be used to refine teaching plans, implement curricular activities, change room setup, and acquire or develop resources (Krogh & Morehouse, 2014). Moreover, from the sociocultural perspective, assessing fully developed competencies or current achievement underestimates children's capacities because the information obtained pertains only to the lowest level of the ZPD and does not measure anything that is in the process of development (Bodrova, 1997). In other words, assessing the independent level of performance was not sufficient to fully describe a young child's holistic development (Bodrova, 1997). Furthermore, Hatch (2010) suggests that assessment need not be separated from curriculum and teaching, and it need not be sterile or threatening. If curriculum, instruction, and assessment components work together they can deliver a consistent message about what should be taught and assessed, students will have the opportunity to learn and truly demonstrate what they have achieved (Martone & Sireci, 2009).

Furthermore, in the majority of observed preschools, children's learning progress and achievements were not monitored systematically and communicated to children's parents (items 2 and 3 of Table 5.14). Shortage of facilities such as print and photocopy, space to document children's files such as shelves, and file cabinets, high teacher-child ratio, and lack of common assessment framework/ guideline are some of the main challenges of teachers. This finding is in agreement with the work of Hyson (2004, p.32), who reported that "teachers' limited ability to document children's progress; many teachers' current assessment practices have been accused of undermining children's self-confidence and creating negative feelings about learning". In addition,

217

there is also a wide variation in understanding the purpose and use of assessment strategies across preschools. This is due to a lack of assessment guidelines or a common framework. Through the analysis of documents, I could not find specific assessment guidelines, neither the ECCE curriculum nor the teacher's guidelines clearly defined and set out assessment strategies for preschool teachers.

The qualitative and quantitative findings revealed that there is misalignment between curriculum elements such as intended objectives/outcomes, pedagogical approach, and assessment strategies. Teachers' pedagogical practice and assessment strategies lack instructional alignment, and they are not mutually interrelated to support young children's holistic development. In other words, the way teachers develop lessons, deliver instruction, and assess children's learning and development are not interconnected to support young children's holistic development.

8.3.2   Pedagogical challenges pertaining to the indoor and outdoor learning environment

According to Krogh & Morehouse (2014), both outdoor and indoor learning environments are instrumental in determining how and what children learn and develop. The qualitative and quantitative findings revealed that most preschools have adequate outdoor space and play areas. However, analysis of structured observation revealed that outdoor learning environments are inadequate to provide a stimulating social and emotional environment as well as to accommodate children's different needs, interests and varying abilities. As evident from the analysis, there is a lack of resources to support the development of fine and gross motor skills as well as aesthetic and sensory characteristics. Some preschools have very limited play equipment such as slides, swings, seesaws, revolving chairs, and so on. However, the majority of these toys are broken or have not yet been repaired.

It was also evident from the structured observation that all preschools lacked materials that would provide children with a variety of opportunities such as constructing their own playthings and engaging in active physical experiences, problem-solving, critical thinking, and creativity (Table 5.10). Furthermore, the outdoor environment is not clean and well organised to support young children's engagement in a wide range of activities such as swinging, climbing, sliding, jumping and hanging, balancing, hammering, hopping, turning, and pouring while completing obstacle courses (Table 5.10). Moreover, despite an attractive and sound policy statement in place, through

218

document analysis either at the national or regional level, I could not find any standards, guidelines, or code of conduct to protect children from hazards, abuse, and so on. As outlined in ECCE National Guidelines, outdoor equipment should be well-maintained, clean, and developmentally appropriate; provide ample opportunity for creativity and the development of different skills as well arranged in an organized manner to allow for accident-free play (MOE, 2010a).

In addition, teachers' lack of skills and attention in planning and preparing for the outdoor environment is a contributing factor to the poor outdoor learning environment. This finding is consistent with the finding of Ihmeideh & Alqaryouti (2015), who claimed that teachers do not plan specific and varied activities for outdoor play environments; free play was most common in outdoor play activities, while structured activities were minimal. Similarly, Wangila (2017, p.22), found that "play facilities like playgrounds, swings, slides, among others are also a major challenge to most early childhood development centres since they are either missing or do not meet the standards required".

Furthermore, the findings of Cooper (2015, p.85) also show that "outdoor learning environment…has been largely overlooked in the considerable efforts to enhance the quality of early childhood education". The finding by Maynard & Waters (2007, p.263) also show that "high priority is given to content-based learning: factual knowledge and basic skills". Previous studies suggest that outdoor activities provide children with emotional experiences and chances to actively participate and for working freely and foster friendships as well as negotiate relationships (Nedovic & Morrissey, 2013; Yıldırım, 2017). It also helps children to develop skills related to the scientific research process like making inferences, measuring and observing (Yıldırım, 2017).

Furthermore, the qualitative and quantitative findings revealed that indoor learning environments are under-resourced and in poor condition, the floors are cracked, and there are no carpets, displacing materials or pictures. This was supported by my structured observations, which revealed that indoor spaces are not effectively organised into different interest areas and these spaces are not equipped with enough materials for play, artistic expression and development of children's different skills (Table 5.10, 8). As evident from the qualitative analysis, shortages of materials and facilities (i.e., playing materials, instructional materials, assistant teachers, learning corners, child sized chairs, and a high teacher-child ratio) and a lack of financial support are some of the problems

219

that teachers face when organising an indoor learning environment. On the other hand, the findings revealed that teachers and children have smooth relationships i.e., they have loving and caring relationships. In sum, the overall findings revealed that the physical environments (both the outdoor and outdoor learning environments) are not conducive to providing a stimulating social and emotional learning environment for the holistic development of young children.

8.3.3 Pedagogical challenges relating to mathematics, language and literacy, gross and fine motor development skills and health, safety and nutrition

8.3.3.1 Mathematics

Meaningful mathematics learning experiences provide young children with the foundation they need to succeed in later mathematics (Cross, Woods, & Schweingruber, 2009). The analysis's quantitative findings revealed that mathematics content and learning experiences are appropriate for promoting young children's early mathematical numeracy and competency skills. However, as evident in the analysis of documents, mathematical problem-solving and critical thinking activities are not adequately integrated across different areas of learning and teachers' daily routines. Furthermore, analysis of the document revealed that the concepts of mathematical learning opportunities are not integrated with locally known games such as "Geteba," "Dibosh and "Segno-Maksegno," which are important for teaching logical reasoning and self-regulation. In supporting this, observation data showed that teachers' lesson plans, daily schedules and teachers' pedagogical approach and selection of materials are not sufficient to provide opportunities to acquire knowledge of measurements such as size, mass, height, time, and volume, or to make a collection with categories, sort, order, match and compare. According to Vogt, Hauser, Stebler, & Rechsteiner (2018), traditionally, mathematics was not at the centre of curricular attention in kindergarten. Aside from the lack of measuring tools, I infer from the findings that teachers lack commitment, readiness, and preparation in preparing instructional materials using locally available materials. The reason for this is that this can be easily accomplished using locally available materials.

Previous research indicates that integrating mathematics with language learning (e.g., stories, rhymes, songs, and jokes, use of information books, and writing) contributes significantly to young children's mathematics numeracy (Clemson & Clemson, 2001). Furthermore, Clemson & Clemson

220

(2001:123) state integrating mathematics with stories provides children with opportunities for "ordering events or ideas (that is sequencing and ordinal number), counting (in stories where an item or person is added to each page), and vocabulary". There is a need to broaden teachers' perspectives in mathematical domains through preservice training because teachers' knowledge is critical in creating challenging and supportive learning environments that help children make sense of mathematics (Bowman, Donovan, & Burns, 2001).

8.3.3.2 Language and literacy

Language is an integral part of children's education "everyone agrees that language is necessary for children if they are to develop their full potential, socially, emotionally, and intellectually, but not everyone agrees on just how children go about learning a language" (Seefeldt, 1980, p.258). The overall quantitative finding revealed that the content and the learning experiences are appropriate to facilitate children's language and literacy learning. When each item is examined, however, the majority of teachers disagreed that the content and learning experiences are insufficient to promote the development of children's phonological awareness skills (i.e., identifying spoken and written language, discriminating words, clapping out the number of syllables and onsets, rhyming songs, sound matching, reading storybooks and poems), as well as vocabulary acquisition and use (i.e., generating or sorting words that are similar in meaning) (items 3 and 7 of Table 5.8).

The qualitative findings confirmed that the content and the learning experiences are inadequate for providing opportunities for the development of phonological awareness [identifying letter names, sounds, and shapes]. In addition, teachers' lesson planning does not encourage children to engage in cooperative, shared activities and conversations with each other. This finding is relatively consistent with the finding of Phillips, Clancy-Menchetti, & Lonigan (2008), who found that many preschool curricula and early childhood education teachers are lacking in robust instruction in phonological awareness and that many preschool teachers do not yet have a strong grasp of the developmental trajectory of phonological awareness nor of how to incorporate effective support and instruction into a developmentally appropriate teaching plan. Another recent finding shows that there is a "significant, positive association between teachers' knowledge and children's print concept, letter naming, and phonological awareness learning" (Piasta, Justice, Park, Farley, &

221

Connell, 2020:137). According to Hyson (2004), young children's academic futures are in jeopardy because of reading difficulties. Carroll (2004) also argues that if a child learns letters but has not yet developed a sensitivity to sound similarities, they will be unable to move to full phoneme awareness. Successful early literacy programmes emphasize phonemic awareness and other foundational skills, while also encouraging children to talk and write about personally relevant matters (Hyson, 2004).

8.3.3.3 Physical Development or Gross and fine motor development skills

From a theoretical perspective, physical development involves gross motor, fine motor, and sensory-perceptual development (Essa, 2014). Physical activity and play may be important, not only for physical development but also perhaps for cognitive performance subsequent to physical activity and even for aspects of social organization and social skills (Pellegrini & Smith, 1998). For good physical experience and to develop gross and fine motor skills, children need time, space, equipment, and safe indoor and outdoor activities (Essa, 2014). In this regard, the quantitative findings revealed that curriculum content and learning experiences are appropriate for providing children with opportunities for gross motor, fine motor, and sensory-perceptual development (Table 5.1). However, analysis of structured observation revealed that the majority of observed preschools are inadequate and under-resourced (i.e., lack a variety of materials and equipment) to provide children with a stimulating learning environment. And the learning environment and physical spaces are not intentionally organized and structured to support young children's gross and fine motor development (Table 5.10).

In addition, observation data revealed that children do not have many outdoor learning opportunities to play games such as running, jumping, crawling, climbing, throwing, and so on. Furthermore, data from field notes and document analysis revealed that teachers' lesson plans mainly focused on cognitive activities such as mathematics and language, but fine and gross motor development activities were not properly planned and integrated into the daily activities to support the physical and sensory-perceptual development of children. These findings are consistent with the works of Stork & Sanders (2008), who found that teachers of young children often neglect gross and fine motor development and instead emphasize cognitive and social areas and that the creation and integration of quality physical activity into early childhood settings face challenges.

222

On the other hand, analysis of the observation showed that in most of the observed preschools, children have unstructured free time for play. Recent research suggests that structured free play may have a positive impact on physical activity, particularly during recess (Frank, Flynn, Farnell, & Barkley, 2018). Medina & Sobel (2020) reported in their findings that teacher or caregiver involvement and structured activities keep children on task and stay longer because of the reinforcing nature of the social interaction. Similarly, Essa (2014) points out that children require planned movement activities, explicit instruction (both verbal and modelled), and structured physical skill development opportunities to help them become physically active and healthy for life. Conversely, free play, which often includes various motor experiences, does not adequately meet the motor development needs of young children (Essa, 2014). According to Stork & Sanders (2008), fine and gross motor development cannot be left to chance. Hence, it appears that children need specific and systematic opportunities to learn and practice basic physical (fine motor, gross motor, and sensory-perceptual) development that will contribute to a lifetime of physical activity.

8.3.3.4 Health, Safety and Nutrition

The analysis of quantitative findings revealed that health, safety, and nutrition content and learning experiences have received adequate attention in the ECCE curriculum. The findings revealed that content and learning experiences are appropriate to provide children with a conceptual understanding of self-help, self-care, and personal hygiene skills and good health habits when eating, drinking, toileting, washing, and dressing; and be aware of potential hazards and safety principles in their environment and everyday routines (Table 5.3). In contrast, data from structured observation and field notes revealed that the majority of the observed preschools were found inadequate to provide basic sanitation, safe and potable water, hand washing water, and flushing toilets (Table 5.9 item 2). Similarly, data from the Amhara National Regional Bureau shows that in 2020, out of 9134 preschools, only 487 (5.3%) preschools have potable water and 482 (5.3%) have toilets (Amhara Education Bureau reports, 2020). Furthermore, interview participant teachers also repeatedly mentioned that toilets are not appropriate and child sized.

My observations revealed that toilets are inappropriate and inadequate, children and teachers do not have access to sanitary facilities, children's cleanliness is not supervised, and sanitation conditions are not monitored and maintained. This may expose children to communicable diseases

223

related to inadequate hygiene and sanitation. Moreover, the findings revealed that there is a lack of guidelines and procedures in place for the protection of children from hazards, harm or abuse (Table 5.20, item 1). In addition, the findings revealed that families and community members in all preschools do not have access to resources/information about children's health care, nutrition and safety (Table 5.21 of item 2).

As indicated in the findings of the preceding sections, this could be due to a lack of coordination within the Kebele ECCE implementing committee because this responsibility is delegated to Kebel Health Extension Workers. In general, the findings revealed that almost all of the preschools are not in good condition for health practices. Similarly, the findings by Chikutuma (2015) showed that preschools failed to maintain their sanitary facilities. The lack of appropriate health and safety procedures and training are contributing factors. Mwoma, Begi, & Murungi (2018) notes that improving water, sanitation, and hygiene in preschools will enhance child health, attendance, and retention, as well as performance. Therefore, health and hygiene education needs to be part of ECCE teachers' training. In parallel, frequent monitoring of appropriate safety and health practices with explicit policy procedures is needed. Furthermore, the preschool teachers have set aside time for District health extension workers to visit the classroom to deliver educational programmes on different aspects of health, safety, and nutrition.

8.3.4 Importance of parent and community-school partnerships

Parental and community involvement is increasingly seen as a key policy lever for promoting healthy child development and learning (OECD, 2012). Young children's holistic development (physical, social, emotional, and academic) needs a strong community and parent partnership. Darling-Hammond et al. (2020) noted that developing strong, respectful partnerships with family and community enable teachers to gain a better understanding of their children and build on children's experiences, and, as needed, strengthen any aspects of the developmental system where there are challenges to children's health and well-being. The analysis of qualitative findings revealed that parents and the community are actively and voluntarily involved in expanding O-class, in particular by hiring contract teachers, building and maintaining classrooms, buying carpets and chairs, and so on. Apart from this, their contributions and participation are limited and

224

not properly documented and reported. On the other hand, teacher participants complained that except for children's parents, the larger communities did not feel a sense of ownership.

As evidenced by teachers' interview responses and observations, teachers or preschools do not have direct communication and discussion with the community and community representatives in planning and implementing programmes or activities together. In other words, there is a lack of collaboration and joint programme planning and decision-making with parents and the community. It is the Kebele or District administration who discusses and directly communicates and collects money from the parents and the community to do the activities mentioned above. Furthermore, as evident from the analysis of qualitative findings, preschools do not gain direct financial support either from the community or government. From the field notes it was also found that in many preschools, particularly in urban areas, parents voluntarily paid school fees from a minimum of 50 to 120 Birrs per month. But this is not constitutional. In Ethiopia, public preschool is free of charge. As interview participant teachers mentioned, this is due to a lack of financial support from the government or community to buy school facilities. This may be another disadvantage for economically disadvantaged children and for this reason, parents may not send their children to school. On the other hand, teachers also have a belief and see parents' monthly fees as evidence of active parental involvement.

From teachers' responses, it is possible to infer that teachers did not properly understand the significance of parental involvement and their relationships with parents. This finding reaffirms the recent finding in Ethiopia by Kim et al. (2022, p.8), who found that community contributions are largely through supplying building materials or supporting classroom construction, rather than direct financial contributions. The study by Albaiz & Ernest (2021, p.459) shows that "49% of teachers had never engaged in school family community partnership practices to increase community involvement". In this respect, Epstein (2011) suggests that maintaining partnerships with families, and community members enhance work together to share information, guide students, solve problems, and celebrate successes. However, these activities were not seen or observed in most of the observed preschools.

As clearly stated in the ECCE National Policy Framework, promoting and strengthening partnerships and collaboration among all stakeholders for the effective delivery of services and

225

programmes to young children is one of the stated strategic objectives (MOE, 2010b). However, the qualitative findings revealed that almost all preschools lack connections and collaboration with other sectors and stakeholders. In other words, collaboration with families or community representatives for programme planning, management, evaluation, and decision-making processes was not yet established (Table 5.23). This study may provide evidence that there is a significant gap in policy implementation.

In addition, the qualitative findings revealed that parent and teacher communication is not planned and scheduled and parents do not have regular opportunities to discuss and share their child's progress and the events that have taken place in the preschool. As it was clear from the analysis of qualitative findings, parent-teacher communication is not scheduled; most often, they meet with parents at the end of the year or when the programme is closing, or informally when parents come for payment or to drop off or pick up their children. This does not only limit parents' opportunities to know what happened at school or how their child is doing and progressing. It also limits teachers' opportunities to be informed about children's behaviour, and respond to significant events in the child's home life (Essa, 2014; Roopnarine & Johnson, 2013). Children's learning and development are greatly enhanced when parents and teachers exchange information on a regular basis and adopt consistent approaches to socialization, daily routines, child development, and learning (OECD, 2006).

Parents are a child's first and most enthusiastic teachers, and this role does not end when the child enters school; they remain their lifelong teachers (Larocque, Kleiman, & Darling, 2011; OECD, 2006; Rapp & Duncan, 2012). Parents can play a vital role in their children's development and learning by monitoring and providing constructive feedback and input to programmes as well as by providing interesting learning experiences, particularly through daily conversation and out-loud reading of children's literature OECD (2006). The National Guidelines for Early Childhood Care and Education set clear expectations; it states that parents and teachers should regularly share information on the child's progress; clear and comprehensive information about the preschool should be made available to all parents (MOE, 2010a). In short, these experiences suggest that parental and community partnership is not supported or led in a way that will bring significant changes and improvements.

226

Furthermore, analysis of qualitative findings revealed that lack of awareness, time, and parents' prioritization; a lack of teachers' training; a lack of principals; lack of support (Keble or District Administrative) are some of the main barriers to school community partnerships. There is also a lack of specific parent and community participation strategies or guidelines in all preschools. This may be a challenge for teachers to train parents and provide information about early childhood education as well as to build their knowledge and ensure effective communication and partnership with parents and communities. As evident from the qualitative findings, parental education is provided non-formally through adult literacy classes, group or community meetings, house-to-house visits, and during weekly faith-based sessions in churches and mosques by different government sectors such as health extension workers, preschool teachers, and agriculture extension workers (MOE, 2010a). However, there is a lack of formal structure, coordination, and accountability between these different sectors. This finding reaffirms the previous findings in Ethiopia by Belay (2018, p.183), who found that "these different organizations work under unclear boundaries, responsibilities, collaborations, accountabilities and coordination that would mean total neglect in some areas or repetitive work in others that may even lead to exhaustion and apathy among parents".

This finding is in agreement with the findings of the OECD (2006), which found that parents are not involved in their children's learning, which could be due to time constraints, a lack of awareness and motivation about how they can effectively support their children's learning, or underestimating the importance of their responsibility. Leadership is critical in family and community engagement OECD (2006); principals who are trained in ECCE need to be assigned who will lead ECCE. Indeed, teachers and cluster supervisors need the training to develop the skills needed to understand the benefits and barriers to parental and community involvement, as well as techniques for improving two-way communication between the home, community, and preschool.

8.4   Conclusion

This chapter has presented an analysis and discussion of the quantitative and qualitative findings emanating from Chapters six and seven. The quantitative and qualitative findings were integrated compared and contrasted with literature and previous research findings. The discussion provides

227

contextual, out-of-school, and pedagogical, or in-school, challenges that early childhood care and education faced in curriculum implementation to ensure the holistic development of young children in Amhara National Regional State. Young children's holistic development (social, emotional, physical, cognitive, language, and creative) is integrated and interconnected. To ensure young children's holistic development, these interconnected and dynamic young children's developmental domains need an integrated approach. The findings revealed that ensuring the holistic development of young children in Amhara National Regional State has not run optimally due to the presence of several implementation challenges. More specifically, the study findings revealed that there is a significant gap or misalignment between national policies the intention or the planned and implemented curriculum, as well as the needs of children's learning and development.

The findings showed that in Amhara National Regional State, the issues of access, addressing inequalities, and improving the quality of services are still major challenges. This significant gap lies in the lack of government commitment, particularly in funding and financing ECCE and ongoing support and monitoring programme implementation. The findings also revealed that teachers lack basic theoretical knowledge and understanding of ECCE curriculum and policy, as well as developmentally appropriate learning theory and practice. Furthermore, early childhood care and education curricula are seen as inadequate and lack comprehensives to provide a wide range of development opportunities for young children's holistic development. Especially, content and learning experiences in physical-fine and gross motor development, early science, and emotional and self-regulation skills are inadequate to support young children's developmental opportunities.

In addition, there is a lack of curriculum integration and learning domains are presented separately in distinct learning areas or subjects. Besides, preschool teachers lack adequate preparation, pedagogical content knowledge and required competency to effectively implement and deliver the curriculum. Preservice teachers' training curriculum and courses lack breadth and integration with the ECCE curriculum or with young children's learning and development. Coupled with this, the findings showed that in-service professional development is not part of early childhood care and education in Amhara National Regional State and that teachers do not have access to in-service professional development opportunities.

228

Pedagogically, there is a misalignment between curriculum elements such as intended objectives/outcomes, pedagogical approach and assessment strategies and they are not mutually interrelated to support young children's holistic development. Furthermore, indoor and outdoor learning environments are found inadequate to provide natural play space and create an emotional and stimulating learning environment for children, which is necessary for their holistic development. Furthermore, there is poor parental involvement in their children's education and parent and community partnership in joint programme planning and decision-making, largely overlooked. In general, the findings showed that ECCE policies are not effectively implemented to optimally enhance young children's holistic development. The next chapter is the final chapter of this study, where I provide the conclusions and implications of this study.

229
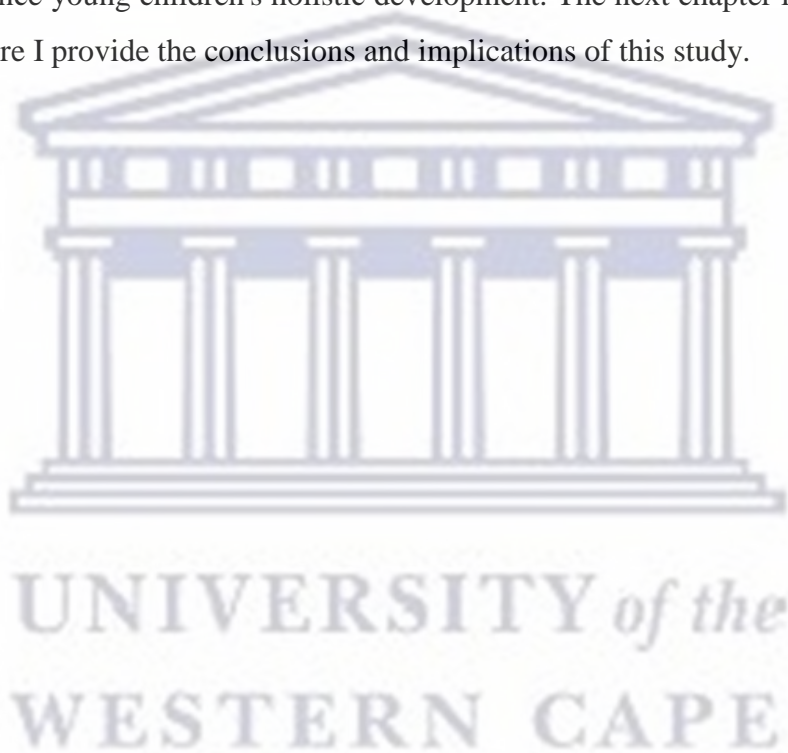
CHAPTER NINE

CONCLUSION AND RECOMMENDATION

9.1   Introduction

This final chapter begins with an overview of the study, followed by a summary of the key findings that stemmed from this research, which are presented in relation to the research questions. This is followed by a reflection on the theory used to frame the study, the implication and recommendations of the study. This chapter concludes with recommendations for further study.

9.2   An overview of the Study

The purpose of this study is to explain and explore curriculum implementation challenges faced by ECCE teachers in Amhara National Regional State of Ethiopia in ensuring the holistic development of young children. Globally, there is a growing interest in enhancing the ECCE sector not only in terms of providing access but also in terms of improving the quality of programmes in this sector. The reasons for this are multiple. According to the OECD, ECCE "can improve children's cognitive abilities, and sociocultural development, help create a foundation for lifelong learning, make children's learning more equitable to reduce poverty and improve social mobility from generation to generation" (OECD, 2017, p.11). However, the benefit of ECCE and children's future learning and development depend on the quality of ECCE services.

Young children's holistic development, which encompasses intellectual, physical, spiritual/moral, emotional, social, and aesthetic development, develops within a complex system of contexts, interactions, and relationships; what happens in one domain influences what happens in others (Darling-Hammond et al., 2020). The main assumption of this study is therefore, young children's holistic development is optimally supported if all educational environments, which are discussed as contextual and pedagogical challenges such as ECCE development policy, curriculum, teacher training and pedagogical approach, learning environments, and parent and community partnerships are integrated and support each other. Previous Ethiopia studies focused on describing the status, practice, access and inequalities, quality of ECCE, progress and prospects, leadership roles, challenges, and the relationship between preschool attendance and academic achievement in early childhood care and education. From this, I note that many of the available studies have not

230

sufficiently investigated the relevance of curriculum content to the holistic development of young children and the challenges that ECCE teachers face during curriculum implementation. The aim of this study was, therefore, to investigate contextual and pedagogical challenges that lie behind ensuring the holistic development of young children.

The general aim of this study was, therefore, to explain and explore curriculum implementation challenges faced by ECCE teachers in the Amhara National Regional State of Ethiopia in ensuring the holistic development of young children. This general aim was based on two specific objectives:

- To offer a comprehensive analysis of the literature on the nature of ECCE both internationally and nationally, and
- To provide an analytical account of the relationship between curriculum implementation and the holistic development of young children by focusing on the following:
  - The nature of ECCE in Amhara National Regional State;
  - Curriculum implementation;
  - The alignment between curriculum, pedagogy, and assessment;
  - The nature of teacher training;
  - The appropriateness of the physical environment; and
  - The role of District, community and parental support.

This aim and subsequent objectives translated into the following research questions, which framed and guided the research process. The main research question was: what are the curriculum challenges that ECCE teachers face in the Amhara National Regional State of Ethiopia in ensuring the holistic development of young children? a study of three Administrative Zones selected in Amhara National Regional State. To address the main questions, the following sub-questions were raised.

- What is the nature of ECCE in the Amhara National Regional State in Ethiopia?
- To what extent does the ECCE curriculum address the holistic development of children?
- What is the nature of teacher training in early childhood education and how does this impact their ability to implement and deliver the curriculum?

231

- How do the curriculum, pedagogic practices, and assessment align to support the holistic development of children?

- To what extent does the physical environment support the holistic development of children?

- What is the nature of District, Community and Parental support in the implementation and delivery of the curriculum?

To answer these questions, a concurrent mixed methods research design was adopted. Methodologically, this study was built upon the philosophical insight gained from the pragmatism assumption, as well as mixed methods research. To guide the process of selecting research sites and participants for this study, I employed both purposive and probability sampling techniques. Firstly, three administrative zones (North Wollo, Bahir Dar City, and East Gojam zone) were selected using simple random sampling. Secondly, 30% (396) of teachers were selected using multistage random sampling for the quantitative and questionnaire data completed. For qualitative data, 4 ECCE teachers and 2 experts (1 from the Ministry of Education and 1 from the Regional Education Bureau) were selected using purposive sampling techniques. In addition, from these sampled preschools 25 preschools were selected for structured observation using purposive sampling based on their accessibility.

To gain a better understanding of the phenomenon under study, I also used document sources, such as ECCE policy, curriculum, teacher's guide, national and regional annual abstracts reports, and teachers' lesson plans. Then the quantitative statistical data were collected through structured questionnaires and structured observation and qualitative textual data were collected through semi-structured interviews and documents. Data analysis in a concurrent mixed methods research design involves the concurrent, but separate, collection and analysis of quantitative and qualitative data (Creswell & Creswell, 2018; Molina-Azorin, 2018). The qualitative and quantitative data were collected concurrently/simultaneously, analysed and presented in separate sections and integrated into the discussion of chapter seven (Gubrium et al., 2012). Thus, the quantitative statistical results were presented in chapter six and then followed by the qualitative results in chapter seven. Then the quantitative results obtained using questionnaires and structured observation were integrated with qualitative results obtained through semi-structured interviews and document analysis in

chapter 8, and the two datasets were juxtaposed to generate complementary insights that together create a larger picture (Creswell, 2014; Leavy, 2017). Theoretically, this study was framed within the sociocultural theory of Vygotsky. The theoretical reflection of sociocultural theory is presented in the next section (9.3). The main findings that emerged from the data are discussed and presented in relation to the research questions as follows.

9.3   Summary of key findings in relation to the research questions

a)   What is the nature of ECCE in the Amhara National Regional State in Ethiopia?

It was clear from the discussion that Ethiopia has adopted a sound early childhood care and education policy that recognises the right to a healthy start in life, to be nurtured in a safe, caring, and stimulating environment, and to develop to their fullest potential. However, despite this ambitious and attractive statement, the findings revealed that there is a significant gap between government policy and actual programme implementation and government commitment, particularly in terms of funding and financing the ECCE sector, expanding access and participation, and improving the quality of ECCE service. The finding showed that preschools face serious budget problems, and government funding for ECCE is still limited and it is not the government's top priority i.e. the government commitment is not aligned with the allocation of sufficient financial resources. A similar report has been reported previously by (Janice Kim et al., 2022). It is clear from the discussion of chapter six, most Woreda education office leaders do not prioritize ECCE and they hire untrained teachers by contract.

The responsibility for managing and financing ECCE is left to the Kebele or District Administrative ECCE implementing committee which does not have decision-making power. Furthermore, the findings also showed that access and participation remain a challenging issue in Ethiopia; it is still disadvantageous to rural children and economically disadvantaged parents. Currently, the national gross enrolment rate remains extremely low and more than 63% of young children lack access to early childhood care and education. Instead of steadily improving, the rate of participation is declining; it decreases from 45.4% in 2019/2020 to 36.7% (2020/21). In 2021, the gross enrolment in the Amhara region was 39.9% (ANRS, 2021) i.e. more than 60.1% of children do not have access to ECCE. Lack of trained staff in ECCE (from the Regional Education Bureau to the Woreda Education Office), lack of coordination and joint ventures among different

233

departments and Ministers and single management system, teacher turnover, inappropriate learning environments or poor preschool facilities, lack of parental awareness, poor community collaboration and partnerships, geographical location or home school distance are major problems low access, and poor-quality service. Despite the division of labour or administration, the partner Ministries lack coordination, collaboration, and a joint venture.

Concerning epistemological assumptions, the finding revealed that the early childhood care and education curriculum practised a child-centred teaching approach based on developmentally appropriate practice drawing on the constructive learning theory of how children learn through active participation. However, findings also revealed that teachers lack basic theoretical knowledge and understanding of the curriculum and the learning theory of developmentally appropriate practice. Teachers are insufficiently informed about ECCE policy and curriculum, lack up-to-date information, and there exists a lack of a shared frame of understanding between the curriculum planners or experts and teachers. This has an impact on how teachers teach and assess children and may result in neglecting the basic learning needs of children, so the curriculum will fail to be implemented effectively.

This study also found that there is a lack of curriculum integration, each of the learning domains is presented separately in distinct learning areas such as language and use; mathematics; sensory and physical development; personal, social, and emotional development; and environmental knowledge and skill. Curriculum elements are not planned in an integrated fashion to support the holistic development of children. There is a lack of coherence in stating the main learning domains between the national policy framework, the ECCE syllabus and the teachers' guide because the national policy has not yet been revised since it was developed in 2010. Therefore, it appears that children's learning is not viewed holistically.

b) To what extent does the ECCE curriculum address the holistic development of children?

The findings revealed that curriculum content and learning experiences are inadequate and lack comprehensiveness to provide opportunities for children in a broad range of holistic development areas, such as physical, social, cognitive, creative, and aesthetic appreciation. It was found that children did not get sufficient learning experiences in the most important developmental areas that are essential for their later development such as physical development, early science, self-

regulation, art or creativity, and emotional development. Ineffective provision of these learning domains is disadvantageous to children to enhance their holistic development. Teachers' planning and teaching approaches mainly focused on cognitive aspects of development and are inadequate to meet individual needs and abilities. In addition, findings revealed that ECCE curriculum does not integrate with locally known games, arts, folklore, puzzles, poems, and stories as well as indigenous knowledge of "Geeze," especially 'Abugida' that will help children to master the alphabet, sound, and shape of letters easily. Furthermore, lack of resources and materials or poor facilities, lack of monitoring and ongoing instructional supervision, shortage of trained teachers, teacher turnover, a very high teacher-child ratio, and lack of teacher training opportunities and incentives; parent awareness and involvement have been identified as exacerbating factors.

c) *What is the nature of teacher training in early childhood education and how does this impact their ability to implement and deliver the curriculum?*

The findings revealed that preschool teachers lack pedagogical content knowledge; necessary competency, skills and adequate preparation to enhance young children's holistic development as well as to effectively implement and deliver the curriculum. Teachers lack the competency and skills to plan, assess children's learning, and adapt the use of space, materials, and time to meet the needs of the children. The findings showed that the preservice teachers' training programme is inadequate to prepare teachers with the necessary pedagogical content knowledge, basic disciplinary content knowledge, competency and skills and to provide them with rich, meaningful educational experiences in child growth, development and learning. In other words, preservice teachers training curriculum and courses lack breadth and integration with the ECCE curriculum as well as with children's learning and development. Teachers have strong negative perceptions and complaints about the preservice training course and trainees' teaching approach and assessment strategies. Teachers perceive themselves as inadequately prepared to be able to work as ECCE teachers. In addition, the lack of a well-prepared preservice training curriculum, inadequate preparation of teacher trainers, lack of resources and facilities; short duration of the training, and course load as the challenges of preservice teachers' training.

Furthermore, this study finding showed that preschool teachers in the Amhara National Regional State do not have access to in-service professional development opportunities. Both at the Regional

and national levels, there are no established guidelines for ECCE teachers' in-service professional development. Overall, the finding showed that in-service professional development is not part of early childhood care and education in Ethiopia. Thus, lack of in-service training may limit teachers' opportunities to constantly analyse the effectiveness of what they do, reflect on their current practice, make adaptations when things are not going well, and continually explore new alternatives and opportunities for improvements. Furthermore, findings revealed that teachers are unsatisfied with their profession and do not have positive attitudes toward their job. This is due to unsupportive attitudes of parents and the community, insufficient preparation in preservice training, a poor government support system, and teachers' low salaries are the main reasons for teachers' dissatisfaction with their jobs. Coupled with this, data findings revealed that preschool teachers have job insecurity problems because many of them were hired on contract. Therefore, it is possible to conclude that the challenges that preschool teachers face are more likely structural and emanate from policy.

d) *How do the curriculum, pedagogic practices, and assessment align to support the holistic development of children?*

The finding revealed that there is a misalignment between curriculum content, pedagogical approaches, and assessment practices. In other words, the way teachers develop lessons, deliver instruction and assess children's learning and development lacks instructional alignment and are not mutually interrelated to ensure young children's holistic development. As a pedagogical approach, teachers mostly commonly used whole-class lectures or direct instruction, which is insufficient to support young children's development of emerging skills, extend their capabilities and efforts, as well as address individual learning styles. Instruction would be completely unnecessary if it merely utilized what had already matured in the developmental process if it were not itself a source of development" (Vygotsky, 1978). The findings also revealed that as a pedagogical approach, play is not adequately integrated into the curriculum and learning activities or is not explicitly linked to the corresponding content and objectives.

Furthermore, there is a significant gap and misalignment between teachers' assessment practices and policy intention. Teachers' assessment strategies are inadequate to fully assess and describe children's learning and development such as cognitive, and physical well-being or motor, social

236

and emotional development. Teachers' assessment strategies mainly focused on judging children's current academic performance as correct or incorrect; using numbers instead of assessing children's progress over time. Assessing fully developed competencies or current achievement underestimates children's capacities because the information obtained pertains only to the lowest level of the ZPD. Therefore, it appears that children's learning progress and achievements were not assessed systematically and assessment results are not used to develop resources, change room setup, implement curricular activities, and refine instruction. Thus, it is possible to conclude that there is a misalignment between the National Policy intention and teachers' assessment practice.

e) To what *extent does the physical environment support the holistic development of children?*

This study finding revealed that most preschools have adequate outdoor and indoor space and play areas. However, the finding revealed that the indoor and outdoor learning environments are inadequate to provide children with a stimulating social and emotional learning environment and support children's needs; almost all the preschools are under-resourced and lack a variety of equipment, aesthetic and sensory characteristics which are necessary for the holistic development of young children. The indoor and outdoor environments and physical spaces are not intentionally organized and structured to support the gross and fine motor development of young children.

The data revealed that teachers' lesson plans mainly focused on cognitive activities such as mathematics, and language, but outdoor and indoor learning environments are overlooked and are not appropriate to offer children a pleasant, enjoyable, and emotionally rich learning environment. Activities are not properly planned and integrated to support children's physical and sensory-perceptual development for children with different abilities and interests. Indeed, there is a shortage of playing materials and facilities materials to engage children in problem-solving, critical thinking, and creativity. Furthermore, preschools are not adequately equipped to provide basic sanitation facilities, such as safe and potable water and hand washing water. Moreover, all of the preschools do not have procedures in place for the protection of children from hazards or abuse.

f) ***What is the nature of District, Community and Parental support in the implementation and delivery of the curriculum?***

The findings revealed that parents and community involvement are promising. They are very involved in expanding O-class, hiring contract teachers, building and maintaining classrooms, buying carpets and chairs and so on. However, preschools do not get financial support either from the government or the community. Due to this, preschools, particularly in urban areas are forced to collect money from parents. Parents pay school fees from a minimum of 50 to 120 Birrs per month. Furthermore, preschools, parents and community representatives seldom engage in direct communication, joint programme planning or implementing programme activities and decision-making. There is also poor collaboration and partnership with other sectors and stakeholders.

Furthermore, the findings revealed that parental communication is not planned and scheduled and parents do not have regular opportunities to discuss and share their children's progress with teachers. Overall, analysis of the data revealed that parental and community partnership is not supported and led in a way that will bring changes and programme improvements and their contribution is not properly documented and reported. Lack of parents' awareness, time, and prioritisation, a lack of trained principals, parent and community participation guidelines, absence of institutional structure and poor government support are contributing factors to poor parental and community partnerships.

9.4   Reflecting on the Theoretical Framework that Framed this Study

Theoretically, this study was framed within the sociocultural theory of Vygotsky. The sociocultural theory of Vygotsky is a contemporary theoretical perspective for early childhood education, which explains the sociocultural forces in shaping the situation of a child's development and learning; systemic interrelationships and interdependencies between development and learning or teaching; childhood practice and teacher professional development; provides strong theoretical support for the critical role of the teacher or skilled partner in the development of children; and also identifies the crucial role played by peers, parents, and the community in defining the types of interaction occurring between children and their environments (Hatch, 2010; Kozulin et al., 2003; Stremmel, 1993). The constructs like the Zone of Proximal Development (ZPD), mediation, and scaffolding, which lie at the heart of Vygotsky's theory, were used to

understand human cognition and learning as social and cultural rather than individual phenomena (Kozulin et al., 2003). In the context of this study, as a researcher, I believe that the socio-cultural theory of Vygotsky provided me with a conceptual and analytical lens to explain and explore the implementation challenges faced by ECCE teachers in the Amhara National Regional State of Ethiopia in ensuring the holistic development of young children. It is especially important to understand the relationship between children's learning and development, the appropriateness of curriculum, assessment, pedagogical practice, and physical environment, as well as teachers' training and the role played by teachers, which this study intended to explore.

In this regard, Mahn (2003, p120) notes that "Vygotsky provides a solid foundation for developing teaching-learning environments that value the whole child and honour the different cultures, languages, prior experiences and learning styles that children take to the classroom". Moreover, as discussed earlier in chapter four, Vygotsky's theoretically constructed concepts, such as scaffolding, ZPD, mediation, and dynamic assessment have better instructional implications on teacher-child interaction, the use and selection of teaching methods, and assessment strategies. According to Edwards (2009), a sociocultural theory is an appropriate theoretical approach for a culturally and linguistically diverse communities. Thus, Vygotsky's theory may be useful in understanding early learning in multilingual countries like Ethiopia.

9.5   Implications and recommendations for further studies

Whilst this study focused on explaining and exploring curriculum implementation challenges faced by ECCE teachers in ensuring the holistic development of young children in Amhara National Regional State of Ethiopia. The finding holds various implications for the teaching and learning of children in ECCE, opening up possibilities for further study.

1. Policy and policy frameworks are important levers for ensuring high-quality service and improving the equity of access and participation for parents and vulnerable children. It is also instrumental in improving quality in ECCE settings such as curriculum and pedagogy, support and monitoring, and parent and community engagement. Considerable progress has been made in the policy arena. However, the finding revealed that there is a significant gap in policy implementation and government commitment, particularly in funding, access and participation, support, and monitoring. Public funding is also limited to enhancing quality service.

239

Implications: this study showed that most preschools are under-resourced and of poor quality; do not have trained leadership/principal, ongoing support, and monitoring. Thus, without the direct involvement of the government and supplementary funding, and a strong management system, young children in rural areas may not have equal access and will continue with low-quality care and education.

Recommendations: what is needed right now is strengthening and addressing policy responsibility at all levels (from Ministry to District or Kebele ECCE implementing committees). It is also imperative to support the policy direction with international studies, programme evaluations, and quality evaluation standards that have a positive impact on young children's holistic learning and development. There is a need to raise awareness among parents and the community about young children's holistic development using national and regional media. Furthermore, improving the working conditions of teachers needs the government's prior attention.

2. Curriculum is one of the other critical components for ensuring young children's holistic development, it sets out principles, goals, guidelines, values, and contents that children learn as well as a pedagogical approach and assessment strategies to address the whole child. The finding reveals that the curriculum framework lacks content and learning experiences integration. It was also found that the curriculum is inadequate to support young children's holistic development (physical, personal social and emotional, cognitive, creativity and aesthetic development).

Implications: In order to foster and nurture young children's holistic development in an integrated manner, a culturally competent early childhood care and education curriculum framework based on relevant theory supported by appropriate resources is required.

Recommendations: In order to address interrelated domains of the holistic development of a child, further rigorous studies are needed on curriculum integration. The Regional Education Bureau should invite researchers to conduct a systematic review of the ECCE theory and curriculum to support Ethiopian culture and values and child-rearing practices. Indeed, early childhood care and education theory and curriculum need to be a debatable and negotiable issue.

3. Preservice and in-service training and working conditions, which are crucial for a teacher's pedagogical content knowledge and competency, fill the gap of insufficient preparation in

240

preservice training and keep teachers up to date with new knowledge as well as motivate and retain qualified teachers. The findings revealed that preschool teachers lack pedagogical content knowledge; competency and adequate preparation to implement and deliver the curriculum. It was evident from the observation that teachers lack a basic understanding of pedagogical principles and skills to plan, assess children's learning, and adapt the use of space, materials, and time to meet the needs of the children.

Implications: it is evident from interview analysis that preservice teachers' training courses lack breadth and integration with the ECCE curriculum as well as with children's learning and development. The finding also found that in-service training is not part of early childhood care and education. Poor working conditions are another contributing factor.

Recommendations: revising the preservice training curriculum and aligning it with the ECCE curriculum is needed. Both Ministry of Education and the Education Bureau have called researchers and facilitated Universities and teachers' training colleges to work in collaboration. Moreover, teacher training colleges have an important task in equipping teachers with enough theoretical pedagogical content knowledge as well as providing time and experience to reflect upon the competencies needed of an early childhood teacher in the Ethiopian preschool context. The teacher training colleges and Education Bureau have to identify the right professional development strategies and give priority to in-service training and develop a system and standards for the in-service training material for preschool teachers.

4. Assessing instructional alignment help policymakers refine curriculum, identify professional development needs, and assess classroom practice. The finding revealed that teachers' assessment procedures are insufficient to inform children's development and to the improvement of the teaching and learning process.

Implications: If curriculum, pedagogy, and assessment components are integrated they can deliver a consistent message about what should be taught and assessed. This study finding revealed that teachers' pedagogical approaches, assessment purposes, and procedures lack instructional alignment to ensure young children's holistic development. It is clear from the discussion that assessment practices focus on current academic achievement (i.e., the cognitive aspect of

241

development), which means social, emotional, and physical aspects of child development are neglected and inconsistent with what the national policy calls for.

Recommendations: I strongly suggest that teachers need urgent specific training on child assessment. Coupled with this, a common assessment framework or guideline, and recording forms are needed. In collaboration with universities, the Regional Education Bureau has to conduct more in-depth content alignment studies to look deeply at the interplay and how well content, teaching strategies, and assessments are aligned as well as to refine curriculum, identify professional development needs, and assess classroom practice.

5. Learning environment: Unlike productive instructional strategies, children need a supportive and stimulating learning environment that will foster their holistic development. The finding revealed that outdoor and indoor learning environment is inadequate to provide natural play space and create an emotional and stimulating learning environment for children, which is necessary for their holistic development.

Implication: As evident in this study's findings, curriculum content and learning experiences seem adequate to provide opportunities for children's physical-fine and motor gross development. However, this study indicated that teachers lacked skills in planning and preparing outdoor and indoor learning environments to support the developmental and learning skills of children with different needs and abilities, and they also paid less attention to outdoor learning environments.

Recommendation: Zone Education Department and Woreda Education office have to provide further training and ongoing supervision to plan, structure, and organize indoor and outdoor learning environments using locally available material. Ministry of Education and Regional Education Bureau has to develop culturally specific standards for monitoring and inspection of indoor and outdoor learning settings. In addition to mobilizing the community, special government support is needed to meet resource shortages.

6. Parent and community-school partnerships: the holistic development of children must necessarily connect with cultural and social contexts; building strong, respectful partnerships aids teachers to understand and build on children's experiences and supports the development and

242

effective implementation of the curriculum. The findings revealed that parents have a low level of involvement in their children's education as well as a lack of information and awareness.

Implication: the findings revealed a lack of teacher-parent communication and a lack of collaboration and joint planning and decision-making with parents and the community. As it was found, almost all preschools do not have a principal. Again, the data revealed that parental and community partnership is not supported, or led in a way that will bring changes and improvements. Thus, so far leadership matters.

Recommendation: Woreda Education has to assign principals who are trained in ECCE. Ministry of Education and Regional Education Bureau has to develop parent and community participation guidelines and provide training to teachers and cluster supervisors on the benefits and barriers to parental and community involvement, as well as techniques for improving two-way communication between the home, community, and preschool.

9.6   Conclusion

This final chapter restated the problem, that this thesis sought to address, namely, to explain and explore curriculum implementation challenges faced by ECCE teachers in Amhara National Regional State of Ethiopia in ensuring the holistic development of young children. I provided an overview of the study, revisited the main findings emanating from the research process, theoretical reflection used to frame the study, and provided the implications and recommendations of the findings for various stakeholders, as well as suggestions for further research.

Inadequacies of curriculum content to ensure holistic development of young children; inadequacies of preservice teachers' training and professional development; and teachers' knowledge and competency to deliver the curriculum; misalignment of policy intention and actual practice; curriculum implementation challenges; insufficient support and monitoring of Woreda Administrates, parents, and community; as well as alternative theoretical frameworks are suggested.

I concluded that ensuring the holistic development of young children cannot be the sole responsibility of teachers alone; consistent and well-integrated approaches and support are required, including a culturally competent curriculum framework and parent and community

243

involvement. Above all, the strong commitment of the government to implement the policy is very critical for the effective implementation of the curriculum, which in turn would ensure young children's holistic development.

REFERENCES

Admassu, G. (2014). *The Situation of Public and Private Early Childhood Education in Bonga Town: A Comparative Analysis*. Addis Ababa University.

African Union. (2014). The African Union Education Outlook Report : Early Childhood Development : A Continental Perspective., (AU Outlook on Education, 2014), 2–6.

African Union Commission. (2016). *Continental Education Strategy for Africa 2016 – 2025*.

Ahmadian, M. (2014). Sociocultural Theory in Practice : The Effect of Teacher, Class, and Peer Scaffolding on the Writing Development of EFL Learners. *International Journal of Applied Linguistics & English Literature*, *3*(5), 1–12. https://doi.org/10.7575/aiac.ijalel.v.3n.5p.1

Akpan, B., & Kennedy, T. J. (Eds.). (2020). *Science Education in Theory and Practice: An Introductory Guide to Learning Theory*. Springer Texts in Education. https://doi.org/10.1007/978-3-030-43620-9

Alasuutari, P., Bickman, L., & Brannen, J. (2009). *The SAGE Handbook of Social Research Methods. Los Angeles, Calif.: SAGE*. Los Angeles: Sage.

Albaiz, N. E. A., & Ernest, J. M. (2021). Exploring Saudi Kindergarten Teachers' Views and Uses of School, Family, and Community Partnerships Practices. *Early Childhood Education Journal*, *49*(3), 451–462. https://doi.org/10.1007/s10643-020-01091-z

Altun, Z. D. (2018). Early Childhood Pre-Service Teachers' Perspectives on Play and Teachers' Role. *International Education Studies*, *11*(8), 91–97. https://doi.org/10.5539/ies.v11n8p91

Alvesad, M., & Duncan, J. (2006). "The Value is Enormous-It's Priceless I Think!" New Zealand Preschool Teachers' Understandings of The Early Childhood Curriculum in New Zealand—A Comparative Perspective. *International Journal of Early Childhood*, *38*(1), 31–45.

Ameri, M. (2020). Criticism of the Sociocultural Theory. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, *3*(3), 1530–1540. https://doi.org/10.33258/birci.v3i3.1082 1530

245

Amogne, A. (2015). The Impact of Attending Pre-School Education on Later Academic Achievement of Students: Empirical Evidence from Dessie, Ethiopia. *Basic Research Journal of Education Research and Review*, *4*(3), 72.80.

Angela, A., Cullen, J., & Fleer, M. (Eds.). (2004). *Early Childhood Education; Society and Culture*. New Delhi: Sage Publications.

ANRS. (2013). *Amhara National Regional State Education Bureau Annual Education Statistics Abstract*. Bahir Dar, Ethiopia.

ANRS. (2021). *Amhara National Regional State Education Bureau Annual Education Statistics Abstract*. Bahir Dar, Ethiopia.

Arndt, S., & Tesar, M. (2015). Early Childhood Assessment in Aotearoa New Zealand: Critical Perspectives and Fresh Openings. *Journal of Pedagogy*, *6*(2), 71–86. https://doi.org/10.1515/jped-2015-0014

Babakr, Z. H., Mohamedamin, P., & Kakamad, K. (2019). Piaget's Cognitive Developmental Theory: Critical Review. *Education Quarterly Reviews*, *2*(3), 517–524. https://doi.org/10.31014/aior.1993.02.03.84

Bajpai, S., & Bajpai, R. (2014). Goodness of Measurement: Reliability and Validity. *International Journal of Medical Science and Public Health*, *3*(1), 173–176. https://doi.org/10.5455/ijmsph.2013.191120133

Baluyos, G. R., Rivera, H. L., & Baluyos, E. L. (2019). Teachers' Job Satisfaction and Work Performance. *Open Journal of Social Sciences*, *7*(8), 206–221. https://doi.org/10.4236/jss.2019.78015

Barnett, W. S. (2008). Preschool Education and its Lasting Effects: Research and Policy Implications. *Boulder and Tempe: Education and the Public Interest Center & Education Policy Research Unit.*, 1–37.

246

Barnett, W. S., Jung, K., Yarosz, D. J., Thomas, J., Hornbeck, A., Stechuk, R., & Burns, S. (2008). Educational effects of the Tools of the Mind curriculum: A randomized trial. *Early Childhood Research Quarterly*, *23*, 299–313. https://doi.org/10.1016/j.ecresq.2008.03.001

Basit, T. (2003). Manual or Electronic? The Role of Coding in Qualitative Data Analysis. *Educational Research*, *45*(2), 143–154. https://doi.org/10.1080/0013188032000133548

Belay, T. (2018). Early Childhood Care and Education (ECCE) in Ethiopia: Development, Research, and Implications. *Eastern Africa Social Science Research Review*, *34*(1), 171–206. https://doi.org/10.1353/eas.2018.0005

Benko, S. L. (2013). Scaffolding: An Ongoing Process to Support Adolescent Writing Development. *Journal of Adolescent & Adult Literacy*, *56*(4), 291–300. https://doi.org/10.1002/JAAL.00142

Bergen, D., & Hardin, B. J. (2015). Involving Early Childhood Stakeholders in Programme Evaluation: The GGA Story. *Childhood Education*, *91*(4), 259–264. https://doi.org/10.1080/00094056.2015.1069154

Berk, L. E., & Winsler, A. (1995). *Scaffolding Children's Learning: Vygotsky and Early Childhood Education. NAEYC Research into Practice Series. Volume 7*. New York: National Association for the Education of Young Children.

Black, M. M., Walker, S. P., Fernald, L. C. H., Andersen, C. T., DiGirolamo, A. M., Lu, C., … & Grantham-McGregor, S. (2017). Early Childhood Development Coming of Age: Science Through the Life Course. *The Lancet*, *389*(10064), 77–90. https://doi.org/10.1016/S0140-6736(16)31389-7

Bodrova, E., & Leong, D. J. (2001). Tools of the Mind: A Case Study of Implementing the Vygotskian Approach in American Early Childhood and Primary Classrooms, *19*(1), 75. https://doi.org/10.1016/0165-6074(87)90235-3

Bodrova, B. E., & Leong, D. J. (2005). Promoting Student Self-Regulation in Learning. *Education Digest*, *7*(2), 54–58.

247

Bodrova, E., & Leong, D. (1998). Scaffolding Emergent Writing in the Zone of Proximal Development. *Literacy Teaching and Learning*, *3*(2), 1–19.

Bodrova, E., & Leong, D. J. (2007). *Tools of the Mind: The Vygotskian Approach to Early Childhood Education* (2nd ed.). New Jersey: Kevin M. Davi.

Bodrova, E., & Leong, D. J. (2011). When Everything New is Well-Forgotten Old: Vygotsky/ Luria Insights in the Development of Executive Functions. *New Directions for Child and Adolescent Development*, (133), 11–28. https://doi.org/10.1002/cd.301

Bodrova, E., & Leong, D. J. (2013). Play and Self-Regulation. *American Journal of Play*, *6*(1), 111–123.

Bodrova, E., & Leong, D. J. (2018). Tools of the Mind: A Vygotskian Early Childhood Curriculum. In *International Handbook of Early Childhood Education* (pp. 1311–1322). Denver: Springer. https://doi.org/10.1007/978-94-024-0927-7

Bodrova, E. (1997). Key Concepts of Vygotsky's Theory of Learning and Development. *Journal of Early Childhood Teacher Education*, *18*(2), 16–22. https://doi.org/10.1080/1090102970180205

Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, *9*(2), 27–40. https://doi.org/10.3316/QRJ0902027

Bowman, B. T., Donovan, M. S., & Burns, M. S. (2001). *Eager to Learn: Educating Our Preschoolers*. Washington: National Academy of Sciences. https://doi.org/10.17226/9745

Bradburn, N., Sudman, S., & Wansink, B. (2004). *Asking Questions: A Practical Guide to Questionnaire Design*. Jossey-Bass. https://doi.org/10.1016/0198-9715(90)90052-U

Brannen, J., & O'Connell, R. (2015). *The Oxford Handbook of Multimethod and Mixed Methods Research Inquiry*. (S. Hesse-Biber & R. B. Johnson, Eds.). New York: Open University Press.

Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

248

Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., … & Bhutta, Z. A. (2017). Nurturing Care: Promoting Early Childhood Development. *The Lancet*, *389*(10064), 91–102. https://doi.org/10.1016/S0140-6736(16)31390-3

Bruce, T. (2014). The Routledge International Handbook of Philosophies and Theories of Early Childhood Education and Care. *Practical Pre-School*, *2012*, 12–13. https://doi.org/10.12968/prps.2012.1.133.12

Bryan, J., & Henry, L. (2012). A Model for Building School - Family - Community Partnerships: Principles and Process. *Journal of Counseling & Development*, *90*(4), 408–420. https://doi.org/10.1002/j.1556-6676.2012.00052.x

Bryman, A. (1989). *Research Methods and Organization Studies (Contemporary Social Research)*. London: Routledge.

Bryman, A. (2006). Integrating Quantitative and Qualitative Research: How is it Done? *Qualitative Research*, *6*(1), 97–113. https://doi.org/10.1177/1468794106058877

Bryman, A. (2016). *Social Research Methods* (5th ed.). Oxford: Oxford University Press.

Bryman, A., & Bell, E. (2011). *Business Research Methods* (Third). New York: Open University Press.

Burger, K. (2010). How do Early Childhood Care and Education Affect Cognitive Development? An International Review of the Effects of Early Interventions for Children from Different Social Backgrounds. *Early Childhood Research Quarterly*, *25*(2), 140–165. https://doi.org/10.1016/j.ecresq.2009.11.001

Bush, A. A., & Amechi, M. H. (2019). Conducting and Presenting Qualitative Research in Pharmacy Education. *Currents in Pharmacy Teaching and Learning*, 0–1. https://doi.org/10.1016/j.cptl.2019.02.030

Cameron, R. (2011). Mixed Methods Research: The Five Ps Framework: One-stop search. *The Electronic Journal of Business Research Methods*, *9*(2), 96–108. https://doi.org/ISSN 1477-7029

Cantor, Osher, D., Berg, J., Steyer, L., & Rose, T. (2019). Malleability, Plasticity, And Individuality: How Children Learn and Develop in Context. *Applied Developmental Science*, *23*(4), 307–337. https://doi.org/10.1080/10888691.2017.1398649

Carroll, J. M. (2004). Letter knowledge precipitates phoneme segmentation, but not phoneme invariance. *Journal of Research in Reading*, *27*(3), 212–225.

Chaiklin, S. (2003). The Zone of Proximal Development in Vygotsky's Analysis of Learning and Instruction. In A. Kozulin, B. Gindis, V. S. Ageyev, & S. M. Miller (Eds.), *Vygotsky's Educational Theory in Cultural Context* (pp. 39–64). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511840975.004

Chikutuma, T. (2015). Nutrition, Health and Safety in Early Childhood Development Programmes in Selected Harare Primary Schools in Zimbabwe. *Zimbabwe Journal of Educational Research*, *27*(1).

Clemson, D., & Clemson, W. (2001). *Mathematics in the Early Years*. London: Routledge.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education* (6th ed.). London: Routledge. https://doi.org/10.1111/j.1467-8527.2007.00388_4.x

Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in Education* (8th ed.). London and New York: Routledge.

Cole, M., Levitin, K., & Luria, A. (2006). *The Autobiography Alexander Luria*. New Delhi: Lawrence Erlbaum Associates, Inc.

Confrey, J. (1995). A Theory of Intellectual Development. *For the Learning of Mathematics*, *15*(1), 38–48.

Cooper, A. (2015). Nature and the Outdoor Learning Environment: The Forgotten Resource in Early Childhood Education. *International Journal of Early Childhood Environmental Education*, *3*(1), 85–97.

Cope, D. G. (2014). Methods and Meanings: Credibility and Trustworthiness of Qualitative Research. *Oncology Nursing Forum*, *41*(1), 89–92. https://doi.org/10.7748/nr2009.07.16.4.40.c7160

Creswell, J. W. (2014). Research Design. Qualitative, Quantitative and Mixed Methods Approach. https://doi.org/10.1007/s13398-014-0173-7.2

Creswell, J. W., Plano-Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). An Expanded Typology for Classifying Mixed Methods Research Into Designs. In T. C. Teddlie (Ed.), *Handbook of Mixed Methods in Social and Behavioural Research* (pp. 209–240). Thousand Oaks: Sage. https://doi.org/10.1017/CBO9781107415324.004

Creswell, J W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Thousand Oaks: SAGE Publications. https://doi.org/10.1007/s13398-014-0173-7.2

Creswell, J. W. (2003a). *Research Design : Qualitative, Quantitative and Mixed Method Approaches* (2nd ed.). Thousand Oaks, Calif: Sage Publications.

Creswell, J. W. (2003b). *Research Design and Mixed Methods Quantitative. Qualitative, Approaches* (2nd ed.). London: Sage Publications Ltd. https://doi.org/08 jun 2015

Creswell, J. W. (2014). *Research Design : Qualitative, Quantitative and Mixed Methods Approach* (4th ed.). Thousand Oaks, Calif: Sage Publications.

Creswell, J. W. (2015). *A Concise Introduction to Mixed Methods Research*. Los Angeles: Sage.

Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative and Mixed Methods Approach* (5th ed.). Los Angeles: Sage.

Creswell, J. W., & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory Into Practice*, *39*(3). https://doi.org/10.1207/s15430421tip3903

Creswell, J. W., & Miller, D. L. (2010). Analysing Qualitative Data. *Theory into Practice*, *39*(3), 124–130. https://doi.org/10.1207/s15430421tip3903

251

Creswell, J. W. (2007). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches* (second). New Delhi: Sage Publications.

Creswell, J. W. (2009). *Research Design - Qualitative, Quantitative and Mixed Approaches* (3rd ed.). Thousand Oaks: SAGE Publications. https://doi.org/10.1016/j.math.2010.09.003

Creswell, J. W. (2012). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research* (4th ed.). New York: Pearson. https://doi.org/10.1017/CBO9781107415324.004

Creswell, John W, & Planao Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research* (2nd ed.). Los Angeles: SAGE.

Creswell, John W, & Plano Clark, V. L. (2007). Choosing a Mixed Method Design. In *Designing and Conducting Mixed Methods Research* (pp. 58–89). https://doi.org/1412927927

Cross, C. T., Woods, T. A., & Schweingruber, H. (2009). *Mathematics learning in early childhood: Paths toward excellence and equity*. New York: National Academy Press.

Crotty, M. (1998). *The Foundations of Social Research: Meaning and Perspective in the Research*. Thousand Oaks: SAGE Publications.

Curtis, A., & O'Hagan, M. (2014). *Care and Education in Early Childhood: A Student's Guide to Theory and Practice*. New York: Routledge. https://doi.org/10.4324/9781315832012

Damon, W., Lerner, R. M., & Eisenberg, N. (Eds.). (2006). *Handbook of Child Psychology: Social, Emotional, and Personality Development* (6th ed.). New Jersey: John Wiley & Sons, Inc.

Daneshfar, S., & Moharami, M. (2018). Dynamic Assessment in Vygotsky's Sociocultural Theory : Origins and Main Concepts. *Journal of Language Teaching and Research*, *9*(3), 600–607. https://doi.org/10.17507/jltr.0903.20

Daniels, H. (2001). *Vygotsky and Pedagogy*. New York: RoutledgeFalmer.

Daniels, H. (2015). Mediation: An Expansion of the Socio-Cultural Gaze. *History of the Human Sciences*, *28*(2), 34–50. https://doi.org/10.1177/0952695114559994

252

Daniels, H., Cole, M., & Wertsch, J. V. (2007). *The Cambridge Companion to Vygotsky*. New York: Cambridge university press.

Danish, J., Saleh, A., Andrade, A., & Bryan, B. (2016). Observing Complex Systems Thinking in the Zone of Proximal Development. *Instructional Science*, *45*(1), 5–24. https://doi.org/10.1007/s11251-016-9391-z

Danniels, E., & Pyle, A. (2018). Play-based learning. In *Encyclopedia on early childhood development, 1-5*.

Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education*, *40*(3), 1–19. https://doi.org/10.1080/02619768.2017.1315399

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational Practice of the Science of Learning and Development. *Applied Developmental Science*, *24*(2), 97–140. https://doi.org/10.1080/10888691.2018.1537791

Davin, K. J., Herazo, J. D., & Sagre, A. (2017). Learning to mediate: Teacher Appropriation of Dynamic Assessment. *Language Teaching Research*, *21*(5), 632–651. https://doi.org/10.1177/1362168816654309

Dawson, J. (2017). Methodological Assumptions, Reliability and Validity. *Analysing Quantitative Survey Data for Business and Management Students*, 11–20. https://doi.org/10.4135/9781473983311.n2

de la Riva, S., & Ryan, T. G. (2015). Self-Regulation and Academic Success. *International Journal of Early Childhood Special Education*, *7*(1), 69–96.

De Vos, A. (2011). *Research at Grass Roots: For the Social Sciences and Human Services Professions* (4th ed.). Pretoria: Van Schaik.

Demeke, G. (2006). *Historical, Sociological and Philosophical Foundations of Early Education in Ethiopia*.

253

Denzin, N. K., & Lincoln, Y. S. (2018). *The SAGE Handbook of Qualitative Research* (5ᵗʰ ed.). Los Angeles: SAGE Publications. https://doi.org/10.1007/s11229-017-1319-x

Domínguez, S., & Hollstein, B. (2011). *Mixed Methods Social Networks Research Design*. New York: Cambridge University Press. https://doi.org/10.1088/1751-8113/44/8/085201

Doyle, L., Brady, A. M., & Byrne, G. (2016). An Overview of Mixed Methods Research – Revisited. *Journal of Research in Nursing*, *21*(8), 623–635. https://doi.org/10.1177/1744987116674257

Drange, N., & Telle, K. (2017). Preschool and School Performance of Children from Immigrant Families. *Empirical Economics*, *52*(2), 825–867. https://doi.org/10.1007/s00181-016-1091-7

Duhn, I., & Hennessy, L. (2019). Developmentalism, Developmentally Appropriate Practice (DAP) and Beyond in Early Childhood Education. In M. A. Peters (Ed.), *Encyclopedia of Teacher Education* (pp. 1–6). Springer Singapore. https://doi.org/10.1007/978-981-13-1179-6_95-1

Đurišić, M., & Bunijevac, M. (2017). Parental Involvement as an Important Factor for Successful Education. *Center for Educational Policy Studies Journal*, *7*(3), 137–153.

Easterbrook, S., Singer, J., Storey, M.-A., & Damian, D. (2008). Selecting Empirical Methods for Software Engineering Research. In *Guide to Advanced Empirical Software Engineering* (pp. 285–311). London: Springer. https://doi.org/10.1007/978-1-84800-044-5_11

Edmonds, W. A., & Kennedy, T. D. (2017). *An Applied Guide to Research Designs: Quantitative, Qualitative, and Mixed Methods*. New Delhi: Sage Publications Ltd.

Edwards, S. (2009a). *Early Childhood Education and Care: A Sociocultural Approach*. New South Wales: Pademelon.

Edwards, S. (2009b). *Early Childhood Education and Care*. New South Wales: Pademelon Press.

Edwards, Suzy. (2003). New Directions : Charting the Paths for the Role of Sociocultural Theory in Early. *Contemporary Issues in Early Childhood*, *4*(3), 251–266.

254

Epstein, J. & Sheldon, S. (2006). Moving Forward: Ideas for Research on School, Family, and Community Partnerships. In C.F. Conrad & R. Serlin (Eds.). *SAGE Handbook for Research in Education: Engaging Ideas and Enriching Inquiry.* (pp.117-138). Thousand Oaks, CA: SAGE Publications.

Epstein, J. L. (2010). School/family/Community Partnerships: Preparing Teachers and Preparing Schools. *Phi Delta Kappan*, *92*(3), 389–414.

Epstein, J. L. (2011). *School, Family, and Community Partnerships* (2nd ed.). Philadelphia: Westview Press.

Essa, E. L. (2014). *Introduction to Early Childhood Education* (6th ed.). Wadsworth: Nelson Education, Ltd.

Eun, B. (2008). Making Connections: Grounding Professional Development in The Developmental Theories of Vygotsky. *The Teacher Educator*, *43*(2), 37–41. https://doi.org/10.1080/08878730701838934

Eun, B. (2010). From Learning to Development: A Sociocultural Approach. *Cambridge Journal of Education*, *40*(4), 401–418. https://doi.org/10.1080/0305764X.2010.526593

Eun, B. (2011). A Vygotskian Theory-based Professional Development: Implications. *Professional Development in Education*, *37*(3), 319–333. https://doi.org/10.1080/19415257.2010.527761

Eun, B. (2018). Adopting a stance : Bandura and Vygotsky on Professional Development. *Research in Education*, *0*(0), 1–15. https://doi.org/10.1177/0034523718793431

Eun, B. (2019). The Zone of Proximal Development as an Overarching Concept: A Framework for Synthesizing Vygotsky's Theories. *Educational Philosophy and Theory*, *51*(1), 18–30. https://doi.org/10.1080/00131857.2017.1421941

Ezzat, M., Amin, K., Nørgaard, L. S., Cavaco, A. M., Witry, M. J., Hillman, L., … & Desselle, S. P. (2020). Research in Social and Administrative Pharmacy. *Research in Social and Administrative Pharmacy*, (February), 0–1. https://doi.org/10.1016/j.sapharm.2020.02.005

255

Fani, T., & Ghaemi, F. (2011). Implications of Vygotsky's Zone of Proximal Development (ZPD) in Teacher Education: ZPTD and Self-scaffolding. *Procedia - Social and Behavioural Sciences*, *29*(Iceepsy), 1549–1554. https://doi.org/10.1016/j.sbspro.2011.11.396

Feilzer, M. Y. (2010). Doing Mixed Methods Research Pragmatically: Implications for the Rediscovery of Pragmatism as a Research Paradigm. *Journal of Mixed Methods Research*, *4*(1), 6–16. https://doi.org/10.1177/1558689809349691

File, N., Mueller, J. J., & Wisneski, D. B. (Eds.). (2012). *Curriculum in Early Childhood Education: Re-examined, Rediscovered, Renewed*. New York: Routledge. https://doi.org/10.1017/CBO9781107415324.004

Fleer, M. (2015a). A Cultural-Historical View of Child Development : Key Concepts for Going Beyond a Universal View of the Child. *Asia-Pacific Journal of Research in Early Childhood Education*, *9*(1), 19–37. https://doi.org/10.17206/apjrece.2015.9.1.19

Fleer, M. (2015b). Developing an Assessment Pedagogy: The Tensions and Struggles in Re-Theorising Assessment from a Cultural-Historical Perspective. *Assessment in Education: Principles, Policy and Practice*, *22*(2), 224–246. https://doi.org/10.1080/0969594X.2015.1015403

Forman, E. A., Minick, N., & Stone, C. A. (1993). *Contexts for Learning: Sociocultural Dynamics in Children's Development*. New York: Oxford University Press.

Frank, M. L., Flynn, A., Farnell, G. S., & Barkley, J. E. (2018). The Differences in Physical Activity Levels in Preschool Children During Free Play Recess and Structured Play Recess. *Journal of Exercise Science & Fitness*, *16*(1), 37–42. https://doi.org/10.1016/j.jesf.2018.03.001

Gajdamaschko, N. (2015). Vygotsky's Sociocultural Theory. In *International Encyclopedia of the Social & Behavioural Sciences* (2nd ed., Vol. 25, pp. 329–334). Elsevier. https://doi.org/10.1016/B978-0-08-097086-8.23203-0

Geroge, D., & Mallery, P. (2003). *SPSS For Windows Step By Step: A Simple Guide and Reference* (4th ed.). Boston: Allyn and Bacon.

256

Gestwicki, C. (2017). *Developmentally Appropriate Practice: Curriculum and Development in Early Education* (6ᵗʰ ed.). Boston: Cengage Learning.

Gibson, W. J., & Brown, A. (2009). Working with Qualitative Data. In *Working with Qualitative Data* (pp. 81–87). London: SAGE Publications Ltd. https://doi.org/10.1007/s13398-014-0173-7.2

Girma, L. (2014). *Quality of Early Childhood Care and Education in Addis Ababa: Caregiver Child Interaction, Parental Perception and Social Competence of Children (Input-Process-Output Approach)*. Addis Ababa University.

Girma, S. (2014). *Early Childhood Education Practices: The Case of Akaki Kality Sub City Girma Sileshi A Thesis Submitted to The Institute of Educational Research*. Addis Ababa University.

Goldstein, L. S. (2008). Teaching the Standards is Developmentally Appropriate Practice: Strategies for Incorporating the Sociopolitical Dimension of DAP in Early Childhood Teaching. *Early Childhood Education Journal*, *36*(3), 253–260. https://doi.org/10.1007/s10643-008-0268-x

Gonulal, T., & Loewen, S. (2018). Scaffolding Technique. *The TESOL Encyclopedia of English Language Teaching*, 1–5. https://doi.org/10.1002/9781118784235.eelt0180

Gordon, A. M., & Browne, K. W. (2011). *Teach Source Video Cases bring the realities of Early Childhood Education to you*. Belmont: Graphic World Inc.

Graneheim, U. H., & Lundman, B. (2004). Qualitative Content Analysis in Nursing Research: Concepts, Procedures and Measures to Achieve Trustworthiness. *Nurse Education Today*, *24*(2), 105–112. https://doi.org/10.1016/j.nedt.2003.10.001

Grant, C., & Osanloo, A. (2016). Understanding, Selecting, and Integrating a Theoretical Framework in Dissertation Research: Creating the Blueprint for Your "House." *Administrative Issues Journal: Connecting Education, Practice, and Research*, *4*(2), 12–26. https://doi.org/10.5929/2014.4.2.9

Greenberg, J. P., Herman-Smith, R., Allen, S. F., & Fram, M. S. (2013). Early Childhood Education and Care Content for the Social Work Curriculum. *Journal of Teaching in Social Work*, *33*(3), 308–324. https://doi.org/10.1080/08841233.2013.794761

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*, *11*(3), 255–274. https://doi.org/10.3102/01623737011003255

Greenfield, D. B., Jirout, J., Greenberg, A., Maier, M., & Fuccillo, J. (2009). Early Education and Development Science in the Preschool Classroom: A Programmatic Research Agenda to Improve Science Readiness. *Early Education and Development*, *20*(2), 238–264. https://doi.org/10.1080/10409280802595441

Guba, E. G. (1982). Criteria for Assessing the Trustworthiness of Naturalistic Inquiries. *ERIC*, *29*(2), 75–91.

Guba, E. G. (1990). *The Alternative Paradigm Dialog*. London: SAGE Publications.

Guba, E., & Lincoln, Y. S. (1981). *Effective Evaluation: Improving the Usefulness of Evaluation Results Through Responsive and Naturalistic Approaches*. New York: Maxwell Macmillan.

Gubrium, J. F., Holstein, J. A., Marvasti, A. B., & McKinney, K. D. (2012). *The SAGE Handbook of Interview Research: The Complexity of the Craft* (2nd ed.). SAGE Publications. https://doi.org/10.4135/9781452218403

Gullo, D. F. (2005). *Understanding Assessment and Evaluation in Early Childhood Education* (2nd ed.). New York: Teachers College Press.

Guskey, T. R. (2000). *Evaluating professional development*. Thousand Oaks: Corwin press, INC.

Guskey, T. R., & Guskey, T. R. (1991). Enhancing the Effectiveness of Professional Development Programs. *Journal of Educational and Psychological Consultation*, *2*(3), 139–247. https://doi.org/10.1207/s1532768xjepc0203

Hammond, J., & Gibbons, S. P. (2005a). What is scaffolding? In *Teachers' Voices 8: Explicitly supporting reading and writing in the classroom* (pp. 8–17).

Hammond, J., & Gibbons, S. P. (2005b). Putting scaffolding to work : The contribution of scaffolding in articulating ESL education, *20*(1), 6-30.

Hardin, B. J. (2017). Investigating the Psychometric Properties of the ACEI Global Guidelines Assessment, Third Edition (GGA) in Nine Countries. *Early Childhood Education Journal*, *45*(3), 297–312. https://doi.org/10.1007/s10643-016-0795-9

Harraqi, M. (2017). Review of Aida Walqui's s Scaffolding Instruction for English Language Learners : A Conceptual Framework 2. The Consequences of the Social Nature. *American Journal of Arts and Design*, *2*(3), 84–88. https://doi.org/10.11648/j.ajad.20170203.13

Hatch, J. A. (2002). *Doing Qualitative Research in Education Settings*. New York: Albany.

Hatch, J. A. (2010). Rethinking the Relationship Between Learning and Development: Teaching for Learning in Early Childhood Classrooms. *Educational Forum*, *74*(3), 258–268. https://doi.org/10.1080/00131725.2010.483911

Hathcoat, J. D., & Meixner, C. (2017). Pragmatism, Factor Analysis, and the Conditional Incompatibility Thesis in Mixed Methods Research. *Journal of Mixed Methods Research*, *11*(4), 433–449. https://doi.org/10.1177/1558689815622114

Hawani, N. (2014). *Integration of Indigenous Knowledge and Cultural Practices in Early Childhood care and Education*.

Haywood, H. C., & Lidz, C. S. (2007). *Dynamic Assessment in Practice: Clinical and Educational Applications*. Cambridge: Cambridge University Press.

Heckman, J. J. (2006). Skill Formation and the Economics of Investing in Disadvantaged Children. *Science*, *312*(5782), 1898–1900. https://doi.org/10.1126/science.1130121

Heckman, J. J. (2004). Invest in the Very Young.In: R.E. Tremblay, R.G. Barr, R.D. Peters (Eds). *Encyclopedia on Early Childhood Development*, 1–2.

Heckman, J. J. (2012). Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy. *The Heckman Equation*, *7*, 1–2.

Hedges, H., & Cooper, M. (2014). Engaging with Holistic Curriculum Outcomes: Deconstructing 'Working Theories.' *International Journal of Early Years Education*, *22*(4), 395–408. https://doi.org/10.1080/09669760.2014.968531

Hedges, H., & Cullen, J. (2005). Subject Knowledge in Early Childhood Curriculum and Pedagogy: Beliefs and Practices. *Contemporary Issues in Early Childhood*, *6*(1), 66–79. https://doi.org/10.2304/ciec.2005.6.1.10

Hedges, H., Cullen, J., & Jordan, B. (2011). Early Years Curriculum: Funds of Knowledge as a Conceptual Framework for Children's Interests. *Journal of Curriculum Studies*, *43*(2), 185–205. https://doi.org/10.1080/00220272.2010.511275

Helms, J. E., Henze, K. T., Sass, T. L., & Mifsud, V. A. (2006). Treating Cronbach's Alpha Reliability Coefficients as Data in Counseling Research. *The Counseling Psychologist*, *34*(5), 630–660. https://doi.org/10.1177/0011000006288308

Hesse-Biber, S. N. (2010). *Mixed Methods Research: Merging Theory with Practice*. New York: Guilford Press.

Heyneman, S. P. (2010). Education and Development: A Return to Basic Principles. *Development*, *53*(4), 518–521. https://doi.org/10.1057/dev.2010.85

Hockenbury, S. E., Nolan, S. A., & Hockenbury, D. H. (2016). *Discovering Psychology* (7th ed.). New York: Worth Publishers.

Holton, D., & Clarke, D. (2006). International Journal of Mathematical Education in Scaffolding and metacognition. *International Journal of Mathematical Education in Science and Technology*, *37*(2), 127–143. https://doi.org/10.1080/00207390500285818

Hong, S., Torquati, J., & Molfese, V. J. (2013). Theory Guided Professional Development in Early Childhood Science Education. *Advances in Early Education and Day Care*, *17*, 1–32. https://doi.org/10.1108/S0270-4021(2013)0000017005

Hoot, J., Szente, J., & Mebratu, B. (2004). Early Education in Ethiopia: Progress and Prospects. *Early Childhood Education Journal*, *32*(1), 3–8. https://doi.org/10.1023/B:ECEJ.0000039637.29327.d2

Hornby, G. (2011). *Parental Involvement in Childhood Education: Building Effective School-Family Partnerships*. New York: Springer.

Howe, K. R. (1988). Against the Quantitative-Qualitative Incompatibility Thesis or Dogmas Die Hard. *Educational Researcher*, *17*(8), 10–16. https://doi.org/10.3102/0013189x017008010

Howe, K. R. (2003). *Closing Methodological Divides Toward Democratic Educational Research* (Vol. 11). New York: Kluwer Academic Publishers. https://doi.org/10.1007/0-306-47984-2

Hurmerinta-Peltomäki, L., & Nummela, N. (2006). Mixed Methods in International Business Research. *Management International Review*, *46*(4), 439–459. https://doi.org/10.1007/s11575-006-0100-z

Hyson, M. (2004). *The Emotional Development of Young Children: Building an Emotion-Centered Curriculum* (2nd ed.). London: Teachers College Press.

Hyson, M. (2008). *Enthusiastic and Engaged Learners: Approaches to Learning in the Early Childhood Classroom*. (L. R. Williams, Ed.). New South Wales: Teachers College, Columbia University.

Ige, A. M. (2011). The Challenges Facing Early Childhood Care, Development and Education (ECCDE) in an Era of Universal Basic Education in Nigeria. *Early Childhood Education Journal*, *39*(2), 161–167. https://doi.org/10.1007/s10643-011-0443-3

Ihmeideh, F., & Alqaryouti, I. (2015). Early Years Exploring kindergarten teachers' views and roles regarding children's outdoor play environments in Oman. *Early Years*, *36*(1), 81–96. https://doi.org/10.1080/09575146.2015.1077783

Isaacs, B. (2015). *Bringing the Montessori Approach to your Early Years Practice*. (S. Green, Ed.) (3rd ed.). London and New York: Research in Science Education. https://doi.org/10.4324/9780203931769

261

Jick, T. D. (1979). Mixing Qualitative and Quantitative Methods: Triangulation in Action. *Administrative Science Quarterly*, *24*(4), 602–611.

John-Steiner, V., & Mahn, H. (1996a). Sociocultural Approaches to Learning and Development : A Vygotskian Framework. *Educational Psychologist*, *31*(3–4), 1991–206. https://doi.org/10.1080/00461520.1996.9653266

John-Steiner, V., & Mahn, H. (1996b). Sociocultural Approaches to Learning and Development: A Vygotskian Framework. *Educational Psychologist*, *31*(3–4), 191–206. https://doi.org/10.1207/s15326985ep3103&4_4

Johnson, K. E. (2009). *Second Language Teacher Education: A Sociocultural Perspective* (1st ed.). New York: Routledge.

Johnson, R. B. B., Onwuegbuzie, A. J. A. J., & Turner, L. A. L. A. (2007). Toward a Definition of Mixed Methods Research. *Journal of Mixed Methods Research*, *1*(2), 112–133. https://doi.org/10.1177/1558689806298224

Johnson, R. B., & Christensen, L. (2017). *Educational Research Quantitative, Qualitative, and Mixed Approaches* (6th ed.). Los Angeles: SAGE Publications Ltd.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, *33*(7), 14–26. https://doi.org/10.3102/0013189X033007014

Jorde-bloom, P. (1988). Factors Influencing Overall Job Satisfaction and Organizational Commitment in Early Childhood Work Environments. *Journal of Research in Childhood Education*, *3*(2), 107–121. https://doi.org/10.1080/02568548809594933

Jose F. Molina-Azorin. (2018). Mixed Methods. In *The SAGE Handbook of Qualitative Business and Management Research Methods: History and Traditions* (pp. 102–118). Thousand Oaks: Sage Publications Ltd. https://doi.org/10.4135/9781526430212

Kaiser, K. (2009). Protecting Respondent Confidentiality in Qualitative Research. *Qualitative Health Research*, *19*(11), 632–1641. https://doi.org/10.1177/1049732309350879

Keung, C. P. C., & Cheung, A. C. K. (2019). Towards Holistic Supporting of Play-Based Learning Implementation in Kindergartens: A Mixed Method Study. *Early Childhood Education Journal*, *47*(5), 627–640. https://doi.org/10.1007/s10643-019-00956-2

Kim, J. H., Hailu, B. H., Rose: M., Rossiter, J., & Teferra, T. (2022). Persistent Inequalities in Early Years' Access and Learning: Evidence from Large-Scale Expansion of Pre-Primary Education in Ethiopia. *Early Childhood Research Quarterly*, *58*, 103–114. https://doi.org/10.1016/j.ecresq.2021.07.006

Kim, Janice, Robinson, N., H¨arm, J., Jeffery, D., Rose, & Woldehanna, T. (2022). Misalignment of Policy Priorities and Financing for Early Childhood Education: Evidence from Ethiopia, Liberia, and Mainland Tanzania. *International Journal of Educational Research*, *111*, 1–12. https://doi.org/10.1016/j.ijer.2021.101891

Kim, J. (2018). Pilot Study. In M. Allen (Ed.), *The SAGE Encyclopedia of Communication Research Methods* (pp. 1254–1255). Thousand Oaks: SAGE Publications. https://doi.org/10.4135/9781483381411

King, N., & Brooks, J. (2018). Thematic Analysis in Organisational Research. In *The SAGE Handbook of Qualitative Business and Management Research Methods: Methods and Challenges* (pp. 219–236). The Netherlands: SAGE Publications Ltd. https://doi.org/10.4135/9781526430236

King, N. R., & King, N. R. (1979). Play: The Kindergartners ' Perspective. *The Elementary School Journal*, *80*(2), 80–87.

Knudsen, E. I., Heckman, J. J., Cameron, J. L., & Shonkoff, J. P. (2006). Economic, Neurobiological and Behavioural Perspectives on Building America's Future Workforce. In *Proceedings of the National Academy of Sciences* (Vol. 103, pp. 10155–10162). https://doi.org/10.1073/pnas.0600888103

Korstjens, I., & Moser, A. (2018). Series: Practical Guidance to Qualitative Research. Part 4: Trustworthiness and Publishing. *European Journal of General Practice*, *24*(1), 120–124. https://doi.org/10.1080/13814788.2017.1375092

Kothari, C. (2004). *Research Methodology: Methods and Techniques*. New Delhi: New Age International
https://doi.org/http://196.29.172.66:8080/jspui/bitstream/123456789/2574/1/Research%20Methodology.pdf

Kozulin, A. (2002). Sociocultural Theory and the Mediated Learning Experience. *School Psychology International*, *23*(1). https://doi.org/10.1177/0143034302023001729

Kozulin, A., Gindis, B., Ageyev, V. S., & Miller, S. M. (2003). *Vygotsky's Educational Theory in Cultural Context*. (A. Kozulin, B. Gindis, V. S. Ageyev, & S. M. Miller, Eds.) (1ˢᵗ ed.). New York: Cambridge University Press.

Krefting, L. (1991). Rigour in Qualitative Research: The Assessment of Trustworthiness. *American Journal of Occupational Therapy*, *45*(3), 214–222.

Krogh, S. L., & Morehouse, P. (2014). *The Early Childhood Curriculum: Inquiry Learning Through Integration* (2ⁿᵈ ed.). New York: Routledge.

Kumar, K., & Whyte, M. (2018). Interactive Science in a Sociocultural Environment in Early Childhood. *He Kupu The World*, *5*(3), 20–27.

Kumar, R. (2011). *Research Methodology is a Step-By-Step Guide for Beginners*. Thousand Oaks: SAGE Publications India Pvt Ltd.

Kutluca, A. Y. (2021). Exploring Preschool Teachers' Pedagogical Content Knowledge: The Effect of Professional Experience. *Journal of Science Learning*, *4*(2), 160–172. https://doi.org/10.17509/jsl.v4i2.31599

Lang, S. (2018). Study on Peer Scaffolding in English-majored Group Interaction in Private College. In *23rd International Social Sciences and Education Conference* (pp. 204–207).

Langer, J. A., & Applebee, A. N. (1987). *How Writing Shapes Thinking: A Study of Teaching and Learning Judith*. New York: The National Council of Teachers of English.

Lantolf, J. P. (2004). Introducing Sociocultural Theory. In *Sociocultural Theory and Second Language Learning* (pp. 1–26). https://doi.org/10.1007/978-0-387-46301-8

264

Lantolf, J. P., & Poehner, M. E. (2014). *Sociocultural Theory and the Pedagogical Imperative in L2 Education*. New York: Taylor & Francis.

Lantolf, J. P., Thorne, S. L., & Poehner, M. E. (2015). Sociocultural Theory and Second Language Development. In B. van Patten & J. Williams (Eds.), *Theories in Second Language Acquisition*. New York: Research in Science Education.

Larkin, M. J. (2001). Providing Support for Student Independence Through Scaffolded Instruction. *Teaching Exceptional Children*, *34*(1), 30–34. https://doi.org/10.1177/004005990103400104

Larocque, M., Kleiman, I. R. A., & Darling, S. M. (2011). Parental Involvement : The Missing Link in School Achievement. *Preventing School Failure*, *55*(3), 115–122. https://doi.org/10.1080/10459880903472876

Leavy, P. (2017). *Research Design: Quantitative, Qualitative, Mixed Methods, Arts-Based, and Community-Based Participatory Research approaches* (2nd ed.). London: The Guilford Press.

Leong, D., & Bodrova, E. (2009). Tools of the Mind Developing Self-Regulation by Developing Intentional Make Believe Play, (April).

Leong, E. B., & D. J. (2009). Tools of the Mind : A Vygotskian-based early childhood curriculum. *Early Childhood Service*, *3*(3).

Leong, E. B. D. J. (2015). Vygotskian and Post-Vygotskian Views on Children's Play. *American Journal of Play*, *7*(3), 371–388.

Li Wang, C. B., & Hughes, H. (2011). Sociocultural Theories and their Application in Information Literacy Research and Education. *Australian Academic & Research Libraries*, *42*(4), 296–308. https://doi.org/10.1080/00048623.2011.10722242

Lillvist, A., Sandberg, A., Sheridan, S. & Williams, P. (2014). Preschool teacher competence is viewed from the perspective of students in early childhood teacher education. *Journal of Education for Teaching*, *40*(1), 3–19. https://doi.org/10.1080/02607476.2013.864014

Lim, S. M.-Y., & Genishi, C. (2010). Early Childhood Curriculum and Developmental Theory. *International Encyclopedia of Education*, 514–519. https://doi.org/10.1016/B978-0-08-044894-7.00087-7

Lindberg, E., Nilsson, C., & Palmér, L. (2019). Qualitative Thematic Analysis Based on Descriptive Phenomenology. *Nursing Open*, *6*(3), 733–739. https://doi.org/10.1002/nop2.275

Lindberg, L., & Swedlow, R. (1985). *Young Children: Exploring and Learning*. Boston: Allyn and Bacon.

Lo, L., & Xu, Y. (Eds.). (2019). *Family, School, and Community Partnerships for Students with Disabilities*. Singapore: Springer. https://doi.org/10.1007/978-981-13-6307-8

Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2006). *Methods in Educational Research from Theory to Practice*. Thousand Oaks: John Wiley & Sons, Inc.

Loizou, E. (2017). Towards Play Pedagogy : Supporting Teacher Play Practices with a Teacher Guide about Socio-Dramatic and Imaginative Play. *European Early Childhood Education Research Journal*, *25*(5), 784–795. https://doi.org/10.1080/1350293X.2017.1356574

Mackiewicz, J., & Thompson, I. (2014). Instruction, Cognitive Scaffolding, and Motivational Scaffolding in Writing Center Tutoring. *Composition Studies*, *42*(1), 54–78.

Mahmoudi, S., Jafari, E., Nasrabadi, H., & Liaghatdar, M. (2012). Holistic Education: An Approach for 21 Century. *International Education Studies*, *5*(2), 178–186. https://doi.org/10.5539/ies.v5n3p178

Mahn, H. (2012). Vygotsky's Methodological Contribution to Sociocultural Theory. *Remedial and Special Education*, *20*(6), 341–350. https://doi.org/10.1007/978-1-4419-1428-6_2422

Maree, K., Creswell, J., Ebersöhn, L., Eloff, I., Ferreira, R., Ivankova, N., & Jansen, J. (2016). *First Steps in Research* (2nd ed.). Pretoria: Van Schailk Publisher.

Martone, A., & Sireci, S. G. (2009). Evaluating Alignment between Curriculum, Assessment, and Instruction. *American Educational Research Association*, *79*(4), 1332–1361. https://doi.org/10.3102/0034654309341375

266

Mason, J. (2004). Semistructured Interview. In *The SAGE Encyclopedia of Social Science Research Methods*. Thousand Oaks: SAGE Publications.

Maxwell, J. A. (2013). *Qualitative Research Design An Interactive Approach*. New York: SAGE Publications.

Maynard, T., Waters, J., Maynard, T., & Waters, J. (2007). Learning in the Outdoor Environment: a Missed Opportunity? *Early Years*, *27*(3), 255–265. https://doi.org/10.1080/09575140701594400

McCaslin, M. L. (2008). The SAGE Encyclopedia of Qualitative Research Methods. In *The SAGE Encyclopedia of Qualitative Research Methods* (pp. 672–675). Thousand Oaks: SAGE Publications. https://doi.org/10.4135/9781412963909

Mchugh, M. L. (2012). Lessons in Biostatistics Interrater Reliability : The Kappa Statistic. *Biochemia Medica*, *22*(3), 276–282.

McKechnie, L. E. F. (2012). Observation Schedule. In L. M. Given (Ed.), *The SAGE Encyclopedia of Qualitative Research Methods*. Thousand Oaks: SAGE Publications. https://doi.org/10.4135/9781412963909 Print

McLachlan, C., Fleer, M., & Edwards, S. (2010a). *Early Childhood Curriculum, Planning, Assessment, and Implementation*. New York: Cambridge university press.

McLachlan, C., Fleer, M., & Edwards, S. (2010b). *Early childhood Curriculum, Planning, Assessment and Implementation*. New York: Cambridge University Press.

Medina, C., & Sobel, D. M. (2020). Caregiver-Child Interaction Influences Causal Learning And Engagement During Structured Play. *Journal of Experimental Child Psychology*, *189*, 1–12. https://doi.org/10.1016/j.jecp.2019.104678

Miller, P. H. (2016). *The Theories of Developmental Psychology*. New York: Rachel Losh.

Mills, A. J., Durepos, G., & Wiebe, E. (2010). Credibility. In *Encyclopedia of Case Study Research* (pp. 243–244). Thousand Oaks: SAGE Publications.

267

MOE. (1994). *The Education and Training Policy and Its implementation*. Addis Ababa: Ministry of Education.

MOE. (2001). *Education Statistics Annual Abstract*. Adiss Abba; Ethiopia.

MOE. (2007). *Status of Early Childhood Care and Education in Ethiopia: Ministry of Education in collaboration with UNICEF*.

MOE. (2008). *Review of Ethiopian Education Training Policy and its Implementation*. Adiss Abba; Ethiopia.

MOE. (2010a). *Education Sector Development Programme IV (ESDP IV) 2010/2011 – 2014/2015*. Addis Ababa, Ethiopia: Federal Ministry of Education.

MOE. (2010b). *Education Sector Development Programme IV (ESDP IV)*. Adiss Abba; Ethiopia: Federal Ministry of Education.

MOE. (2010c). *Education Statistics Annual Abstract*. Adiss Abba; Ethiopia.

MOE. (2010d). *Guidelines for Early Childhood Care and Education*. Adiss Abba; Ethiopia: Ministry of Education.

MOE. (2010e). *National Policy Framework for Early Childhood Care and Education (ECCE)*. Ministry of Education: Addis Ababa, Ethiopia.

MOE. (2010f). *National Policy Framework for Early Childhood Care and Education (ECCE)*. Adiss Abba; Ethiopia: Ministry of Education.

MOE. (2013). *Education Statistics Annual Abstract*. Adiss Abba; Ethiopia.

MOE. (2014). *Education Sector Development Programme III (ESDP III)*. Adiss Abba; Ethiopia: Ministry of Education.

MOE. (2016). *Education Statistics Annual Abstract*. Adiss Abba; Ethiopia.

MOE. (2018a). *Education Statistics Annual Abstract*. Adiss Abba; Ethiopia.

MOE. (2018b). *Ethiopian Education Development Roadmap*. Addis Ababa: Ministry of Education.

MOE. (2020). *Education Statistics Annual Abstract*. Adiss Abba; Ethiopia.

MOE. (2021a). *Education Sector Development Programme VI (ESDP VI) 2020/21-2024/25*. Adiss Abba; Ethiopia: Federal Ministry of Education.

MOE. (2021b). *Education Statistics Annual Abstract*. Adiss Abba; Ethiopia.

MoE (Ministry of Education). (2017). *Te Whāriki He whāriki mātauranga mō ngā mokopuna o Aotearoa: Early childhood curriculum*. New Zealand: Ministry of Education.

Mohanty, S. P. (2014). A Holistic Curricular and Pedagogical Approach to Early Childhood Care and Education. *Pedagogy of Learning*, *2*(1), 53–61.

Moll, L. C. (1990). Vygotsky's Zone of Proximal Development: Rethinking its Instructional Implications. *Infancia y Aprendizaje*, *13*(51–52), 157–168. https://doi.org/10.1080/02103702.1990.10822276

Mooney, C. G. (2013). *Theories of Childhood An Introduction to Dewey, Montessori, Erikson, Piaget, and Vygotsky* (2nd ed.). Redleaf Press.

Moorley, C., & Cathala, X. (2019). How to Appraise Mixed Methods Research. *Evid Based Nurs*, *22*(2), 38–41. https://doi.org/10.1136/ebnurs-2019-103076

Morgan, David L. (1998). Practical Strategies for Combining Qualitative and Quantitative Methods: Applications to Health Research. *Qualitative Health Research*, *8*(3), 362–376. https://doi.org/10.1177/104973239800800307

Morgan, David L. (2014). Pragmatism as a Paradigm for Social Research. *Qualitative Inquiry*, *20*(8), 1045–1053. https://doi.org/10.1177/1077800413513733

Morgan, David L. (2007a). Methodological Implications of Combining Qualitative and Quantitative Methods. *Journal of Mixed Methods Research*, *1*, 48–76. https://doi.org/10.1177/2345678906292462

269

Morgan, D. L. (2007b). Paradigms Lost and Pragmatism Regained Methodological Implications of Combining Qualitative and Quantitative Methods. *Journal of Mixed Methods Research*, *1*(1), 48–76. https://doi.org/10.1177/2345678906292462

Morgan, Demetri L., & Ravitch, S. M. (2018). Trustworthiness. In *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation* (pp. 1729–1731). Thousand Oaks: SAGE Publications. https://doi.org/10.4135/9781506326139

Morrow, S. L. (2005). Quality and Trustworthiness in Qualitative Research in Counselling Psychology. *Journal of Counseling Psychology*, *52*(2), 250–260. https://doi.org/10.1037/0022-0167.52.2.250

Morse, J. M. (2015). Critical Analysis of Strategies for Determining Rigor in Qualitative Inquiry. *Qualitative Health Research*, *25*(9), 1212–1222. https://doi.org/10.1177/1049732315588501

Morse, J. M., & Coulehan, J. (2015). Maintaining Confidentiality in Qualitative Publications. *Qualitative Health Research*, *25*(2), 151–152. https://doi.org/10.1177/1049732314563489

Mortimore, P. (Ed.). (1999). *Understanding Pedagogy and its Impact on Learning*. Thousand Oaks, California: Paul Chapman Publishing Ltd.

Moser, A., & Korstjens, I. (2018). Series : Practical Guidance to Qualitative Research. Part 3 : Sampling, Data Collection and Analysis. *European Journal of General Practice*, *24*(4), 9–18. https://doi.org/10.1080/13814788.2017.1375091

Mouton, J. (2001). *How to Succeed in Your Master's and Doctoral Studies: A South African Guide and Resource Book*. Pretoria: Van Schaik.

Moyles, J., Adams, S., & Musgrove, A. (2002). Early Years Teachers' Understanding of Pedagogical Effectiveness: Defining and Managing Effective Pedagogy. *International Journal of Primary, Elementary and Early Years Education*, *3*(13), 37–41. https://doi.org/10.1080/03004270285200291

Mueller, J. J., & File, N. (Eds.). (2020). *Curriculum in Early Childhood Education: Re-examined, Reclaimed, Renewed* (2nd ed.). New York: Routledge.

Murphy, P. (1996). Defining Pedagogy. In *Equity in the Classroom: Towards Effective Pedagogy for Girls and Boys* (pp. 28–39). UNESCO.

Murphy, P. (1999). *Learners, Learning and Assessment*. New Delhi.

Murray, D. E., & Mcpherson, P. (2006). Scaffolding Instruction for Reading the Web. *Language Teaching Research*, *10*(2), 131–156. https://doi.org/10.1191/1362168806lr189oa

Mwoma, T., Begi, N., & Murungi, C. (2018). Safety and Security in Preschools: A Challenge in Informal Settlements. *Issues in Educational Research*, *28*(3), 720–736.

Nah, K.-O., & Kwak, J. I. (2011). Child Assessment in Early Childhood Education and Care Settings in South Korea. *Asian Social Science*, *7*(6), 66–78. https://doi.org/10.5539/ass.v7n6p66

Nedovic, S., & Morrissey, A.-M. (2013). Calm Active and Focused: Children's Responses to an Organic Outdoor Learning Environment. *Learning Environ Res*, *16*(2), 281–295. https://doi.org/10.1007/s10984-013-9127-9

Neuman, W. L. (2014). *Social Research Methods: Qualitative and Quantitative Approaches*. (7th ed.). New York: Pearson Education Limited. https://doi.org/10.2307/3211488

Nouro, V. H. (2014). *Play at the Center of the Curriculum* (5th ed.). New York: Pearson Education Limited.

Novianti, R., & Febrialismanto, F. (2020). The Analysis of Early Childhood Teachers' Pedagogical Content Knowledge. *Journal of Educational Sciences*, *4*(2), 404–413. https://doi.org/10.31258/jes.4.2.p.404-413

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis : Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, *1*(13), 1–13. https://doi.org/10.1177/1609406917733847

Ntumi, S. (2016). Challenges School Teachers Face in the Implementation of the Early Childhood Curriculum in the Cape Coast Metropolis. *Journal of Education and Practice*, *7*(1), 54–62.

271

OECD. (2006). *Starting Strong II Early Childhood Education and Care*. Paris: OECD.

OECD. (2012a). *Quality Matters in Early Childhood Education and Care*. https://doi.org/10.1787/9789264176690-en

OECD. (2012b). *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care* (Vol. III). Paris: OECD Publishing. https://doi.org//10.1787/9789264123564-en

OECD. (2017a). *Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care*. Paris: OECD. https://doi.org/10.1787/9789264276116-en

OECD. (2017b). *Starting Strong V: Transitions from Early Childhood Education and Care to Primary Education*. Paris: OECD Publishing. https://doi.org/10.1787/9789264276253-en

OECD. (2021). *Starting Strong VI Supporting Meaningful Interactions in Early Childhood Education and Care*. Paris: OECD.

Onwuegbuzie, A. J. (2007). A Typology of Mixed Methods Sampling Designs in Social Science Research. *The Qualitative Report*, *12*(2), 281–316. https://doi.org/10.1177/1558689807299526

Onwuegbuzie, A. J., & Collins, K. M. T. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, *12*(2), 281–316. https://doi.org/10.1177/1558689807299526

Onwuegbuzie, A. J., & Leech, N. L. (2007). Validity and Qualitative Research: An Oxymoron? *Quality and Quantity*, *41*(2), 233–249. https://doi.org/10.1007/s11135-006-9000-3

Ornstein, A. C., & Hunkins, F. P. (2018). *Curriculum Foundations, Principles, and Issues*. New Delhi: Pearson Education Limited.

Osher, D., Cantor, Berg, J., Steyer, L., & Rose, T. (2020). Drivers of Human Development: How Relationships and Context Shape Learning and Development. *Applied Developmental Science*, *24*(1), 6–36. https://doi.org/10.1080/10888691.2017.1398650

Pařízek, M. (2021). Principles of Holistic Education Applied to the Teacher Education Model for the 21st Century in Singapore. *Sociální Pedagogika / Social Education*, *9*(2), 9–22. https://doi.org/10.7441/soced.2021.09.02.01

Pathan, H., Memon, R. A., Memon, S., Khoso, A. R., & Bux, I. (2018). A Critical Review of Vygotsky's Socio-Cultural Theory in Second Language Acquisition. *International Journal of English Linguistics*, *8*(4), 232–236. https://doi.org/10.5539/ijel.v8n4p232

Patton, Michael Quilnn. (2015). *Qualitative Research and Evaluation Methods* (fourth). Thousand Oaks: SAGE Publications.

Patton, Michael Quinn. (1999). Enhancing the Quality and Credibility of Qualitative Analysis. *Health Services Research*, *34*(5 Pt 2), 1189–1208.

Pea, R. D. (2004). The Social and Technological Dimensions of Scaffolding and Related Theoretical Concepts for Learning, Education, and Human Activity. *Journal of the Learning Sciences*, *13*(3), 423–451. https://doi.org/10.1207/s15327809jls1303

Pellegrini, A. D., & Smith, P. K. (1998). Physical Activity Play: The Nature and Function of a Neglected Aspect of Play. *Child Development*, *69*(3), 577–598. https://doi.org/10.1111/j.1467-8624.1998.tb06226.x

Pence, A. R., & Marfo, K. (2008). Early Childhood Development in Africa: Interrogating Constraints of Prevailing Knowledge Bases. *International Journal of Psychology*, *43*(2), 78–87. https://doi.org/10.1080/00207590701859143

Petrova, E., Dewing, J., & Camilleri, M. (2016). Confidentiality in Participatory Research: Challenges from One Study. *Nursing Ethics*, *23*(4), 442–454. https://doi.org/10.1177/0969733014564909

Phillips, B. M., Clancy-Menchetti, J., & Lonigan, C. J. (2008). Successful Phonological Awareness Instruction With Preschool Children: Lessons From the Classroom. *Topics in Early Childhood Special Education*, *28*(1), 03–17. https://doi.org/10.1177/0271121407313813

273

Piasta, S. B., Justice, L. M., Park, S., Farley, K. S., & Connell, A. A. O. (2020). Early childhood Teachers' Knowledge About Language and Literacy: Associations with Practice and Children's Learning. *Dyslexia*, *26*(2), 137–152. https://doi.org/10.1002/dys.1612

Plano Clark, V. L. (2017). Mixed Methods Research. *Journal of Positive Psychology*, *12*(3), 305–306. https://doi.org/10.1080/17439760.2016.1262619

Plano Clark, V. L., & Ivankova, N. V. (2016). *Mixed Methods Research: A Guide to the Field*. Thousand Oaks: SAGE Publications. https://doi.org/10.4135/9781483398341

Plano Clark, V. L., & Ivankova, N. V. (2017). *Mixed Methods Research: A Guide to the Field*. Thousand Oaks California: SAGE Publications. https://doi.org/10.4135/9781483398341

Pound, L. (2011). *Influencing Early Childhood Education: Key figures, Philosophies and Ideas*. New York: Open University Press.

Pugach, M. C., Blanton, L. P., Mickelson, A. M., & Boveda, M. (2020). Curriculum Theory: The Missing Perspective in Teacher Education for Inclusion. *Teacher Education and Special Education*, *43*(1), 85–103. https://doi.org/10.1177/0888406419883665

Rademacher, A., & Koglin, U. (2018). The Concept of Self-Regulation and Preschoolers ' Social-Emotional Development : A Systematic Review. *Early Child Development and Care*, *0*(0), 1–19. https://doi.org/10.1080/03004430.2018.1450251

Rahel, G. (2014). *Quality of Early Childhood Care and Education: The Case of Selected Government ECCE Centres in Bole and Kirkos Sub-Cites in Addis Ababa, Ethiopia*. Addis Ababa University.

Rahel, T. (2014). *The Role of Leadership In Preschool Teachers Competence*. Addis Ababa University.

Rahi, S. (2017). Research Design and Methods: A Systematic Review of Research Paradigms, Sampling Issues and Instruments Development. *International Journal of Economics & Management Sciences*, *06*(02). https://doi.org/10.4172/2162-6359.1000403

Rahmatirad, M. (2020). A Review of Socio-Cultural Theory. *SIASAT Journal of Social, Cultural and Political Studies*, *5*(3), 23–31. https://doi.org/10.33258/siasat.v5i3.66

Rao, N., Sun, J., Wong, J. M. S., Weekes, B., I, Shaeffer, S., … & Lee, D. (2014). Early childhood Development and Cognitive Development in Developing Countries. Hong Kong: Comparative Education Research Centre.

Rapp, N., & Duncan, H. (2012). Multi-Dimensional Parental Involvement in Schools: A Principal's Guide. *Journal of Educational Leadership Preparation*, *7*(1), 1–14.

Resnik, D. B. (2018). *The Ethics of Research with Human Subjects: Protecting People, Advancing Science, Promoting Trust*. New York: Springer.

Rezaee, M. (2011). Sociocultural Theory Revisited: What are the Educational implications? *BRAIN: Broad Research in Artificial Intelligence and Neuroscience*, *2*(4), 62–67.

Rogoff, B. (1990). *Apprenticeship in Thinking: Cognitive Development in A Social Context.* New York: Oxford University Press. https://doi.org/10.1126/science.249.4969.684

Rogoff, B. (2003). *The Cultural Nature of Human Development*. New York: Oxford University Press, Inc.

Roopnarine, J., & Johnson, J. E. (2013). *Approaches to Early Childhood Education* (6th ed.). New Jersey: Pearson HE, Inc.

Rose, J., & Johnson, C. W. (2020). Contextualizing Reliability and Validity in Qualitative Research: Toward more Rigorous and Trustworthy Qualitative Social Science in Leisure Research. *Journal of Leisure Research*, *0*(0), 1–20. https://doi.org/10.1080/00222216.2020.1722042

Roth, W.-M. (2007). On Mediation Toward a Cultural-Historical Understanding. *Theory & Psychology*, *17*(5), 655–680. https://doi.org/10.1177/0959354307081622

Rowlands, S. (2003). Vygotsky and the Zpd: Have We Got it Right? *Research in Mathematics Education*, *5*(1), 155–170. https://doi.org/10.1080/14794800008520120

275

Ruane, J. M. (2005). *Essentials of Research Methods: A Guide to Social Science Research*. Blackwell.

Rubtsov, V. V. (2020). Two Approaches to the Problem of Development in the Context of Social Interactions: L.S. Vygotsky vs J. Piaget. *Cultural-Historical Psychology*, *16*(3), 5–14. https://doi.org/10.17759/chp.2020160302

Rutherford-Hemming, T. (2018). Pilot Studies. In *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation*.

Saldaña, J. (2013). *The Coding Manual for Qualitative Researchers* (2nd ed.). Thousand Oaks: SAGE Publications Ltd. https://doi.org/10.1017/CBO9781107415324.004

Sale, J. E. M., Lohfeld, L. H., & Brazil, K. (2002). Revisiting the Quantitative-Qualitative Debate: Implications for Mixed-Methods Research. *Quality and Quantity*, *36*(1), 43–53. https://doi.org/10.1023/A:1014301607592

Samuelsson, I. P., & Johansson, E. (2006). Play and Learning - Inseparable Dimensions In Preschool Practice. *Early Child Development and Care*, *176*(1), 47–65. https://doi.org/10.1080/0300443042000302654

Samuelsson, I. P., & Sheridan, S. (2010). A Turning Point or a Backward Slide: The Challenge Facing the Swedish Preschool Today. *Early Years*, *30*(3), 219–227. https://doi.org/10.1080/09575146.2010.513328

Schreiber, J. B. (2012). Pilot Study. In L. M. Given (Ed.), *The SAGE Encyclopedia of Qualitative Research Methods* (pp. 625–626). Thousand Oaks: SAGE Publications.

Schwandt, T. A. (2007). *The Sage Dictionary of Qualitative Inquiry* (3rd ed.). New Delhi: SAGE Publications.

Scott, D. (2008). *Critical Essays on Major Curriculum Theorists*. London: Routledge.

Scott, P. (1998). Teacher talk and Meaning Making in Science Classrooms: A Vygotskian Analysis and Review. *Studies in Science Education*, *32*(1), 45–80. https://doi.org/10.1080/03057269808560127

Seefeldt, C. (1980). *Teaching young children*. Englewood Cliffs: Prentice-Hall.

Selamawit, M. (2015). *Assessment of the Practices of Early Childhood Education for Children with Visual Impairment: the case of German church school in Addis Ababa*. Addis Ababa University.

Shabani, K. (2016). Applications of Vygotsky's sociocultural approach for Teachers' Professional Development. *Cogent Education*, *3*(1), 1–10. https://doi.org/10.1080/2331186X.2016.1252177

Shabani, K., Khatib, M., & Ebadi, S. (2010). Vygotsky's Zone of Proximal Development: Instructional Implications and Teachers' Professional Development. *English Language Teaching*, *3*(4), 237–248. https://doi.org/10.5539/elt.v3n4p237

Shala, M. (2013). The Impact of Preschool Social-Emotional Development on Academic Success of Elementary School Students. *Psychology*, *4*(11), 787–791. https://doi.org/10.4236/psych.2013.411112

Shannon-Baker, P. (2016). Making Paradigms Meaningful in Mixed Methods Research. *Journal of Mixed Methods Research*, *10*(4), 319–334. https://doi.org/10.1177/1558689815575861

Sharp, J. L., Mobley, C., Hammond, C., Withington, C., Drew, S., Stringfield, S., & Stipanovic, N. (2012). A Mixed Methods Sampling Methodology for a Multisite Case Study. *Journal of Mixed Methods Research*, *6*(1), 34–54. https://doi.org/10.1177/1558689811417133

Shawar, Y. R., & Shiffman, J. (2017). Generation of Global Political Priority for Early Childhood Development: The Challenges of Framing and Governance. *The Lancet*, *389*(10064), 119–124. https://doi.org/10.1016/S0140-6736(16)31574-4

Sheperis, C. J., Young, J. S., & Daniels, M. H. (2010). *Counseling Research* (first). New Jersey: Palgrave Macmillan.

Sheridan, S. M., Edwards, C. P., Marvin, C. A., & Knoche, L. L. (2009). Professional Development in Early Childhood Programs: Process Issues and Research Needs. *Early Education and Development*, *20*(3), 377–401. https://doi.org/10.1080/10409280802582795

277

Sheridana, S., Williamsa, P., Sandbergb, A., & Vuorinenb, T. (2011). Preschool Teaching In Sweden - A Profession In Change. *Educational Research*, *53*(4), 415–437. https://doi.org/10.1080/00131881.2011.625153

Shonkoff, J. P. (2010). Building A New Bio-Developmental Framework to Guide the Future of Early Childhood Policy. *Child Development*, *81*(1), 357–367. https://doi.org/10.1111/j.1467-8624.2009.01399.x

Shuey, E. A., Kim, N., Cortazar, A., Poblete, X., Rivera, L., Lagos, M. J., … & Engel, A. (2019). *Curriculum Alignment and Progression between Early Childhood Education and Care and Primary School : A Brief Review and Case Studies* (EDU/WKP(2019)1 No. 193). Paris.

Shulman, L. S. (1987). Knowledge and Teaching: Foundations of the New Reform. *Harvard Educational Review*, *57*(1), 1–23.

Sieber, J. E., & Tolich, M. B. (2013). Strategies for Assuring Confidentiality. In *Planning Ethically Responsible Research*. Thousand Oaks: SAGE Publications.

Silalahi, R. M. (2019). Understanding Vygotsky's Zone of Proximal Development for Learning. *Polyglot: Jurnal Ilmiah*, *15*(2), 169–186. https://doi.org/10.19166/pji.v15i2.1544

Silva, P. (2017). Scaffolding assignments: Analysis of AssignMentor as a Tool to Support First-Year Students' Academic Writing Skills. *E-Learning and Digital Media*, *14*(1–2), 86–97. https://doi.org/10.1177/2042753017695652

Siraj-Blatchford, I., Sylva, K., Muttock, S., Gilden, R., & Bel, D. (2002). *Researching Effective Pedagogy in the Early Years*. Norwich: University of London, Institute of Education, Department of Educational Studies.

Smith, A. B. (1993). Early Childhood Educare: Seeking a Theoretical Framework in Vygotsky's Work. *International Journal of Early Years Education*, *1*(1), 47–62. https://doi.org/10.1080/0966976930010105

Smith, A. B. (1996). The Early Childhood Curriculum from a Sociocultural Perspective. *Early Child Development and Care*, *115*(1), 51–64. https://doi.org/10.1080/0300443961150105

Sofou, E., & Tsafos, V. (2010). Preschool Teachers' Understandings of the National Preschool Curriculum in Greece. *Early Childhood Education Journal*, *37*(5), 411–420. https://doi.org/10.1007/s10643-009-0368-2

Sosina, T. (2013). *Challenges of Implementing Kindergarten Curriculum in Addis Ababa*. Addis Ababa University.

Steenbeek, H., & van Geert, P. (2017). Assessing Young Children's Learning and Behaviour in the Classroom: A Complexity Approach. In *International Handbook of Early Childhood Education*. Springer. https://doi.org/10.1007/978-94-024-0927-7_66

Stephanie Wall, I. L., & M. T. (2015). *Early Childhood Education and Care Pedagogy Review*. England: OECD Publishing. https://doi.org/10.1787/9789264276253-en.

Stephen, C. (2010). Pedagogy: The Silent Partner in Early Years Learning. *Early Years*, *30*(1), 15–28. https://doi.org/10.1080/09575140903402881

Stone, C. A. (1998). The Metaphor of Scaffolding: Its Utility for the Field of Learning Disabilities. *Journal of Learning Disabilities*, *31*(4), 344–364. https://doi.org/http://dx.doi.org/10.1177/002221949803100404

Stork, S., & Sanders, S. W. (2008). Physical Education in Early Childhood. *The Elementary School Journal*, *8*(3), 197-. https://doi.org/0013-5984/2008/10803-0005$10.00

Stremmel, A. J. (1993). Implications of Vygotsky's Sociocultural Theory for Child and Youth Care Practice. *Child & Youth Care Forum*, *22*(5), 333–335.

Sultan, N. (2019). Evaluating the Research : A Collaborative Process. In *Heuristic Inquiry: Researching Human Experience Holistically* (pp. 177–190). Thousand Oaks: SAGE Publications. https://doi.org/10.4135/9781071802632

Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, *48*(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

279

Tadesse, M. (2015). *The Contributions of Preschool Education on the First Cycle Primary School Students Learning Process and Academic Achievement: Implications to Curriculum Development*. Addis Ababa University.

Taguma, M., Litjens, I., & Makowiecki, K. (2012). *Quality Matters in Early Childhood Education and Care; New Zealand 2012*. Springer, Dordrecht. https://doi.org/10.1787/9789264176690-en

Tanga, B. (2012). *The Practices and Challenge of Pre-Schooling in Dawuro Zone*. Addis Ababa University.

Tassew, W. (2016). Inequality, Preschool Education and Cognitive Development in Ethiopia. *International Journal of Behavioural Development*, *40*(6), 509–516. https://doi.org/10.1177/0165025415627700

Tayler, C. (2015). Learning in Early Childhood: Experiences, Relationships and "Learning to Be." *European Journal of Education*, *50*(2), 160–174. https://doi.org/10.1111/ejed.12117

Taylor, J., Bond, E., & Woods, M. (2018). *Early Childhood Studies: A Multidisciplinary and Holistic Introduction* (3rd ed.). London: Hodder & Stoughton Limited.

Teddlie, C., & Tashakkori, A. (2010). *SAGE Handbook of Mixed Methods in Social & Behavioural Research*. Thousand Oaks: SAGE Publications. https://doi.org/10.4135/9781506335193

Teddlie, C., & Yu, F. (2007). Mixed Methods Sampling : A Typology With Examples. *Journal of Mixed Methods Research*, *1*(1), 77–100. https://doi.org/10.1177/1558689806292430

Teijlingen, E. R. van, & Hundley, V. (2011). Pilot Study. In M. S. Lewis-Beck, A. Bryman, & T. F. Liao (Eds.), *The SAGE Encyclopedia of Social Science Research Methods* (pp. 404–406). Thousand Oaks: SAGE Publications. https://doi.org/10.4135/9781412950589

Temesgen, Y. (2016). The Challenges of Pre-Primary Education Organized in Primary Schools of Selected Districts of Jimma Zone. *International Journal of Scientific and Research Publications*, *6*(2), 201–213.

Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L. P., … & Goldsmith, C. H. (2010). A Tutorial on Pilot Studies: The What, Why and How. *Medical Research Methodology*, *10*(1), 1–10. https://doi.org/10.1186/1471-2288-10-1

Tigistu, K. (2013). Professionalism in Early Childhood Education and Care in Ethiopia: What Are We Talking About? *Childhood Education*, *89*(3), 152–158. https://doi.org/10.1080/00094056.2013.792641

Tobin, G. A., & Begley, C. M. (2004). Methodological Rigour Within a Qualitative Framework. *Journal of Advanced Nursing*, *48*(4). https://doi.org/10.1111/j.1365-2648.2004.03207.x

Torbeyns, J., Verbruggen, S., & Depaepe, F. (2022). Pedagogical Content Knowledge in Preservice Preschool Teachers and its Association with Opportunities to Learn During Teacher Training. *ZDM*, *52*(2), 269–280.

Tran, H. P. (2013). *Promoting Holistic Development of Young Children — An Imperative for the Advancement of Nations in Asia-Pacific* (No. UNESCO-ARNEC). *White Paper*.

Tsegai, M. (2015). Early Child Care and Education Attainment in Ethiopia : *African Educational Research Journal*, *3*(June), 136–142.

Tsegaye, S. (2014). *School of Graduate Studies College of Education Practice and Challenges of Pre-School Education in Nefasilk Lafto*. Addis Ababa University.

UNESCO. (2014). *Teaching and Learning Achieving: Quality for All. Education for All Global Monitoring Report 2013-2014*.

UNESCO. (2015). *Investing against Evidence The Global State of Early Childhood Care and Education*. Paris: UNESCO.

UNICEF. (2012). *Inequities in Early Childhood Development: What the Data Say. Evidence from the Multiple Indicator Cluster Surveys*. New York: UNICEF.

UNICEF. (2019). *A World To Learn: Prioritizing Quality Early Childhood*. New York.

Vanpatten, B., & Williams, J. (2015). *Theories in Second Language Acquisition*. (B. VanPatten & J. Williams, Eds.) (1st ed.). New York: Routledge.

Vargas-Barón, E. (2016). Policy Planning for Early Childhood Care and Education: 2000–2014. *Springer*, *46*(1), 15–38. https://doi.org/10.1007/s11125-016-9377-2

Vargas-barón, E., & Vargas-barón, E. (2005). *Planning Policies for Early Childhood Development: Guidelines for Action Guidelines for Action*. Paris: UNESCO.

Vargas-López, G., Rizzoli-Córdoba, A., Medrano-Loera, G., Hernández, O. M., Guadarrama-Orozco, J. H., Narcizo-Cenobio, F. J., … Gabriel O'Shea Cuevas. (2016). Curriculum Analysis and Comparison Between Strategies or Programs for Early Childhood Development In Mexico. *Hospital Infantil de México*, *73*(2), 90–104. https://doi.org/10.1016/S2444-3409(16)30005-X

Veraksa, N., & Sheridan, S. (Eds.). (2018). *Vygotsky's Theory in Early Childhood Education and Research: Russian and Western Values*. London: Routledge.

Veraksa, N., & Veraksa, A. (2018). Lev Vygotsky's Cultural-Historical Theory of Development and the Problem of Mental Tools. *Papeles Del Psicólogo/Psychologist Papers*, *39*(2), 150–154. https://doi.org/10.23923/pap.psico1208.2862

Vujičić, L., & Tambolaš, A. Č. (2017). Professional Development of Preschool Teachers and Changing the Culture of the Institution of Early Education. *Early Child Development and Care*, *187*(10), 1583–1595. https://doi.org/10.1080/03004430.2017.1317763

Vygotsky, L. (1978). Interaction Between Learning and Development. In Gauvain & Coles (Ed.), *Readings on the Development of Children* (pp. 34–40). New York: Scientific American Books. https://doi.org/10.1016/S0006-3495(96)79572-3

Vygotsky, L. (1997). Interaction Between Learning and Development. In M. Gauvain & M. Cole (Eds.), *Mind and Society* (2nd ed., pp. 79–91). New York. https://doi.org/10.1016/S0006-3495(96)79572-3

Vygotsky, L. (1978a). *Mind in Society: The Development of Higher Psychological Processes*. (S. S. E. S. Michael Cole, Vera John-Steiner, Ed.). Cambridge: Harvard university press. https://doi.org/10.1007/978-3-540-92784-6

Vygotsky, L. (1978b). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge: Harvard University Press. https://doi.org/10.1007/978-3-540-92784-6

Vygotsky, L. (1981). *The Concept Of Activity In Soviet Psychology*. (J. V. Wertsch, Ed.). New York: M. E. Sharpe, Inc.

Walker, J., Shenker, S., & Hoover-Dempsey, K. (2015). Why Do Parents Become Involved in Their Children's Education? Implications for School Counselors. *Professional School Counseling*, *14*(1), 27–41. https://doi.org/10.5330/prsc.14.1.768th8v77571hm7r

Walker, S. P., Wachs, T. D., Grantham-McGregor, S., Black, M. M., Nelson, C. A., Huffman, S. L., … & Richter, L. (2011). Inequality in Early Childhood : Risk and Protective Factors for Early Child Development. *The Lancet*, *378*(9799), 1325-1338. https://doi.org/10.1016/S0140-6736(11)60555-2

Walqui, A. (2006). Scaffolding Instruction for English Language Learners : A Conceptual Framework. *The International Journal of Bilingual Education and Bilingualism*, *9*(2), 159–180.

Wangila, V. M. (2017). The Challenges Facing the Implementation of Early Childhood Development and Education Policy in Bungoma County, Kenya. *Journal of Education and Practice*, *8*(15), 217–223.

Warrens, M. J. (2015). Five Ways to Look at Cohen's Kappa. *Journal of Psychology & Psychotherapy*, *5*(4), 8–11. https://doi.org/10.4172/2161-0487.1000197

Weaver, K. (2018). Pragmatic Paradigm. In *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation*. Thousand Oaks: SAGE Publications. https://doi.org/10.4135/9781506326139

Wertsch, J. V. (1993). *Voices of the Mind A Sociocultural Approach to Mediated Action*. New York: Harvard University Press.

Wertsch, J. V. (1985). *Vygotsky and the Social Formation of Mind*. Cambridge: Harvard University Press.

Wertsch, J. V, & Tulviste, P. (1992). Vygotsky and Contemporary Developmental Psychology. *Developmental Psychology*, *28*(4), 548–557.

White, C. S., & Coleman, M. (2000). *Early childhood education: Building a philosophy for teaching*. New Jersey: Prentice-Hall, Inc.

Whitebread, D. (2018). Quality in Early Childhood Education: The Contribution of Developmental Psychology. In M. Fleer & B. van Oers (Eds.), *International Handbook of Early Childhood* (pp. 319–334). Springer, Dordrecht. https://doi.org/10.1007/978-94-024-0927-7_13

William, G., & Brown, A. G. (2011). Generating Data through Questions and Observations. In *Working with Qualitative Data*. London: Sage Publications Ltd. https://doi.org/10.1007/s13398-014-0173-7.2

Winn, J. A. (1994). Promises and Challenges of Scaffolded Instruction. *Sage*, *17*(1), 89–104. https://doi.org/10.2307/1511107

Wood, D., Bruner, J. S., & Ross, G. (1976). The Role of Tutoring In Problem-Solving. *Journal of Child Psychology and Psychiatry*, *17*(2), 89–100.

Wood, E. (2014). The play-Pedagogy Interface in Contemporary Debates. In & B. Edwards, S., Blaise, M. (Ed.), *SAGE Handbook of Play and Learning in Early Childhood*. Los Angeles: Sage Publications.

Wood, E. (2020). Learning, Development and the Early Childhood Curriculum: A Critical Discourse Analysis of the Early Years Foundation Stage in England. *Journal of Early Childhood Research*, *18*(3), 321–336. https://doi.org/10.1177/1476718X20927726

Wood, E., & Hedges, H. (2016). Curriculum in Early Childhood Education: Critical Questions about Content, Coherence, and Control. *Curriculum Journal*, *27*(3), 387–405. https://doi.org/10.1080/09585176.2015.1129981

Woodhead, M., Ames, P., Vennam, U., Abebe, W., & Streuli, N. (2009a). *Early Childhood Development: Equity and Quality? Challenges for Early Childhood and Primary Education in Ethiopia, India and Peru*.

Woodhead, M., Ames, P., Vennam, U., Abebe, W., & Streuli, N. (2009b). *Equity and quality? Challenges for Early Childhood and Primary Education in Ethiopia, India and Peru* (Working Paper No. 55). The Hague, The Netherland.

Wortham, S. C. (2014). *Assessment in Early Childhood Education* (6th ed.). New York: Pearson.

Wyse, D., Hayward, L., & Pandya, J. (Eds.). (2016). *The SAGE Handbook of Curriculum, Pedagogy and Assessment*. Los Angeles SAGE Publications.

Yigzaw, H., & Abdirahman, M. (2017). Practices and Challenges of Public and Private. *International Journal of Research - Granthaalayah*, *5*(201 7), 17–32. https://doi.org/10.5281/zenodo.1133562

Yigzaw, H., & Bashir, H. (2017). Practices and Challenges of Preschool Leadership and Management in Public and Private Kindergarten in Jijiga City Administrations. *Journal Of Humanities And Social Science*, *22*(12), 74–83. https://doi.org/10.9790/0837-2212077483

Yıldırım, G. (2017). The Effect of Outdoor Learning Activities on the Development of Preschool Children. *South African Journal of Education*, *37*(2), 1–10. https://doi.org/10.15700/saje.v37n2a1378

Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M. R., Espinosa, L. M., Gormley, W. T., … & Zaslow, M. J. (2013). Investing in Our Future : The Evidence Base on Preschool Education. *Society for Research in Child Development*, 1–24. https://doi.org/10.1037/dev0000169

Yoshikawa, H., Wuermli, A. J., Raikes, A., Kim, S., & Kabay, S. B. (2018). Toward High-Quality Early Childhood Development Programs and Policies at National Scale: Directions for Research in Global Contexts. *Social Policy Report*, *31*(1–28).

Zhang, F., Kaufman, D., Schell, R., Salgado, G., Seah, E. T. W., & Jeremic, J. (2017). Situated Learning Through Intergenerational Play Between Older Adults and Undergraduates. *International Journal of Educational Technology in Higher Education*, *14*(1). https://doi.org/10.1186/s41239-017-0055-0

Zhanga, X., Hub, B. Y., Renc, L., & Fan, X. (2017). Pathways to Reading, Mathematics and Science: Examining Domain-General Correlates in Young Chinese Children. *Contemporary Educational Psychology*, *51*, 366–377. https://doi.org/10.1016/j.cedpsych.2017.09.004

Zohrabi, M. (2013). Mixed Method Research: Instruments, Validity, Reliability and Reporting Findings. *Theory & Practice in Language Studies*, *3*(2), 254–262. https://doi.org/10.4304/tpls.3.2.254-262

APPENDICES

Appendix A: Informed consent form

Research Title: A case study of the curriculum implementation challenges faced by early childhood education teachers in Ethiopia in ensuring the holistic development of young children.

Principal Researcher: Mr. Alemu   Asresu Fentaw

Instruction: Please read the following very carefully so that you are aware what you are consenting to.

Please put tick mark (√) the appropriate box

I agree to:

To complete a face-to-face questionnaire	
To participate in a personal interview	
To be audio recorded during the interview	
To be observed in the classroom	
To authorize the researcher full access to documents/ materials	

I hereby give my consent to participate in this study and to be interviewed by the interviewer. This is for data to be collected by means of an interview to be used in the research study. Permission to record the interviews has been requested, and I am aware that I may refuse to have interview tape recorded. I understand the participation is voluntary, that I may refrain from answering any or all questions which might make me feel uncomfortable and that I have the right to withdraw from the study at any time if I so wish. Information gathered from the study will be handled with confidentiality and pseudonyms will be used to protect my identity. I am assured that the information will be used for research purpose only and I am assured that there is no risk involved in participation in the study. I consent to voluntary participate in this research study by signing this form.

Signed --------------------------------on-------------------------------this day-----------------at-----------

Appendix B: Information sheet

FACULTY OF EDUCATION

Private Bag X17, Bellville, 7535
South Africa
Tel: +27 (0) 21 959 3001
Fax: +27 (0) 21 959 2647
Email: lduplooy@uwc.ac.za
Website: www.uwc.ac.za

INFORMATION SHEET

TITLE OF THE RESEARCH PROJECT: A case study of the curriculum Implementation challenges faced by early childhood education teachers in Ethiopia in ensuring the holistic development of young children.

Project leader and researcher: Mr. Aemu Asresu Fentaw

Purpose of the research: The purpose of this project is to conduct evidence-based research in order to explain and explore the curriculum implementation challenges faced by early childhood education teachers in ensuring the holistic development of young children in Ethiopia. Furthermore, the research will identify opportunities, challenges or barriers teachers are experiencing in early childhood education sector.

Location: Amhara National Regional State in Ethiopia

Sample: ECCE preschool teachers, and ECCE experts.

Participation in this research project is completely voluntary and participants have the right to withdraw from this research project at any time, without any detriment to themselves.

If they do participate they will be asked to complete a consent form consenting to one or more of the following:

- Face to face questionnaire survey
- Individual Interview
- Classroom observation
- Use of documents or material related to teaching and learning

CONFIDENTIALITY and ANONYMITY:

The ECCE centres and all participants' in the study will remain anonymous. The research will not interfere with the normal functioning of the ECCE centre or with learning in the classroom. There are no known or anticipated risk or discomforts associated with participating in this study.

Voluntary participation

Appendix C: Early childhood care and education teacher questionnaire

A questionnaire to be filled in by teachers ECCE teachers to evaluate the relevance of ECCE curriculum to the holistic development of young children.

Instruction: Please respond to the following questions as honestly as you can by putting (√) or (X) in the appropriate box to the corresponding and if any question makes you uneasy do not answer it.

Section I: Biographical Data

1. Preschool Code………………………

2. Sex: A. Male ☐   B. Female ☐

Age group:

☐ 21-25   ☐ 31-35

☐ 26-30   ☐ 36 and above

4. Level of educational or qualification ---

6. Work experience:

A. 1-5 years ☐   D.16-20 ☐

B. 6-10 ☐   E. 21 and above years ☐

C. 11-15 ☐

Section II: Please read the following questions carefully and put "√" or (X) mark on the appropriate box that most accurately describe your argument. Note that: SA= strongly agree, A= agree, NS= not sure, D= disagree SD= strongly disagree.

No	Items	Scales				
	ECCE curriculum content of gross and fine motor development skill includes experiences and activities that:	SDA	DA	UD	A	SA
1	Provide opportunities for physical activity of fine motor skills development					
2	Provide opportunities for physical activities of gross motor skills development					
3	Provide opportunities for sensory-perceptual development					
4	provide experiences to develop physical capabilities and cognitive abilities with confidence					
5	Promote children to build self-confidence and positive attitudes to physical movement					
	ECCE curriculum content of self-regulation skill includes experiences and activities that:					

289

6	Provide opportunities to develop cognitive functioning control skills through make-believable play, private speech, puzzles, obstacle courses, do what I do, sand and water, and other symbolic systems				
7	Encourages children to develop physical or self-control skills through freeze games, stop and play now, balance, cooperative activities, and so on				
8	Enable children to develop selective and sustained attention through buddy reading, shared activity, vocabulary, and mind-reading games, make-believe play, take turns reading and listening				
9	Facilitate emotional maturity to monitor, evaluate and modify emotions through private speech, freeze game, rhythm, role play, mousetrap, breathing exercise, peer model, and so on				
10	Allow children to make choices and decisions, accept challenges, describe their actions and efforts				
	curriculum content of Health, safety, and nutrition include experiences and activities that:				
11	allow children to practice self-help, self-care and personal hygiene skills and good health habits when eating, drinking, toileting, washing and dressing				
12	promote children to be aware of potential hazards and safety principles in their environment and everyday routines				
13	enables children to acquire the necessary knowledge and skills about nutritious choices and concepts of food nutrition				
14	enables children to acquire basic knowledge about concepts of body structure and function, body care, and grooming need for activity and rest				
	ECCE curriculum content of social development includes experiences and activities that:				
15	Address children's social background i.e., promotes understand the history, cultures, values, beliefs, knowledge, and skills of the society				
16	Enable children to develop socially acceptable manners important in their socio-cultural context e.g., valuing relationships, demonstrating empathy, give hugs, hold hands				
17	Enable children to develop a sense of personal responsibility (toward others, their environment and their actions)				
18	Enable children to develop manners to respect other's opinion, culture, liberty, freedom of choice, equality and privileges of others				
19	Enable children to master information and practice the skills that they need to function effectively in the society				

290

20	Enable to develop pro-social skills and behavior through cooperative/paired activities, take turns reading and listening, story discussions, and play					
21	Enable children to understand and respond to social cues in a socially appropriate manner e.g., greetings, farewells, getting attention, say "thank you," "please," and "excuse me, taking turns and make a queue					
22	Enable children to build positive and interactive relationships in their peers group, teachers, and social circles					
23	Enable children to develop problem-solving skills e.g., handling emergency, suggesting alternative solutions to negotiate with peers and resolving conflict with words					
	curriculum content of emotional development includes experiences and activities that:					
24	provide experiences to build positive self-esteem, self-image, appreciation and sense of personal worth					
25	Provide opportunities to express a wide range of feelings, emotions and behavior related to self and others using appropriate vocabulary and actions					
26	Provide experience to resolve negative feelings, sadness and anger through breathing exercise and mediation, calming words, reading stories, listening to soft music, or working with clay etc.					
27	provide experiences to develop sense of belonging, feelings of psychological safety and security					
28	provide experiences to development of curiosity, engagement and positive attitude for learning					
29	provide experiences to foster self-confidence and competence in their own abilities, achievements, and ideas as learners					
30	provide experiences to recognize and describe a wide range of feelings verbally or non-verbally e.g., sadness, anger, fear, and happiness					
	curriculum content of cognitive development includes science experiences and activities that:					
31	Inspires children to develop inquiry skills and scientific thinking using nature or science objects and material, micro-life book, insect identity charts, a poster of natural creatures, and animal pictures					
32	Promote a cycle of scientific reasoning e.g., as 'Ask and Reflect,' 'Plan and Predict,' 'Act and Observe,' and finally, 'Report and Reflect, allow to describe both verbally and non-verbally what they see, hear, touch, feel and taste					

291

33	Provide opportunities to observe and investigate change in matter: explore states of change when substances are combined, heated, or cooled					
34	Provide opportunities of open-ended exploration and observation of living things for scientific thinking e.g. life cycle of plant, similarities and differences between living and non-living things, observing natural habitats					
35	Provide opportunities for hands-on science activities: to manipulate objects and experiment with cause and effect, trial and error and motion with teachers scaffolding using conceptual tools like magnifying glasses, magnates, ruler, thermometers, wheels, pulleys, and swings etc.					
36	Provide opportunities to explore the natural environment indoors and outdoors e.g. characteristics of soil, sorting rocks, observing water as solid, liquid, and effects of sunlight and wind and the need of conservation with teachers scaffolding					
37	provide opportunities to explore movement/motion: how and how things can be moved by, for example, blowing, throwing, pushing, pulling, rolling, swinging and sinking.					
38	Encourage to integrate science activities with other activities across in each day					
curriculum content of cognitive development /mathematics includes experiences and activities that:						
39	promote children to develop basic concepts of numbers and counting activities (counting, comparing, adding) through numeral games, number flow the leader, cardinal counting, tallying, number line hopscotch, timeline calendar, I have who has games, count object by using1-to-1 correspondences and written number symbols					
40	promote children to acquire knowledge of operation and algebraic: understanding patterns, predicting, describing data how many, and compare collection of objectives more, less, the same or not the same					
41	Allow children to acquire knowledge of geometry and spatial concepts: fitting things together and taking things apart, rearranging and reshaping objects and materials					
42	Develop knowledge of statistics and probability: sorting, classifying, matching, representing and organizing attributes depend on colors, sizes and shapes, order objects according to one attribute					
43	Allow children to acquire knowledge of measurement and data: manipulating different measurement tools like size, mass, height, time, volume, area, and making a collection with categories, order, sort and compare					

292

44	Integrate mathematics problem solving activities and critical thinking across the day					
	curriculum content of language and literacy development include experiences and activities that:					
45	provided opportunities to build aural and oral language: sustained conversations, have fun with words, increase use of vocabulary, develop auditory discrimination					
46	Allow to convey and construct messages for a range of purposes in a variety of contexts using storytelling, buddy reading to comprehend previously learned material, private speech to explain what they understand					
47	Develop phonological awareness skills: engage children in activities of identifying spoken and written language, discriminate words, clapping out the number of syllables, and onsets, rhyming songs, sound match, read storybooks and poems					
48	Provide opportunities to understand phonics and word recognition: isolate and recognize specific phonemes and letters in spoken word and rhyming songs, identification of letters of the alphabet using alphabet books, game names, charts, blocks, and puzzles, read and write children's names daily, practice sound-symbol correspondences					
49	Promote Comprehension and Collaboration: identify the elements of the story- what, where, when and why happened and who is the story about					
50	Provide opportunities to engage in reading and writing: work in pair, take turns reading and listening to develop selective and sustained conversation.					
51	Promote vocabulary Acquisition and Use: generate or sort words that are similar in meaning, explore word relationship, props, topics, materials					
52	Develop concepts of print: identify simple punctuation, such as full stops and question marks					
53	Investigate symbols and pattern systems: recognize simple patterns and relationships, some letter names, for example the letters in their own name, copy simple patterns					

293

Appendix D: Structured observation schedule

Section I. Demographic Information

Preschool code--

Date of Observation --

Duration of observation --------------Start time--------------------- End time----------------------

Number of children-----------------child-teacher ratio-----------------------

Length of ECCE the program ------------------------

Children's age category

Age category	Boys	Girls	Total
< 4 years			
4 years			
5 years			
6 years			
> 6 years			

Section II: Rating scale for learning environment

Rating scales are adopted from the Global Guidelines for the Education and Care of Young

Children in the 21st Century

Excellent = Always observed

Good = Mostly observed

Adequate = Sometimes observed

Minimum = Occasionally observed

Inadequate = Never observed

No	Items	Inadequate	minimum	adequate	good	excellen	Examples of support rating
	Environment and Physical Space						
1	Environment and Physical Space						
2	The environment and physical space are clean, free from hazards, including unsafe equipment, pollution, and violence.						
3	The environment provides basic sanitation, safe and potable water, and good ventilation,						
4	teachers create a calm and peaceful social/emotional classroom						

294

5	The environment promotes good health practices (e.g., personal hygiene, including washing of hands, child sized-toilets).					
6	The environment provides children with a sense of well-being, belonging, security, and freedom from fear.					
	Stimulating Environment					
7	There are opportunities for frequent and positive child-child and child-adult interactions					
8	The environment stimulates children to play, explore, and discover					
9	There are opportunities for children to engage in active indoor and outdoor play.					
10	There is a balance of time for free play and structured activities.					
11	There are a variety of materials that promote problem solving, critical thinking, and creativity for children with different abilities.					
12	The outdoor space and play equipment provide a variety of movement possibilities.					
13	The outdoor environment contains opportunities for extension of play, such as gardening and other activities in natural habitats.					
14	The space is effectively organized so that materials for play and artistic expression are readily accessible to the children.					
15	The indoor environment contains materials for children to construct their own play things.					
16	The outdoor environment contains materials for children to construct their own play things					
17	Children co-participate in planning and organizing the environment.					
	Curriculum Content and Pedagogy					
	Curriculum Content					
18	A curriculum plan exists for fostering children's learning.					
19	Flexible, comprehensive plans are implemented that are oriented to individual difference/ the children, family, and cultural contexts					
20	The curriculum gives children the opportunity to master information and practice the skills that they need in order to function effectively in society					

295

21	The curriculum emphasizes content that is connected to real world experiences.						
22	The children contribute ideas for planning daily activities.						
	Pedagogical Methods						
23	Teachers have a supportive teaching and caring relationship with children.						
24	Teachers use positive language when speaking to children.						
25	Teachers possess a basic understanding of pedagogical principles.						
	Learning Materials						
26	Teachers use local materials as resources for teaching and learning						
27	Curriculum materials and equipment are provided for all children that support creative learning experiences (e.g., art, dance) and maintain cultural integrity.						
	Assessment of Children's Progress						
28	Individual progress is shared with parents and families						
29	The children are engaged in self-evaluation						
30	Individual children's learning processes and achievements are monitored systematically						
	Evaluation of Programs						
31	The program is evaluated regularly in regard to its overall contributions and relevance to children and the broader society.						
32	The program's ability to meet local, regional, national, and international standards for excellence in education/care is evaluated comprehensively.						
	Knowledge and Performance of Teachers						
33	teachers demonstrate knowledge of child growth, development, and learning and are able to apply this knowledge to practice.						
34	teachers adapt the use of space, materials, and time to meet the needs of the children and the particular program.						
35	teachers communicate their professional knowledge to others.						
36	teachers work collaboratively and in partnership with others.						
37	teachers reflect on their individual practices and make appropriate changes						
	Personal and Professional Characteristics						

296

38	teachers exhibit personal characteristics that demonstrate caring, acceptance, sensitivity, empathy, and warmth to children.					
39	teachers respond to children who are experiencing distress in a comforting, supportive, and timely manner.					
40	teachers treat children with dignity and respect to support the development of their self-worth.					
41	teachers are advocates for children					
	Moral/Ethical Dimensions					
42	Teachers respect children, their culture, and family practices					
43	Teachers show courage in acting on behalf of children and speak up when necessary.					
	Partnerships With Families and Communities					
	Program Policies					
44	Program policies promote partnerships with families and community					
45	Program policies provide support for families, either directly or through links with other community resources (e.g., agencies, specialists, community leaders).					
46	Guidelines are established for parent participation and involvement in the program.					
47	Ongoing discussions/ conferences with families about children's progress and other concerns are communicated					
	Moral/Ethical Responsibilities and Behaviors					
48	The program has procedures for protection of children from hazards or abuse.					
49	Program experiences foster self-esteem and self-confidence in all the children.					
50	Moral/spiritual/ethical experiences in the curriculum reflect and promote values of individual families.					
	Training and Resources					
51	Resources/Information is made available to families on aspects of child development and learning.					
52	Resources/Information is provided to family and community members about children's health care and nutrition.					
53	Educational materials and/or information sessions suitable for the community, culture, and geographic location and are made available to families.					

297

54	Materials/strategies ensure participation of families with diverse characteristics (e.g., cultural, linguistic, ethnic, or socioeconomic).						
	Transition of Children From Home to the Program						
55	Families can visit the preschool program.						
56	Information on expected child behaviors in the program and child achievements in the curriculum is disseminated to families.						
57	Connections between home and program are encouraged and maintained.						
	Opportunities for Family and Community Participation						
58	Opportunities are provided for families and community representatives to observe program activities.						
59	Collaboration is established with families and community representatives for program planning, management, and evaluation.						
60	Families and community representatives participate in the decision-making process.						
61	Parent/family volunteer opportunities to assist in the classroom and contribute expertise are provided (e.g., making materials, leading activities).						
62	Support is provided for families in need.						

298

Appendix E: Interview schedule for ECCE teachers and experts

University of the Western Cape, Faculty of Education and Department of Educational Studies. The purpose of this interview to triangulate and supplement data collected from ECCE teachers through questionnaire. Please respond to the questions as honestly as you can and if any question makes you uneasy do not answer it.

Section I. Biographical Data

    a. Sex ----------
    b. How old are you? ---------------
    c. What is your current position? ---------------
    d. For how long have you been working in your current position? -------
    e. What is your educational level? --------------
    f. What is your field of study? -----------
    g. Are you permanently employed-------------

Section II. Interview Questions

1. **Nature of ECCE policy**
   a. What is the nature of early childhood care and education? How do you describe it? To what extent ECCE is accessible in your school.
   b. Which philosophies/theories frame the current ECCE curriculum? What was the motivation for this choice? Do you have the ECCE policy document? Are teachers familiar with it? How do you know it/do you have training?
   c. What is the approach of the curriculum? [teacher-directed or child initiated, child-centered or content-centered, and academic focused or socialization-focused?] What was the motivation for this? Is it integrated or focus on a particular topic?

2. **Curriculum Implementation**
   a. How do you describe the appropriateness of curriculum for the holistic development of young children?
   b. Does the curriculum contents and learning experiences good enough to support the development of children's higher order abilities, such as thinking, reasoning, problem-solving and decision making, creativity?
   c. Does the curriculum contents and learning experiences promote self-regulation skills?
   d. To what extent curriculum address the values, cultures, and expectations of families and society? (oriented to children's experiences?). Does the curriculum help children to master information and practice the skills needed to function effectively in society?
   e. To what extent contents and learning experiences provide hands-on science experiences i.e. encourage children to observe, explore, explain, report, interact, and evaluate? [does it provide hands-on science experiences]?
   f. Do you think that the curriculum needs modification? What are your reasons? In your observation which instructional domains/skills are not sufficiently addressed in the curriculum?

299

g. What challenges do you face as an ECCE teacher? /What are curriculum implementation challenges?

h. How does the regional education bureau/ zone education department and district education office support and monitor the implementation of the curriculum?

3. **Alignment between curriculum, pedagogy and assessment**

   a. In your observation how do you explain the alignment between curriculum content, pedagogy, and assessment? How do you define alignment?

   b. What pedagogical approaches and strategies are recommended by the curriculum? What was the motivation for this? Which methods of teaching most frequently do you apply in your classroom? Do you think this pedagogical approach appropriate to the holistic development of young children? what is scaffolding teaching?

   c. What assessment strategies are recommended in the curriculum? [What is the motive behind this choice?] Which methods of assessment most frequently you apply? How do you understand dynamic assessment? What is the purpose of assessment?

4. **Teacher Training and competency**

   a. How do you describe your pre-service training? [which philosophies/theories frame the current preschool teachers training? what was the motivation for this choice] how do you understand sociocultural theory?

   b. How do you explain the impact of pre-service training on your/teachers' professional carrier?

   c. Do you think your pre-service training gives you the required competency, skills, and motivation to deliver and implement the curriculum effectively?

   d. To what extent the pre-service training appropriate to teaching of young children?

   e. What are the challenges of pre-service training? What strategies you recommend? what modifications might be needed? In which issues?

   f. How do you describe the in-service training practice? What are the feeling of teacher? What opportunities does teachers have to improve their competencies and qualification? What are the challenges?

   g. What do you feel about your profession? What is your attitude towards the teaching profession?

5. **Physical environment**

   a. How do you describe the appropriateness of the physical environment of your school for the holistic development of young children? is it safe, supportive, provides good health practice (like personal hygiene, potable water, toilet), provide a variety of movement.

   b. How do you describe the appropriateness of indoor and outdoor learning environment of your school for the holistic development of young children?

   c. How do you describe the availability of teaching and learning materials to support fine and gross motor development of children?

   d. Are there adequate curriculum materials and equipment that enhance the children's holistic development? Are the materials integrated to /reflects children's culture, such as art, music, dance, and drama?

6. **District, Community and Parental Support**
   a. How do you explain the district, community, and parents' involvement and partnership? Do you have families and community representatives? How do they involve? Do you cooperation with different sectors?
   b. Does the school have established guide lines for parental participation and involvement/ policy?
   c. As a teacher /school how do you communicate child's progress and other issues of concern with parent and family? Is there ongoing discussion with families/ community to ensure quality program services?
   d. What are the challenges/reason for poor community involvement?

Appendix F: Basic themes and sub-themes extracted from interview transcripts

Theme 1: RQ1: Nature of early childhood care and education	
Sub-themes 1.1	Early Childhood Care and Education Curriculum Theory in Ethiopia
Sub-themes 1.2	Early childhood care and education curriculum approach
Sub-themes 1.3	The Integration of Curriculum
Sub-themes 1.4	Teachers' understanding of ECCE policy and curriculum
Sub-themes 1.5	Access and participation
Theme 2: RQ2: Appropriateness of curriculum contents	
Sub-themes 2.1	Social development
Sub-themes 2.2	Self-regulation skills
Sub-themes 2.3	Early science Experiences
Sub-themes 2.4	Appropriateness of curriculum for the holistic development
Sub-themes 2.5	Recommendations to improve the ECCE curriculum
Sub-themes 2.6	Support and Monitoring of Curriculum Implementation
Sub-themes 2.7	Curriculum Implementation Challenges
Theme 3: RQ3: Nature of early childhood care and education teachers training in Ethiopia	
Sub-themes 3.1	Teachers' preparation and pedagogical knowledge
Sub-themes 3.2	Teachers' Content Knowledge and Performance
Sub-themes 3.3	In-service training
Sub-themes 3.4	Attitude of teachers to their profession
Theme 4: RQ4: **Alignment of Curriculum, Pedagogy and Assessment**	
Sub-themes 4.1	Teachers pedagogical approaches
Sub-themes 4.2	Integration of play-based learning in the curriculum
Sub-themes 4.3	Assessment of children's progress
Sub-category 4.3.1	Types of assessment
Sub- category 4.3.2	Purpose of assessment
Sub- category 4.3.3	Alignment between curriculum content, instruction, and assessment
Theme 5: RQ5: Appropriateness of Physical environment	
Sub-themes 5.1	Outdoor environment

Sub-themes 5.2	Indoor environment
Theme 6: RQ6: District, Community, and Parental support	
Sub-themes 6.1	**Financial Support**
Sub-themes 6.2	Community and parental involvement,
Sub-themes 6.3	Collaboration with other sectors and stakeholders,
Sub-themes 6.4	**Parent and school communication**

Appendix G: Cronbach item analysis

Item Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
.728	54

Closed-ended questionnaires item reliability statistics

Item-Total Statistics			
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q1	100.97	241.689	.083	.722
Q2	101.80	247.200	.037	.720
Q3	101.40	227.145	.431	.699
Q4	101.40	248.317	-.013	.725
Q5	100.73	230.547	.283	.708
Q6	101.50	231.776	.281	.708
Q7	101.97	249.068	.022	.719
Q8	102.00	245.103	.173	.714
Q9	101.53	240.395	.130	.718
Q10	102.23	246.185	.145	.715
Q11	101.60	237.490	.387	.706
Q12	101.73	241.926	.181	.714
Q13	101.73	240.754	.257	.711
Q14	101.70	239.872	.243	.711
Q16	102.07	248.064	.106	.717
Q17	101.87	252.051	-.091	.727
Q18	101.87	248.464	.020	.720
Q19	102.20	239.338	.326	.708
Q20	102.30	247.114	.126	.716
Q21	102.03	242.723	.203	.713
Q23	102.17	238.626	.388	.707
Q24	102.27	246.409	.123	.716
Q25	102.20	240.234	.325	.709

304

Q26	101.80	248.648	-.003	.722
Q27	101.97	244.723	.150	.715
Q28	101.80	237.131	.259	.710
Q29	102.13	244.533	.132	.716
Q30	102.07	248.409	.016	.720
Q31	101.83	240.695	.218	.712
Q32	101.63	250.861	-.059	.724
Q33	101.70	241.390	.165	.715
Q34	101.43	250.668	-.058	.726
Q35	101.53	232.120	.332	.705
Q36	102.20	243.131	.198	.713
Q37	102.40	243.283	.296	.711
Q38	102.27	246.892	.095	.717
Q40	102.10	238.852	.279	.709
Q41	102.40	243.628	.179	.714
Q42	102.33	240.437	.314	.709
Q43	101.60	236.179	.262	.709
Q44	102.47	239.913	.401	.708
Q45	101.67	230.920	.353	.704
Q46	102.40	238.938	.337	.708
Q48	102.37	239.895	.423	.707
Q49	102.33	238.506	.384	.707
Q50	101.97	242.999	.161	.715
Q51	101.77	233.289	.334	.705
Q52	102.00	246.069	.077	.718
Q53	101.30	233.666	.260	.709
Q54	101.67	240.851	.147	.716
Q55	102.07	246.685	.061	.719
Q56	101.93	244.823	.106	.717
Q57	102.40	244.179	.179	.714
Q58	102.37	251.413	-.087	.721

Appendix H: Demographic characteristics of ECCE teachers who participated in the questionnaire

Variable	Categories	Frequency	Percent
Sex	Male	18	4.7
	Female	361	95.3
	Total	379	100
Age	21-25	128	33.8%
	26-30	185	48.8%
	31-35	51	13.5%
	36 and above	15	4%
	Total	379	100
Work experience	1-5	175	46.2%
	6-10	169	44.6%
	11-15	33	8.7%
	16-20	2	0.5%
	21 and above	-	-
	Total	379	100
Educational qualification	Certificate	172	45.4
	Diploma	207	54.6
	Degree	-	-
	Total	379	100

306

Appendix I: Characteristics of pilot tested preschools

This section provides a summary of the analyses of preschools chosen for structured observation instrument pilot testing.

Preschools selected for pilot test	Location	Number of teachers		Number of care givers/ assistance teachers		Educational level		Non graduate
		Male	Female	Male	Female	Diploma	Certificate	
Preschool 1	Town		3		3	3		3
preschool 2	Town		3		2	3		2
Preschool 3	Township		3			2		1
Preschool 4	Township		3		1	2		2
Preschool 5	Rural		3			1		2
Total			16		6	11		9

Preschool 1 was the oldest public preschool that opened in 1981 and was run under the administration of the municipality until 2017. Since 2018, the administration shifted to education office of city administration. The preschool has its own principal, and all the teachers and assistant teachers are long serving. However, assistant teachers are hired by contract. There were seven rooms, including the principal's office. Three of them are classrooms, one is a resource center, and the other two were children's feeding and rest room. The preschool is well fenced, clean, and free from hazards. The indoor and outdoor environments are well maintained and attractive for children's learning. The outdoor environments are purposefully structured to nurture the physical, social, and emotional development of young children. The indoor environments are well carpeted, divided into different activity centers, equipped and beautifully decorated with attractive displays. There were totally 147 children, each classroom contained of stage 1, 24 males and 26 females, stage 2, 27 males and 24 females, and stage 3, 22 males and 21 females. The ages of all young children range from four to six years. In this preschool, I discussed with teachers and observed the indoor and outdoor learning environments for two successive days.

Preschool 2 was also a public preschool located in the town. It is not exactly known when it was first opened. In other words, I could not find exact data when it was first opened. The preschool has its own principal. It accommodated children from stages 1 to 3; there were 116 children aged from 4 to 6 years: stage one had 48, stage two had 35, and stage three had 35. There were three diploma teachers qualified in early childhood care and education and two caregivers or assistants. However, as shown in the table, the caregivers were not certified or trained in early childhood care and education. The preschool has three classrooms, one principal office and on resting room for children. The indoor and outdoor learning environments were properly fenced, clean, well-organized and decorated. Though there was a shortage of outdoor space for play and other activities, the preschool does not have the potential to expand in the future. In this preschool, I have effective discussions with teachers. And observation of indoor and outdoor learning environments was conducted for two successive days.

The third piloted preschool was a township public preschool. It was not clearly known when the preschool first opened. The preschool catered for 185 children aged from four to six years, each classroom had 34 males and 28 females in stage 1, 29 males and 31 females in stage 2, and 30 males and 33 females in stage 3. This indicates that there is a high teacher-to-child ratio and above the standards set in the national ECCE policy. In other words, children are highly crowded and have difficult free movement. Furthermore, the preschool does not have its own principal. Teachers are overloaded in routine activities of feeding and toileting children. This is due to lack of caregivers and trained teachers. This is the main challenge in this preschool. The outdoor environments were large and enough to structure different playing and learning activities, but the space was not well structured and organized and there was a lack of playing materials and equipment to maximize children's learning and engagement.
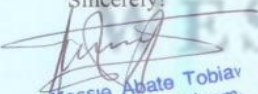
Preschool 4 was a new public preschool that had opened its doors in 2016. The preschool served for 151 children from four to six years old; each classroom contained: stage 1, 27 males and 15 females; stage 2, 30 males and 26 females; and stage 3, 32 males and 24 females. There were three teachers, two of whom were qualified in early childhood care and education and one of whom was not certified. Teachers are overburdened; they face numerous challenges in managing and organizing instructional times, and they do not properly use their time for the teaching and learning

308

process because they are busy managing routine activities such as caring for and feeding children. The preschool was properly fenced, clean, and free from hazards and the outdoor space was enough for free movement of children. However, indoor and outdoor learning environments are under resourced and equipped to support cognitive, social, emotional and motor development of children. There is also a shortage of classrooms, restrooms, and feeding rooms.

Preschool 5 was a public preschool which is located in a rural area and far from the town. The preschool served for 177 children from four to six years old; each classroom contained: stage 1, 40 males and 37 females; stage 2, 29 males and 33 females; and stage 3, 21 males and 17 females. As shown in the above table, there are only three teachers, and only one of the teachers is certified in early childhood care and education. The rest of the two were not certified, and they are not permanently employed. There is a lack of caregivers, and each classroom is overcrowded and unmanageable. There are no enough chairs, and they are not child sized. It is a very poorly resourced preschool and has unclean space and unsafe playgrounds. There is also a lack of potable water and basic sanitation facilities.

Appendix J: Letter of permission

አማራ ብሔራዊ ክልላዊ መንግስት ቢሮ
AMHARA NATIONAL REGIONAL STATE EDUCATION BUREAU

Re No REB 2/ 245/Curr-27/1
Date 05/05/2013 E.C

Subject: letter of permission to conduct research

Dear Zone ECCE Education Experts, Woreda ECCE Education experts, supervisors, Principals and ECCE teachers

Mr. Alemu Asresu has requested a letter of permission to collect data for the partial fulfillment of his PhD thesis, under the title, "A case study of the curriculum implementation challenges faced by early childhood education teachers in Ethiopia in ensuring the holistic development of young children". We have reviewed the research protocol presented by Mr. Alemu. We are aware that the research project is intended to be implemented in North Wollo, Bahir Dar City, and East Gojjam zone by interviewing and administering written survey questions to early childhood care and education teachers, as well as observing preschools, including the indoor and outdoor activities. Furthermore, Mr. Alemu requested access to official documents such as ECCE policy, ECCE curriculum, teacher's guide, textbooks, annual and daily lesson plans, reports, and statistical data. Therefore, the purpose of this letter is to inform you that Mr. Alemu Asresu was permitted to collect data under the following conditions:

1. Before the data collection begins, participants must be asked to give their written or verbal consent.

2. Participants' responses should be treated confidentially; their identities and organization names should not be identifiable.

3. The privacy of individuals should be maintained in all published and written data resulting from the study.

4. Supervisors, principals, education experts, and children are under no obligation to help you with your investigation.

5. Make all the necessary arrangements not to interrupt educational programmers.

6. A brief summary of the findings of the project should be communicated to the Woreda Education Office and Zone Education Department

Wish you success in your research.

Sincerely!

Kassie Abate Tobiav
Curriculum Developm
and Implementatio
Directorate Direr

ሠላም ለሁ·ሉ·ም!
ጥራት ያለው· ትምህርት ለሁ·ሉ·ም
Quality Education For All

310

OFFICE OF THE DIRECTOR: RESEARCH
RESEARCH AND INNOVATION DIVISION

Private Bag X17, Bellville 7535
South Africa
T: +27 21 959 4111/2948
F: +27 21 959 3170
E: research-ethics@uwc.ac.za
www.uwc.ac.za

UNIVERSITY *of the*
WESTERN CAPE

18 January 2019

Mr AA Fentaw
Faculty of Education

Ethics Reference Number: HS18/10/15

Project Title: A case study of the curriculum implementation
                            challenges faced by early childhood education teachers in
                            Ethiopia in ensuring the holistic development of young
                            children.

Approval Period: 14 January 2019 – 14 January 2020

I hereby certify that the Humanities and Social Science Research Ethics Committee of
the University of the Western Cape approved the methodology and ethics of the above
mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted
to the Ethics Committee for approval.

Please remember to submit a progress report in good time for annual renewal.

The Committee must be informed of any serious adverse event and/or termination of
the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

HSSREC REGISTRATION NUMBER - 130416-049

FROM HOPE TO ACTION THROUGH KNOWLEDGE.