

UNIVERSITY OF EDUCATION, WINNEBA

**ASSESSMENT PRACTICES AMONG EARLY CHILDHOOD
EDUCATION TEACHERS IN THE TEMA WEST METROPOLIS,
GHANA**



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TEACHERS IN THE TEMA WEST METROPOLIS, GHANA**



**A thesis in the Department of Early Childhood Education,
Faculty of Educational Studies, submitted to the School
of Graduate Studies in partial fulfilment
of the requirements for the award of the degree of
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DECLARATION

Student's Declaration

I, Agnes Amoah, hereby declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

Signature.....

Date.....

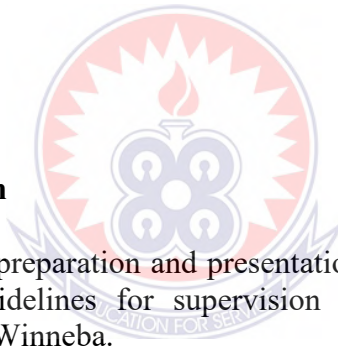
Supervisor's Declaration

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba.

Name of Supervisor: Yayra Dzakadzie (PhD)

Signature.....

Date.....



DEDICATION

To my beautiful daughter Monica Asabea Larbi and friends.



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I am greatly indebted to my supervisor, Yayra Dzakadzie (PhD) for his dedication, guidance, constructive criticism, advice and encouragement throughout the study. My profound gratitude again goes to all the teachers and lecturers who taught me throughout my entire life. Special thanks also go to the workers at the Tema West Educational Directorate and all the Early Childhood Education teachers who willingly provided information for the success of this study. My gratitude also goes to my supportive siblings, Dorcas, Doris, Comfort, Helena, Eunice, Samuel, Haggar and Robert for their unconditional support and prayers. Lastly, my appreciation goes to my family, friends and all those who supported me to go through this academic endeavor. Thank You All and God Richly Bless You.



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ABSTRACT

The study examined the assessment practices among Early Childhood Education teachers in the Tema West Metropolis within the Greater Accra Region of Ghana. The study was guided by four specific research objectives which were to assess the training of ECE teachers, examine teachers' perception about assessment during early years' education, investigate the assessment practices deployed by teachers in assessing children as well as the gender and professional qualification differences in the assessment practices of teachers and the challenges Early Childhood Education teachers encounter in the use of assessment practices in the Tema West Metropolis, Ghana. Two hypotheses were also formulated to guide the study. The study employed a descriptive survey design within a quantitative enquiry. Data were collected through the use of a self-constructed questionnaire. The study covered 200 ECE teachers within 40 public basic schools in the Tema West metropolis. Census sampling technique was used to obtain the sample for the study. Descriptive statistics such as frequency, percentage, mean and standard deviation were used to analyze the quantitative data collected. Independent sample T-test and One Way ANOVA were also used to test hypothesis 1 and 2 respectively. The findings of the study revealed that; the teachers in the Tema West Metropolis have some level of training and also have positive perception of early grade education assessment. Though ECE teachers in the municipality engage in the use of formative assessment practices, most of them still engage in the use of pencil and paper test. The study concluded that ECE teachers in the Tema West Metropolis have been trained and possess positive perceptions about the need for assessing children during their early years' education. The assessment practices of teachers were building of portfolio, the use of observation, informal conversation, self and peer assessment, performance-based assessment among others. The teachers also engage in traditional assessment practices such as pencil and paper test on regular basis. Lack of indoor and outdoor resources for assessing children, lack of understanding of children's assessment outcomes, overcrowding or large number of children among others were some of the challenges teachers face in assessing children in the municipality. It was recommended among others that there should be periodic in-service training for teachers on current assessment practices and the provision of resources for teaching and assessment of children.

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter focused on the background to the study, statement of the problem, purpose of the study, research objectives and questions as well as significance of the study. It also covered the delimitation of the study and organization of the study.

1.1 Background to the Study

The role of assessment in the education of children cannot be underestimated. Assessment is a crucial concern of educational studies since assessment is considered to have a major impact on children's learning and development (Bagnato, McLean, Macy & Neisworth, 2011; Cople & Bredekamp 2006). To Brassard and Boehm (2007), assessment is the most critical issue in education. Bowman, Donovan, and Burns (2000) in their submission stated that, "Assessment...is in a state of flux... and there are a number of promising new approaches to assessment among which includes clinical interview and performance assessment" (p12). In their studies, Atkins-Burnett and Allen-Meares (2000) stressed that, early childhood assessment is a field in transition dominated from its inception by psychometric models and measurement strategies used with older children and adults.

Similarly, Dunphy (2010) emphasized that assessment has growing reputation among educators in all levels of education systems including early years' education. Studies conducted by Bowman, Donovan and Burns (2000) and Schappe (2005) indicated that teaching and assessment in early years is considered to have an important place as in other levels of education systems. Several researches indicated that, there is a large degree of variation between individual children's cognitive, social and emotional

functioning and therefore age alone is not an adequate indicator of a child's skill or capability (Feldman, 2003; Raban & Litchfield, 2007). Teaching and assessing early learners therefore require the use of developmentally appropriate strategies that are interactive and involve active participation of children in order to facilitate learning and their holistic development.

The term "assessment" is defined by many scholars in several ways mostly to suit their ideologies. According to Ellis (2014), assessment is a systematic process to measure or evaluate the characteristics or performance of individuals, programmes and entities for the purposes of drawing inferences. In similar vein, Goodwin (2000) defined assessment as the process of determining through observation or testing, an individual's traits or behaviours, a program characteristic, or the properties of some other entity and then assigning a number, rating or score to that determination. Again, Chen and McNamee (2007) defined assessment as the process of listening, observing, and gathering evidence for learning progress of learners in a classroom environment.

With regards to assessment in the field of Early Childhood Education, Hills cited in Bronson (1994), in his submission stated that, early childhood assessment involves multiple steps of collecting data on children's development and learning, determining its significance in light of the programme goals and objectives, incorporating the information into planning for individuals and programme, and communicating the findings to parents and others. In agreement, Dodge, Jablon and Bickart (1994) further explained that, teachers need to obtain "useful information about children's knowledge, skills, and progress by observing, and reviewing learners work over time, this is because, ongoing assessment that occurs in the context of classroom activities

can provide an accurate, fair and representative picture of children's abilities and progress" (p.181).

According to Horton and Bowman (2002), pre-primary assessment is an ongoing process. Horton and Bowman continue to indicate that understanding the need for early years assessment and the way assessment practices are carried out during early years' education will improve the learning and development of young children. From the definitions, assessment of young learners is different from the assessment of older learners therefore, assessment of young learners should involve multiple and variety of approaches in order to generate a comprehensive understanding of young learners' skills and needs. Also, there has to be a match between the chosen strategy for assessment and the level of mental, social and physical development of learners at each stage. Moreover, there is a rapid developmental change in young learners which requires assessing whether the development is progressing normally or not. In order to meet this need, different assessment practices and procedures must be used in Early Childhood Education delivery.

Amponsah (2004) emphasized that, the importance and purpose of assessment during earlier years education is to provide adults with the information they need to plan more appropriately for children's ongoing development and therefore it needs to involve strategies that support rather than threaten children's feelings of self-esteem. Several studies revealed the vitality of assessment especially during early years education. Among these relevance are to monitor children's learning and development progress, helps in making decisions about programmes to advance learning and development, helps in identifying children who may benefit from special support or intervention, helps in communicating a child's learning and development with

families and other professionals, helps in involving families in planning children's learning in a meaningful way and helps in evaluating early childhood programmes' effectiveness (Bagnato, McLean, Macy & Neisworth, 2011; Copple & Bredekamp 2006; Puckett and Black 2000; Trevarthen, 2002).

Developmentally appropriate assessment approaches and practices for assessing children during their early years' education have been documented by several studies (Bodrova, Germeroth, & Leong, 2013; Saracho & Spodek, 2006). These assessment practices involve actively engaging students in monitoring their learning through self, peer, and instructor-based feedback (Assessment Reform Group, 2002), with the aim of not only supporting academic content learning but also building learner independence through metacognitive and self-regulation development. Furthermore, underpinning contemporary processes of assessment is a view of assessment rooted in a socio-developmental theory of learning which recognizes the importance of classroom context, social interactions, and developmental learning (Black & Wiliam, 2006). According to Beaty (1990), other developmentally appropriate assessment practices should include, observation (in the form of checklist, anecdotal records, time sampling among others) portfolios and interviews.

Despite the empirical documentation of appropriate assessment practices that should be carried out at the early childhood level, pen and paper test as well as single test score continues to be the basis on which young children are grouped, retained in grades and assigned to special education classes and this was rightly stated by McGill-Franzen and Allington (1993). Given this observation, it is prudent to periodically investigate the assessment practices Early Childhood Education teachers are deploying in their various educational settings so as to measure the current

practices of teachers against empirically documented assessment practices that teachers are supposed to use in assessing children at this tender age. This study therefore sought to examine or investigate the assessment practices of Early Childhood Education teachers in the Tema West Metropolis, Ghana.

1.2 Statement of the Problem

Accurate assessment of children is disreputably difficult and hence needs clear guidelines regarding the nature, functions and the use of early childhood assessment practices that are appropriate for use in culturally and linguistically diverse situations for children at that level. This is because, development of children during their early years occurs very rapidly, episodically and very susceptible to environmental conditions (Shepard, Kagan, & Wurtz 1998). It is therefore critical to recognise the unique nature of children development so as to assess them appropriately. Gullo (2006) indicated that, assessing children from birth through the pre-school years is complex and different from assessment of older people; not only can young children not write or read, but a young developing child presents different challenges that influence the teachers' choice of assessment strategies. Despite the challenges associated with assessing children during their early years' education, Early Childhood Education teachers are expected to integrate developmentally appropriate assessment practices throughout their instructional periods to monitor students' achievement as well as guide decision-making to meet mandated standards (Gullo & Hughes, 2011; Stiggins, 1991).

Owing to the increasing demand in Early Childhood Education worldwide which has brought a great reform in early years education that includes the integration of assessment throughout their instruction to support academic learning while retaining

developmentally appropriate pedagogies (Roach, Wixson, & Talapatra, 2010; US Department of Education, 2010), there have been several studies which documented tested and developmentally appropriate assessment practices to be used during early years' education. These documented assessment practices involve but not limited to actively engaging students in monitoring their learning through self, peer, and instructor-based feedback (Assessment Reform Group, 2002), with the aim of not only supporting academic content learning but also building learner independence through metacognitive and self-regulation development. Other developmentally appropriate assessment practices include, observation (in the form of checklist, anecdotal records, time sampling among others), portfolios and interviews (Beaty, 1990) among others.

Regardless of the developmentally appropriate assessment practices for assessing children such as observation, portfolios, interviews, as documented in several studies around the world, it has been observed at Tema West Metropolis that, pen and paper test as well as single test score is used as a basis for grouping and retaining children in grades within the Tema West Metropolis. Again, during a workshop for Early Childhood Education teachers held in the Metropolis in 2019, the metropolitan coordinator for Early Childhood Education indicated that, the usage of alternate assessment practices such as observation, informal conversation, portfolio among others is very low within the metropolis. She continued to caution that; teachers need to make all efforts to minimize the use of pen and paper test especially at the kindergarten level and maximize the use of other documented alternate assessment practices (Tema Municipal ECE Coordinator, 2019). This perceived observation indicated by the ECE coordinator was also lamented by the former General Secretary

of the Ghana National Association of Teachers (GNAT) during their 2018 Delegates Conference held at Tema (Atsu, 2018).

Despite this observation and presentation by the ECE coordinator at the Metropolis, it was also noticed that, there has been no routine effort to examine the assessment practices that are being used and the extent to which these assessment practices are consistent with recommended early childhood assessment practices among Early Childhood Education teachers in the Tema West Metropolis within the Greater Accra Region of Ghana. Due to this observation, it was evident that the effort made by relevant stakeholders to address the issues of best assessment practices at ECE level has not yielded appreciable results. How do teachers perceive assessment at ECE level? What are the assessment practices at ECE level in the Tema West Metropolis? Would it be that assessment practices at ECE level are facing challenges? Answers to these questions are not readily available in the literature. Therefore, finding empirically supported answers to these questions constituted the problem that this study was designed to address.

1.3 Purpose of the Study

The purpose of the study was to examine the assessment practices among Early Childhood Education teachers in the Tema West Metropolis of the Greater Accra Region of Ghana.

1.4 Research Objectives

Specifically, the study sought to:

- 1 Ascertain early childhood teachers training on assessment practices in the Tema West Metropolis, Ghana.

- 2 Examine teachers' perception about assessment in Early Childhood Education in the Tema West Metropolis, Ghana.
- 3 Investigate the assessment practices deployed by teachers in assessing children as well as the gender and professional qualification differences in the assessment practices in the Tema West Metropolis, Ghana.
- 4 Examine the challenges Early Childhood Education teachers, encounter in the use of assessment practices in the Tema West Metropolis, Ghana.

1.5 Research Questions

The study was guided by the following research questions;

- 1 What is the training on assessment practices of ECE teachers in the Tema West Metropolis, Ghana?
- 2 What is the perception of teachers about assessment in Early Childhood Education in the Tema West Metropolis, Ghana?
- 3 What are the assessment practices deployed by teachers in assessing children in the Tema West Metropolis, Ghana?
- 4 What are the challenges Early Childhood Education teachers encounter in the use of assessment practices in the Tema West Metropolis, Ghana?

1.6 Hypotheses

H₀ 1: There is no statistically significant difference between male and female teachers assessment practices in the Tema West Metropolis.

H₁ 1: There is a statistically significant difference between male and female teachers assessment practices in the Tema West Metropolis.

H₀ 2: There is no statistically significant difference between teacher's professional qualifications and assessment practices.

H₁ 2: There is a statistically significant difference in teachers' assessment practices and professional qualifications.

1.7 Significance of the Study

The outcome of this study is intended to become an important document that will help enrich existing literature on assessment practices used at early childhood centres in Ghana. The study also provides information to the Tema West Municipal Directorate of Education in developing better assessment guidelines for Early Childhood Education teachers. The study further provides useful information to curriculum developers on Early Childhood Education assessment. Also, the result of the study will help sensitize the Municipal Education Directorate, private Early Childhood Education providers and other stakeholders in ensuring appropriate and sustainable professional development on assessment practices for teachers within the municipality. Lastly the study will also serve as a reference material for other researchers who would like to acquaint themselves with issues about assessment practices used at early childhood centres in the country.

1.8 Limitation of the Study

As with any study on assessment practices, this study is descriptive in nature, so it is therefore, unable to give more insight into an initial step to investigate assessment practices, specifically assessment instrument, construction, administration and evaluation in the schools at the Tema West Metropolis.

The uncorporative attitude of some of the participates who refused to answer the questionnaire initially might not have provided honest response and might have underreported or over reported their assessment practices. Moreso, the study relied on one time data collection using self-made instrument.

Again, this study was conducted using kindergarten 1 to basic 3 public schools. Hence, the result of this study could not be generalized to other grade levels in public schools. Further the study did not attempt to investigate the assessment practices at the private schools Early Childhood Education Centers in the Tema West Metropolis.

The limitations, however, do not negate the findings of the study.

1.9 Delimitation or Scope of the Study

The study was conducted in the Tema West Metropolis in the Greater Region of Ghana. This was based on the fact that there was limited knowledge and documented literature on assessment practices in the metropolis. The study also focused on the academic qualification or level of training of Early Childhood Education teachers, the perception of teachers about assessment in Early Childhood Education, the assessment practices deployed by teachers in assessing children and the challenges teachers encounter in the use of these assessment practices in the metropolis. The study focused on Early Childhood Education teachers in the municipality. The study also makes use of descriptive survey within a quantitative enquiry.

1.10 Organization of the Study

This study was organized into five chapters. Chapter one presented the background to the study, statement of the problem, purpose of the study, research objectives, research questions, significance of the study, delimitation to the study and organisation of the study. Chapter two covers the literature review. The literature discussed theoretical and conceptual frameworks as well as empirical review as related to the study. In chapter three, the research methods were outlined including the research design, population, sample and sampling techniques, instrumentation, data collection procedure, data analysis procedure and ethical considerations. Chapter four

was dedicated to data presentation, analysis and discussion. Chapter five, finally present summary of findings, conclusions, recommendations, suggested area for further studies.



CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter discussed the related literature reviewed for the study. For the purpose of this study, the literature reviewed focused on the following sub-headings:

1. Theoretical Framework
 - a. Title's Theory for Classroom Assessment Practice.
 - b. Maria Montessori's Model of Early Childhood Education
2. Empirical and Theoretical Review
 - a. Concept of Assessment in Education
 - b. Some Early Childhood Education Approaches and Assessment
 - c. Teachers' Training and Assessment Practices in ECE
 - d. Perception about Early Childhood Education Assessment
 - e. Assessment Practices and Approaches
 - f. Challenges of Teachers in Assessing Children
3. Conceptual Framework for the Study

2.1 Theoretical Framework of the Study

According to Smyth and Buckner (2004), theoretical framework is a model designed from a set of broad ideas and theories that assist a researcher to properly situate his or her study problem, frame his or her questions and find suitable literature. Theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge within the limits of critical bounding assumptions (Abend, 2008; Swanson & Chermack, 2013). The purpose of this review was therefore to situate or underpin the study in a well-tested theory. Regardless of the numerous theories documented, this study was underpinned and guided by the

Title's theory for classroom assessment practice associated to Title (1994) and supported Maria Montessori's model of Early Childhood Education.

2.1.1 Title's Theory for Classroom Assessment Practice

Teacher beliefs, knowledge and roles of assessment practices can be conceptualized within the framework and theory of Title (1994) which she developed to guide assessment practices of teachers in the classrooms. Title maintained in her theory that emphasizes must be placed on the following dimensions about classroom assessment practices: (a) Interpretation and knowledge, beliefs, intents, and actions and (b) Assessment characteristics, embeddedness in practice, format and mode, scoring, evaluation, preparation and feedback. According to Title (1994), there are two things essential to know about assessment which are knowledge related to teaching, and knowledge about assessment process. She further indicated that, teachers' self-knowledge of classroom assessment practices and teachers' belief systems play a major role in effective classroom assessment. For instance, teachers may have construed meanings about professional expectations, standards, values, and their personal effectiveness as well as construed beliefs about assessment.

Furthermore, teacher belief systems were found to be integral part of informing their general teaching practices. To Title, teachers are likely to hold beliefs about assessment on students before assessment (provide a focus of learning), knowledge about assessment, effects on students during assessments (provide a sense of accomplishment, challenge, failure, or inadequacy), and knowledge about assessment, effects on students after assessments (as fair, meaningful, useful providing information for continuing development or lack of it). Teachers may also have beliefs about the effects of assessment on teachers themselves, such as requiring instructions

on particular topics or problems or providing or not providing useful information for instruction (Title, 1994, p. 152). Title (1994) also argued that, the ‘open moves’ of teachers and students in the negotiation of agreement that evolve between them will be determined by their epistemological, psychological and pedagogical beliefs. For instance, when a teacher questions a student, the teachers’ belief will influence both the question asked and the way the answer is interpreted.

This study adopted the Title’s theory of classroom assessment practice because it agrees and shares similar sentiment with her as all the dimensions and beliefs, she propounded informed this study. The theory of teacher knowledge and beliefs, and assessment characteristics played a major role in developing the theoretical framework of this study. Teacher knowledge have been found to be pivotal in constructing their experiences. Through their knowledge and beliefs, teachers develop some perception about their roles and responsibilities, such as what they teach, and how and what they use to assess student learning outcomes. Understanding teachers’ perceptions about their classroom assessment practices are therefore very important as it opens avenues for addressing the needs that teachers have as they wrestle with their day-to-day classroom assessment practices.

The current demands in education reform have over the years put more pressure on teacher’s classroom practices. Most of the teachers continue to struggle and are reluctant to accept the new policies because these new policies conflict with their values, assumptions and beliefs (Gullo, 2006). According to Vandeyar (2005), the origin of these conflicts ‘stems from the fact that the new outcomes-based assessment policy represents a radical departure from the philosophy of assessment and its role in relation to learning. Vandeyar further stated that, there is a total shift from an

exclusively norm referenced summative form of assessment in a content-based education system to criterion-referenced formative assessment” (p.462).

Based on these perspectives Vandeyar (2005) conducted a study with a sample of South African teachers to establish how they cope with conflicting demands on their assessment practices, values, and beliefs about student assessment. What came out in this study was that teachers continue to give attention to their beliefs and personal interests, regardless of the professional requirement to adopt changes in assessment policy meant to serve the interests of students. The selected theory is suitable for this study due to the fact that it enumerates dimensions of assessment that are vital in ensuring effective assessment practices in Early Childhood Education. It has also clearly expatiated the major role teacher’s belief, value and practices have on classroom assessment which negatively or positively can affect the outcome of children classroom assessment results.

2.1.2 Maria Montessori’s Model of Early Childhood Education

Maria Montessori (1870-1952) was Italy’s first female medical doctor and due to her love and interest in children’s development, health and in pedagogy, she observed little children and conceived an early childhood education programme based on the principle that young children learn in a way that is fundamentally different from how adults learn. Agreeing with Froebel, the founder of kindergarten, Montessori felt that Early Childhood Education should aim at allowing children to cultivate their own natural desire to learn and to her, this can be realized by allowing children to experience the excitement of learning by their own choice rather than being forced on them (Gutek, 1995). Montessori therefore started an experimental school in the slum areas of Rome in the year 1906 which she named, “Children’s House”. A greater

number of pupils in the school consist of children who belonged to poor families where both parents had to work and therefore had no one to care for their children and these children were between the ages of 3 and 6 years old (Scheerenberger, 1983).

Just like Froebel, Montessori, cited in Helm and Boos (1996), felt that all children have a fundamental inborn and intellectual structure that unfolds gradually as they develop and although there are individual differences due to different environmental experiences, she emphasized that if children's absorbent minds are exposed to appropriate learning experiences in the developmental stages, the minds will grow. She therefore stated that, the task confronting education especially Early Childhood Education "is above all the task of mending breaches, filling in gaps that are vast and serious but rather the primary goal of education must be the realization of the values of the human personality and the development of mankind" (Montessori, 1972, p. 63).

According to Orem (1965), Maria Montessori developed an approach to teaching which she termed "The Montessori Method" and this approach was a spontaneous, expansive educational system designed to afford children the liberty to move and act in a prepared environment which encourages self-development. Orem further explained that, in her method, Maria Montessori does not have the teacher as the center of attention, nor does she have a prescribed curriculum, rather, according to her beliefs, the child himself/herself must be the center of education. According to Montessori (1972), in order for children to develop effectively and productively, two factors are of utmost importance and must be present. The first factor is a prepared environment that looks after the child's physical health as well as the spiritual life. The second factor is the ability of the child to move freely in his/her environment where constructive activities are available and utilized for the child's development.

These two factors according to Montessori (1972), allow the child to learn and enjoy more fully such things as: movement in education, sensory education and music, and intellectual education. She further stated that, the presence of an adult who is capable of giving guidance to children's work and who will take into account the child's needs is highly needed and paramount in Early Childhood Education.

According to Montessori (1966), adult environment is not a suitable environment for children and therefore little children should not have to live in an adult environment, instead, there should be an environment specially prepared for them. She stated that, in order for children to develop properly, it is necessary to reduce all obstacles around them to a minimum which will create the right environment (both indoor and outdoor) for children (Montessori, 1912). Montessori therefore emphasized and advocated indoor environment in which little furniture such as chairs, tables, washstands and cupboards should be developmentally appropriate and suitable for children easy usage and hooks on classroom walls should be placed low so that children could reach them without any assistance from adults (Orem, 1965). Montessori, also advocated that, children need to spend a lot of time at outdoor environment. She was of the view that, children need to learn to be in harmony with nature because ultimately, all human beings rely on nature and she therefore wanted children to learn to respect the environment, both natural and man-made (Orem, 1965). Montessori's idea and view of dependence between man and the environment is further stressed by her statement that "There is a constant interaction between the individual and his surroundings and the use of things shapes man, and also man shapes things. To her, this reciprocal shaping is a manifestation of man's love for his surroundings" (Montessori, 1972, p. 67).

To Maria Montessori (1966), freedom does not mean leaving children on their own to do whatever pleases them, rather it means removing all obstacles which might hinder the child's "normal" smooth development. To her, adults need not dictate to children what activity they should do but rather, they have the freedom, to choose an activity of their choice within a prepared environment. Freedom in education especially Early Childhood Education for Montessori was very important since the child needed to develop into a fully grown human and be able to take his/her place in society. As she rightly stated, "Education must foster both the development of individuality and that of society because society cannot develop unless the individual develops through learning and most of our actions would have no reason for being if there were no other people around us, and we do most of the things we do because we live in association with others" (Montessori, 1972, p. 65).

Again, movement in education to Montessori was vital and it was to be done indoors as well as outdoors (Gangel & Benson, 1983). With regards to indoor movement, Montessori advocated that, children should be taught to walk gracefully without bumping into any objects and it for this reason that Maria Montessori constructed out of paper a set of circular tracks and had children walk in a circle trying not to step outside of the tracks. Regarding outdoor movement, Montessori believed that children should play outdoor so that they could be kept healthy and grow. She indicated that children need to be active so that their bones and muscles develop. For example, she recommended free games where children would play with balls and use of Didactic Materials hoops, bean bags and kites (Montessori, 1966). She further recommended other educational gymnastics which included gardening and taking care of plants and animals (watering and pruning the plants, carrying the grain to the chickens, etc. To her "exercise was important not only for children but everyone as she stated that every

individual needs to stake sufficient exercise to keep his muscles in a healthy state” (Montessori, 1966, p. 97).

2.2 Empirical and Theoretical Review

The review of empirical and theoretical work in this section examines the literary documented evidence of researchers on assessment in Early Childhood Education delivery as they relate to this study.

2.2.1 Concept of Assessment in Education

Assessment is one of the most essential tools that teachers use to inform the teaching and learning of their pupils during any level of education. According to Chen and McNamee (2007), assessment is the process of listening, observing, and gathering evidence for learning progress of children in a classroom environment. Similarly, Goodwin (2000) defined assessment as “The process of determining, through observation or testing, an individuals’ traits or behaviours, a program characteristic, or the properties of some other entity, and then assigning a number, rating or score to that determination” (p. 523). Farr (1991) further indicated that assessment is not a sorting process, and it should basically be thought of as a guide instead of a type of judgment; so “assessment must serve students.” (p.95). In similar vein, Harlen (2007) explained that assessment involves the process of collecting evidence and making judgments relating to outcomes such as students’ achievement of particular goals of learning or development. Again, Puckett and Black (2007) described assessment as a process of collecting information about individuals and groups for the purpose of making decisions. They further argued that the purpose of assessment is to help identify, diagnose and provide essential services to students, determines an

individual's developmental needs, strengths and aspirations as well as to monitor the growth, development, learning progress and learning challenges of students.

Assessment of young children is different from the assessment of older students.

According to Horton and Bowman (2002), early years education assessment is an ongoing process and the understanding of the current state of the field is crucial, as the way assessment practices are carried out will improve the learning and development of young children. Wortham (2007) stated that not only children who do not write or read, but the young developing child presents different challenges that influence the choice of assessment strategy or assessment tools. There has to be a match between the chosen strategy for assessment and the level of mental, social and physical development of children at each stage. Furthermore, there is a rapid developmental change in young children, which requires assessing whether the development is progressing normally or not. In order to meet this need, different assessment methods and strategies are supposed to be used in Early Childhood Education. There are therefore, different and definite alternatives for assessment practices and methods in educational settings for young learners.

Inherent in young children is the desire to learn and make sense of their immediate world, and the role that adults play is significant in guiding their development (Duffy, 2010; French, 2007). Adults are essential in providing an environment that supports children in the course of their learning (Hattie, 2009; Whitebread, 2008), and in Early Childhood Education (ECE) settings, it is the educators who hold this responsibility. Assessment, which is an integral part of the curriculum (Dunphy, 2008), can be regarded as a vehicle to facilitate the process of learning and development inside Early Childhood Education settings. The perception of assessment in ECE has moved

beyond that of screening and diagnosis, and now encompasses answering questions about the child or providing information about classrooms and programs (Snow & Van Hemel, 2008). As a result, the information obtained from assessments is not only a manifestation of the child's skills and potentials, but also the adequacy of the settings they are embedded within. Hayes and Morrison-Saunders (2007) notes that stakeholders are increasingly interested in children's learning characteristics and how others can support this, going beyond a prescriptive role. The United Nations Convention on the Rights of the Child stresses the necessity of a relevant curriculum to the child's life and needs, and one which promotes the development of holistic skills (Hodgkin & Newell, 2007).

In the second of the Organisation for Economic Co-operation and Development (OECD) review of how stakeholders support children's learning and development, teaching and curriculum standards, the pedagogical relationship between children and educators, as well as child-outcome quality among others were included in the necessary aspects of qualities examined in evaluating early childhood systems (OECD, 2006). Assessment plays a key role in constructing meaningful curriculum (National Research Council, 2001) that promotes quality service for children's learning and development. Assessment features in both curriculum and pedagogy, allowing educators to construct positive experiences for children that facilitate their development and respect them as distinct individuals. Gullo and Hughes (2011) argue that an appropriate curriculum for children should go beyond a "one-size-fits-all" model and make provision for children's 'normative' development while at the same time allowing for variation that addresses their individual needs.

Several studies on assessment have revealed that, classroom assessments aid teachers grading, identification of students with special learning needs, student motivation, clarification of students' achievement expectations, and monitoring instructional effectiveness of students (Ohlsen, 2007; Stiggins, 2001). According to Stiggins (2007) the more information we have about students, the clearer the picture we have about their achievement, learning challenges and where those challenges emanate. To him therefore, there is a need to pay attention to how assessment is used, as failure to do this may lead to inaccurate assessment of students' achievement and progress which may ultimately prevent students from reaching their full academic and developmental potentials. In order to ensure accurate assessment of students therefore, Rowntree (1987) opines that when assessing students, teachers should identify the purpose of using assessments; thus, they should establish how they are going to use assessment results, establish the content of assessment; that is, they should be in a position to determine the kinds of skills and abilities they intend to assess.

Furthermore, Rowntree (1987) stated that, teachers should establish how they will assess those selected skills, make decisions about the choice of assessment methods they want to employ and establish if such methods are relevant for assessing the specific content and effective to help students reach their academic and developmental potential. Rowntree further indicated that, teachers should also make decisions about how they will grade, give students feedback, and how they will analyse, interpret, and use assessment results to inform decisions in teaching and learning. It is therefore paramount that as teachers assess students, they should ask themselves questions like; (1) Why assess? Thus, deciding why assessment is to be carried out and what outcomes the assessment is expected to produce, (2) What to assess? Thus, deciding, realizing or otherwise coming to an awareness of what they

are looking for in people being assessed, (3) How to assess? Thus, selecting from among available means, those assessments they regard as being most truthful and fair for various sorts of valued knowledge, (4) How to interpret? Thus, making sense of the outcomes of the observations or measurement or impressions they gather through whatever means they employ; explaining, appreciating, and attaching meaning to the raw 'events' of assessments and (5) How to respond? Thus, finding appropriate ways of expressing their responses to whatever has been assessed and communicating it to those concerned (Rowntree, 1987).

2.2.2 Some Early Childhood Education Approaches and Assessment

Models/ approaches of Early Childhood Education serve as points of reference for everything or most of the things that happens or needs to happen within ECE settings. Each having developed from different contexts, the models are grounded on particular philosophies relating to children, their learning, and how best to approach it. For the purpose of this study, the models or approaches that were considered were Montessori Approach, David Weikart High/Scope Curriculum, and Reggio Emilia approach.

2.2.2.1 Montessori Approach

In the Montessori approach, children are seen to develop in distinct stages and hence preparing the environment to support children at each stage is critical for them to achieve their potential (Isaacs, 2010). Maria Montessori developed this approach while working with children with special needs, then after with those living in the slums of Rome (Edwards, 2003). The Montessori environment is constructed with respect for the children, confident in their capacity to make choices and establish their independence (Huxel, 2013). The facilitators' role is pivotal in ensuring that this is so and to forge meaningful connections between the environment and the child (Isaacs,

2010). The environment is also where children, particularly those from birth to six, seek “sensory input, regulation of movement, order, and freedom to choose activities and explore them deeply without interruption” (Edwards, 2003, p. 36).

Montessori’s approach uses working materials which are designed to be self-correcting, allowing children to engage with them even without the intervention or supervision of adults (Lillard, 2005). A key element of the Montessori approach is that it is individualised, where children take part in self-directed activities, and through systematic observation educators are able to recognise children’s needs and address them accordingly (Edwards, 2002; Huxel, 2013). Observing and documenting the needs of individual children is an important part of the educator’s role in this model of learning. The extent to which educators are able to facilitate and support the learning and development of different children is dependent on their ability to be reflective in the interpretation of children’s observed behaviour, which can also be used for record-keeping and assessment, and for planning and reworking the environment (Isaacs, 2010).

2.2.2.2 David Weikart High/Scope Curriculum

The High/Scope Curriculum was developed through the leadership of David Weikart as a response to address the needs of at-risk children in Ypsilanti, Michigan (Hohmann, Weikart, & Epstein, 2008). This particular curriculum promotes an approach called ‘active participatory learning’, where there is a partnership between children and educators and both are involved in the learning process (Epstein, 2007). In this curriculum, children are encouraged to self-assess through the ‘plan-do-review sequence’, where they make choices, carry out their ideas, and reflect on what they learned which fosters reflection, purposefulness, and independence (Epstein, 2007).

The High/Scope practice is guided by principles illustrated in the High/School Preschool wheel of Learning where active participatory learning is used as a means to engage with the curriculum outlined by key developmental indicators or behaviours that reflect children's unfolding abilities across domains (Hohmann et al., 2008). Included in this is assessment, where educators undertake daily planning sessions and take regular anecdotal records (Hohmann et al., 2008). In addition, the High/Scope Curriculum uses the Preschool Child Observation Record (COR) for each individual child, and the Preschool Program Quality Assessment (PQA) to evaluate their curriculum.

2.2.2.3 Reggio Emilia Approach

The Reggio Emilia approach flourished from the guidance of Loris Malaguzzi (1920-1994) in the region of the same name in Italy. It emerged from a post-World War II vision of reconstructing society through education (Edwards, 2003). Having reciprocal relationships is an important aspect of the Reggio philosophy, where educators and children learn together as they take part in different projects (Thornton & Brunton, 2009) and where parents are considered important partners in the organization of the school (Malaguzzi, 1993). Children are respected as competent beings and the curriculum is not predetermined but rather flows organically from children's first-hand experiences and their explanations and theories about their surroundings (Thornton & Brunton, 2009). At the same time, children are supported to confidently express themselves through different 'languages', or the "many modes of symbolically representing ideas, such as drawing, painting, modelling, verbal description, numbers, physical movement, drama, puppets, etc." (Malaguzzi, 1993, p. 11). Observation, interpretation, and documentation in this approach are woven together, along with the pedagogy of listening, to allow learning to be visible (Rinaldi,

2004). This documenting of the process and product of engaging with children in different projects creates a concrete record that portrays what had happened, serving as a springboard for further learning (Edwards, Gandini, & Forman, 1998). Apart from this, educators can also use documentation as a research tool and for professional reflection, and to engage the larger community (Edwards et al., 1998).

2.2.3 Teachers' Level of Training and Assessment Practices in ECE

The availability of qualified and trained teachers is vital in the provision of developmentally appropriate assessment practices in ECE centres. This is because, teachers play very crucial roles in the development and learning of children during their early years. The quality of an educational system therefore depends on the quality of its teachers (Soto & Swadener, 2002). A specially trained teacher in ECE programme will help in many ways to lay the proper foundation of a child's learning process. According to Siegel (1987, p.51), "due to the many functions performed by the ECE teacher; he/she must possess certain quality of education, greater theoretical knowledge of child development and learning." Similarly, Clark-Stewart (1984) indicated that, an early childhood teachers or administrators who provide a high-quality Early Childhood Programmes must possess certain specific training in Early Childhood Education and development. Also, Shelton (2010). A quality scorecard for the administration of online education programs: A Delphi study. The University of Nebraska-Lincoln.) disclosed that "the quality of an early childhood programme depends on the availability of trained teachers".

Teachers' qualification corresponds positively with teaching and learning of children in many studies (Betts, Zau & Rice, 2003; Forrester, 2008; Wayne & Youngs, 2003) while other studies showed negative correlation or no relationship between teacher

qualification and teaching and learning during early years' education (Levy & Fox, 2015). For instance, Betts, Zau and Rice (2003) found that teachers' qualification correlates fairly positive with children's learning and assessment. Betts et al submitted that, when teachers have an advanced degree in their teaching subjects or specializations, it has positive impact on the children's learning and achievement. In the same vein, Khurshid (2008) also observed that, if a specially trained teacher teaches a group of learners, the performance of the learners was good and high because, in the process of education, the teacher is very crucial. Similarly, Forrester, (2008) stated that, teachers' knowledge about the subject to be taught certainly affects their teaching attitude and eventually the performance of the learners. They summed up that, teachers are vital in determining the learners' academic performance.

According to the National Association for the Education of Young Children (NAEYC), cited in Hyson (2008), early childhood educators with required professional preparation provide more developmentally appropriate, nurturing, and responsive care and education experiences for young children and this aligns with the submission in an Issue Brief by National Governors Association Centre for Best Practices cited in Reznitskaya & Wilkinson (2015) that, the knowledge and skills of early childhood care providers and teachers are critical factors in their delivery of high-quality developmental and educational experiences to young children. Eshiwani (1983) supported this by stating that, there is a great relationship between teacher's qualification and pedagogical practices which positively influence learner's academic performance. Thus, if the teacher is qualified, he/she is likely to have well performing learners while unqualified teacher is also likely to have poor performing learners.

Describing Froebel's professionalism and the role the of teachers, Cratty (1982) stated that, "in order for Froebel's vision of early year's education to become successful, he proposed and supported a special teacher training in the area of Early Childhood Education" (p.123). The role of the teacher in ECE is to care and nurture the child in a manner that the child's in-built goodness unfolds and blossoms in a realized potential (Reed & Prevost, 1993) and as a cooperative agent, the teacher needs to stimulates and encourages the process of unfolding by controlling the growth of the child by enabling him/her to discover internal dimensions through spontaneous and self-initiated activities.

However, while guarding and protecting the child, the teacher's major obligation is to provide space and time for the child to develop properly according to the laws of nature that are working within. According to Froebel cited in Wilds and Lottich (1961), failure in education is as a result of neglect and prevention of such development which distorts the original good human powers and tendencies however, to ensure such development in children, the teacher must study the laws of human development, construct an educational theory that specifies directions in line with the human development, apply these directions and direct education to the realization and actualization of the innate potentialities of the child (Gangel & Benson, 1983).

A study conducted by Mtahabwa (2010) in Tanzania on the relationship between early childhood education policy and actual practice revealed that, a teachers' professional qualification appears to influence the quality of classroom interaction more than physical setting and resources. Much of teachers' self-esteem and behaviours come from competencies, and elf-competencies are not given by others, but it comes from knowing that one can do certain things through belief in oneself and his /her

competences (Evans, 1982; Mtahabwa, 2010). Soto and Swadener; (2002), further argued that teachers working in early childhood education should have sufficient academic background to give them the intellectual and personal moral strength to articulate issues related to their profession.

Deducing from these perspectives, it can be said that to ensure effective teaching, learning and assessment practices at Early Childhood Education centres, one must first meet the needs for trained manpower or teachers if the program is to become successful and produce quality outputs for societal use. However, this is contrary in most early childhood schools in Africa including Ghana especially in private owned early childhood schools, where teachers with no training in ECE are often found in children's classrooms (Okewole, Iluezi- Ogbedu, & Osinowo, 2015; Osho, Aliyu, Okolie, & Onifade; 2013; Williams, 1996). A study conducted by Education International (2010) on the topic "Early Childhood Education: A Global Scenario", revealed that teachers who teaches children during their early years were not properly trained and majority of them were young female high school graduates who are preparing for higher education.

2.2.4 Perceptions about Early Childhood Education Assessment

Teachers' perceptions and belief about assessment in Early Childhood Education have been investigated by several researchers in many different ways and have come out with several findings. A study conducted by Fennema and Romberg (1999), indicated that the way teachers perceive assessment may influence the way they teach and assess their students. Chester and Quilter (1998) also believed that studying teachers' perceptions and practices of assessment is vital in the sense that it provides an indication of how different forms of assessment are being used or misused and what

could be done to improve the situation. In a study they conducted on in-service teachers' perceptions of classroom assessment, standardized testing, and alternative methods, concluded that teachers' perceptions of classroom assessment affected their classroom assessment practices. Teachers who attached less value to classroom assessment used standardized tests most of the times in their classrooms. From a study conducted by Chester and Quilter (1998), teachers with negative experiences in classroom assessment and standardized testing are less likely to see the value and the need for various forms of classroom assessments for learners.

The complexity of "teacher beliefs and perceptions about assessment however has led to different ways of understanding assessment practices adopted by different groups of teachers and based on their belief and perception about classroom assessments, teachers can be classified into three main sub-categories. The first group is made up of realists (Segers & Dochy, 2001). Realist teachers are those who believe in the use of paper and pencil types of assessments where learners are expected to recognize rather than generate their own answers (Windschitl, 1999, Nitko, 2004). These types of assessments are focused on improving the cognitive side of instruction, i.e., the skills and knowledge that students are expected to develop within a short period of time (Segers & Dochy, 2001). Realist teachers by nature believe in norm-referenced testing where testing students' mastery of core knowledge and skills of the curriculum and is evaluated relative to the performance of others (Nitko, 2004). Again, realists' teachers tend to rely more on paper and pencil objective tests that can be scored easily and be used to compare students.

The second group of teachers is made up of contextual teachers who use alternative assessments such as student portfolios, group-work assessments and performance-based assessments (Tzuriel, 2000). Tzuriel explained that, the contextual teachers' classroom assessments are driven by the need to use classroom assessments that recognize, teach and assess knowledge, skills, and abilities that students need beyond class environments. To the contextual teacher, the overreliance on the use of traditional methods of assessments such as multiple-choice tests, true or false and other related types of tests only measure the recall of knowledge instead of higher-level learning skills. They therefore advocate for the increased use of performance testing that seem better suited for testing complex mental abilities like extended writing and problem-solving skills (Haladyna, Downing & Rodriguez, 2002). According to Nitko (2004), contextual teachers are more likely to use criterion-based testing evaluation to determine what students know and don't know based on a set criterion.

The final group of teachers is made up of relativists (Steinberg, 2008) and they base their assessment practices on the developmental theory of human. According to them, children learn best in classrooms or environments where instruction is developmentally appropriate. The relativists teachers believe that children have opportunities to learn and be assessed in different ways to address the learning mode that is most appropriate for each child's unique developmental level (Schunk, 2008; Siegler, Deloache, & Eisenberg, 2006). They believe and argued that, students have different learning needs and therefore different forms of multiple assessment practices that accommodate students' diverse needs such as written tests, oral presentations, visual, technological presentations, drama, media and so on should be encouraged (Hargreaves, Earl, Moore, & Manning, 2001).

Literature on assessment and evaluation emphasised the formation of assessment tools and activities corresponding to the instruction that displays effectiveness, as opposed to poor assessment format which reduces “students’ motivation for learning, inadequately linked to instruction, and incorrect evaluation of effectiveness of instruction” (Dochy, Segers, & Sluijsmans, (1999). De Corte (1994) therefore suggest “powerful learning environments (PLEs),” as an alternative to the old approach of learning, entails creating a balance between “personal exploration and systematic instruction”. This means that within a student-centred classroom, students are perceived as thinkers and active members, opposed to traditional approaches that see students as receivers of information and blank slats (Brooks & Brooks, 1999).

Again, it is very vital for teachers to provide constructive feedback to students after assessing them. Ramaprasad (1983) describes feedback as a tool that provides information that has an impact on a performance. To Ramaprasad therefore, "feedback is information about the gap between the actual level and the reference level of a system parameter which is used to alter the gap in some way" (p. 4). In addition, Black and Wiliam (1998) point out the importance of oral feedback provided by the teacher, enabling students to reflect on their learning. They indicated that, “the dialogue between pupils and a teacher should be thoughtful reflective, focused to evoke and explore understanding so that all pupils have an opportunity to think and to express their ideas” (p. 8). Given the definitions and characteristics of formative feedback, it is an important component of instruction that occurs while the instruction occurs and enables the instructor to adjust instruction based on students’ suppositions respectively.

Furthermore, according to literature, student involvement in the process of assessment has been seen as effective tool in sharpening student learning. For example, Wiliam and Thompson (2008) indicate that, contrary to the traditional forms, learners and their peers play a considerable role in assessment process in formative assessment. Chappuis and Stiggins (2003) reinforce the above point indicating that, “classroom assessment that involves students in the process and focuses on increasing learning can motivate rather than merely measure students” (p. 40). Assessment for learning, when accompanied by students’ involvement in the process of development and implementation, appear more similar to teaching than to measurement (Davis, 2000). According Chappuis and Stiggins (2003), student involvement in assessment helps them to project their future plans and learning goals. They further explained that, “student involved assessment means that students learn to use assessment information to manage their own learning” (p. 41). In similar vein, Dochy and Moerkerke (1997), Black and Wiliam (1998), and Birenbaum, & Feldman, (1998) observe that involving students in the process of assessment not only reduces the burden of work for the instructor, but also assures students that they are viewed as active members who are responsible for their own progress.

According to Cavangah, Waldrip, Romanoski, Fisher, and Dorman (2005), assessment forms and tasks selected by teachers and administrators depend on their perceptions of assessment. Roos and Hamilton (2005) therefore cautioned that, teachers must perceive the value of assessment to go far beyond playing a role in the self-regulation of human learning, but also being able to support human development. Sokopo (2004) in his study found that teachers essentially believed that classroom assessment is merely for accumulation of marks, and this causes curricular outcomes to be reduced to a checklist. However, a study conducted by Stiggins and Chappuis

(2005), concluded that classroom assessment provides feedback to teachers to modify the teaching and learning process and this was in line with a study conducted by Gulikers, Bastiaens, Kirshner and Kester (2006) as well as Pelligrino and Goldman (2008) which revealed that teachers greatly believe that assessment significantly affects students' approach to learning. Similarly, Goodrum, Hackling, and Rennie (2001) in their study concluded that assessment is a key component of the teaching and learning process. Hence, including students' and teachers' perceptions in designing assessment tools would be considered reasonable, given the fact that both students' preferences and teachers' rationale might influence the way students proceed with learning and the way it is tested.

Messick (1996) in his submission indicated that the consequential aspect of assessment appraises the value implications of score interpretation as a basis for action as well as the actual and potential consequences of the test use, especially in regard to sources of invalidity related to issues of bias, fairness, distributive justice as well as washback. The concept of "washback" referred to by Messick is one of the frequently used words in language teaching to refer to the effects of testing on teaching and learning, thus "the extent to which the introduction and use of a test influences language teachers and learners to do things they would not otherwise do that promote or inhibit learning" (Messick, 1996, p.241). Messick (1996) further pointed out that, the link between testing and washback is not so neat because a poor test may have good effects while a good test may have poor effects due to other factors within the educational system and through the assessment processes.

Furthermore, Messick (1996) argued that, a test may influence instructional content but not instructional practice. For example, a teacher who is committed to a communicative approach to language instruction who finds him/herself in an educational context committed to a more traditional grammar-based approach to instruction. In this situation, the assessment measures of the teacher may be comprised of discrete point grammatical items but the teacher may well teach the targeted grammar in a communicative, context-performance-based manner. Of course, the opposite may well occur, with a teacher teaching grammar in a traditional way in a communicative curriculum. The point is that the test itself does not necessarily washback on teaching method (Messick, 1996).

2.2.5 Assessment Practices and Approaches

There are a number of assessment approaches and strategies documented in several studies. Broadly, there are two main forms or approaches to assessment and these are formal (traditional) assessment and the informal (alternative) assessment. Formal or traditional assessment refers mostly to the standardized tests in which a child's performance in the different developmental domains is translated into a score and that score is compared with either the performance of other children or with specific criteria or objectives. Instruments that are used in formal assessment are mostly focused on reliability and validity (Puckett & Black, 2000). Spinelli (2008) noted that formal assessment procedures generally rely on recognition responses, test items and mechanical scoring which were not suitable for young children's assessment in terms of children's developmental characteristics.

Formal assessment practices are mostly not preferred in young children's assessment processes. This is because trying to standardize the learning process at an early age is inappropriate due to the fact that it puts too much academic pressure on younger learners at that age (Hyson, 2003). Hanes (2010) stated clearly that "because young children are so diverse in their abilities and needs, assessment at the preschool level is particularly challenging" (p. 39). This may imply, using formal assessment at this stage would not deal efficiently and authentically with these diverse needs of children. Also, different studies support that it is inappropriate to employ a scattering of tests as a measure of success at the early years because of children's varied abilities and needs (Epstein, Schweinhart, DeBruin-Parecki, & Robin, 2004; Horton & Bowman, 2002). Informal or alternate assessment practices are suggested for young children education rather than standardized assessment.

Informal or alternate assessment refers to instruments that are non-standardized and does not give a translation from a child's performance to a score and any comparison between a child's performance and other children or criteria. This form of assessment is based mostly on observation, interviews, and often involves normal classroom experiences (Puckett & Black, 2000; Wortham, 2007). In early childhood education, young children benefit from the feedback resulting from informal assessment and considering their education process and maturational development, they are encouraged to produce knowledge via experience rather than reproduce knowledge. Neisworth and Bagnato (2004) believed that ongoing classroom assessment is more suitable as an accurate and appropriate method of data collection and evaluation. Assessment of young children is a challenging issue, as children's competencies are situation-dependent; therefore, their responses to the constraints of standardized testing are not good (Wortham, 2007).

Spinelli (2008) emphasized that due to the increasingly diverse population of learners in our schools today, it is important that educators employ alternates to traditional assessment models. The preference of early childhood teachers and other adults working in this field is to choose informal assessment rather than standardized testing in young child assessment procedures. In young children's assessment process, early childhood teachers must apply different informal assessment practices to support children's learning and development. Observation, checklists, anecdotal records, running records, portfolios, rubrics, teacher-designed strategies, and performance-based strategies are defined and established informal assessment practices in Early Childhood Education (Guddemi & Case, 2004; Wortham, 2007). Although different strategies are applied to assess children's learning, observation has a role as the base of informal assessment because most of the critical information about children's development can be gathered by observing children's behaviors. Some of the documented assessment practices deemed appropriate for assessing the learning and development of children at during the early years' education are discussed.

2.2.5.1 Observation

Smith and Gorard (2005) defined observation as "taking careful note of everything said or done by a child or children over a defined period of time in a particular setting or context" (p.18). By recording everything seen and heard, some questions can be answered by the observers, especially teachers; such as "what is this child paying attention to or interested in?", "what experience does the child have of this?", "what does the child already know about this?", and "what does the child feel?" The aim of giving responses to these questions is not finding the right answers; however, via responding to these questions, teachers have the best possibility of knowing more about the child while they are observing the child. After teachers direct these

questions to themselves during the observation, they get much information about a child or children. Moreover, in order to record children's learning, early childhood teachers often use observation as an assessment technique (Huang, Kim, Song, Townshend, Davis, Altstatt, & Musinsky, 2009).

According to Neisworth and Bagnato (2004), observation is determined as the heart of informal assessment. In young children's education in the past, the analysis of the first sign of assessment was made based on observation. At the beginning of the 20th century, for instance, observation was used to assess human beings' behaviors. Dunphy (2010) emphasized the tradition of child observation in early childhood education strongly promoted the process of watching, listening and reflecting on children's action and words. In order to make learning visible, a student's/child's learning should be assessed with the help of observational evidence of the learning. Dunphy (2010) in his submission stated that educators who have close personal relationships with children are the people best placed to make observations of their learning. Teachers' views and use of observation plays an important role in both young children's development and learning. Children in that age group are dynamic and the nature of their learning is also dynamic and changeable. They can behave in different ways, in different contexts on different days. Therefore, the assessment of them should be an ongoing process in order to catch such changes.

In order to focus on the correct and suitable information depending on the aim of learning, the choice of an appropriate assessment strategy or instrument gains importance. Teachers should set an aim and organize the whole process and then assessment can be done. Consequently, Horton and Bowman (2002) strongly noticed that "there must first be a clear prioritization of assessment purposes before decisions

can be made regarding which instruments and methods best to use. Appropriate instruments for a suitable approach to informal assessment in young children's education result in rich and productive improvement in children's learning. Gronlund and James (2005) defined two main ways to use gathered information from child observation. The first one of these ways is observing to assess children while the second one is observing to plan a curriculum.

Smith and Gorard (2005) represented a cyclical nature of observation, where documentation of observation data provides a starting point. Then assessment on what is seen or heard provides a chance to interpret where the learner is and how to help this learner to take them one step further in their learning. In this respect, teachers must have discussions by themselves or with other teachers, children or other adults. After the discussion, a consensus is made about children and their learning, and then a planning procedure begins. The application of the plans is observed and then the documentation procedure follows the observation and the cycle goes like that.

Mindes (2011) explained the three most common methods for recording observations as: anecdotal notes, running records, and logs or notebooks. In anecdotal notes, brief and accurate notes are taken about a significant event or critical incident in a particular child's routine. Based on the anecdotal notes, the issues (description-physical appearance, moods, communication style-; attendance and arrival; relationship to teachers and children; relationships to materials; relationships to routines; approach to tasks) can be answered at the end of the year (Mindes, 2011). During recording anecdotal notes, teachers should look at one child or situation, write down exactly what a child is doing, observe children at different times and different settings, and be sure to schedule observations. It takes a fair amount of time and

effort, however; these records provide rich information about different moments from children's developmental processes. In addition to anecdotal notes, running records are another type of recording of observation in early childhood education settings.

Running records are narrative notes made of routine functioning of an individual child or a small group of children. They include "everything that occurred over a period of time – that is, all behavior observed" (Wortham, 2007, p. 98). As the third common method to record observation, log or notebooks are records that accumulated throughout the year for each child. They are brief and filled with one's own notes, abbreviations and sketches. These logs are impressions or memories on what children are doing rather than live observation notes. They are used as additional notes for the data gathered from live observation because the memories and impressions are open to misinterpretation. Observations, done as part of the daily routine, provide a fuller, richer picture of development of each child to teachers. The assessment of children's learning can be easily done based on these observations. When the limitations and difficulties of observation are taken into account, more suitable results can be gathered and assessment can be done in its authentic nature.

2.2.5.2 Portfolios

William and Thompson (2008) defined portfolio as the process of gathering purposeful examples of students' work over time to demonstrate their effort, progress and level of understanding over a period to time. Similarly, Wiggins and McTighe (2007) argued that unlike the traditional forms of assessment that take a "snapshot" of students at one point in time, portfolios "function like a photo album containing a variety of photos taken at different times and different contexts" (p. 85). Also, according to Herrera et al. (2007), portfolios contain best examples of students' work

that illustrate their learning and progress overtime. They further asserted in their submission that, the content of portfolios which incorporate a collection of student work are some indications of how students rate themselves on the process and product included and the evidences of how those products met the established criteria.

Portfolios are important in assessing students especially at the early years. By establishing the purpose and target for a portfolio, an instructor or teachers decides what kind of student work to incorporate, who should manage it, how often to review it among others (Wiggins & McTighe, 2007). With the issue of portfolio, instructors regularly assign students to include writing samples, reflections, drawings, reading logs, student self-evaluation, and progress notes, visuals and audio clips, among the many. Portfolios are considered a good alternative to traditional forms of assessment because they incorporate the perspective of students and teachers about learning and assessment. Another significance of a portfolio is that unlike the traditional synoptic evaluations, such as the final exam or any standardized test that happens once, portfolios provide a longitudinal observation of student progress as they show incremental gains in development, knowledge, skills, and proficiencies (Herrera et al., 2007).

Portfolios are also authentic and significant because they are driven by classroom activities; in most cases, they reflect “in-process adaptations to instructional methods and assessment”, and they assess learning which motivates students (Herrera et al., 2007, p. 32). Again, according to Puckett and Black (2000), portfolios offer a practical approach to the challenge of assembling and organizing the range of information on children’s learning and development. Puckett and Black (2000) further opined that two-way flow of information between practitioner and parents is

important. Parents are an important source of information about children's learning and development and their observations and insights are essential in putting together a comprehensive picture of individual children's strengths and needs. Information from practitioners can help parents support, extend and promote children's learning at home.

2.2.5.3. Peer Assessment

Peer assessment involves students giving feedback to each other to grade their work or performance using relevant criteria (Falchikov, 2004). In similar vein, Roberts (2006) refers to peer assessment as a process which allows learners to reflect critically upon the learning of their peers. Peer-assessment is deemed very advantageous as it furthers opportunities for students to identify targeted learning goals (Herrera et al., 2007). According to Chappuis and Stiggins (2003), in peer-assessment, students often assess other students' work compared to the criteria developed by the instructor, or both students and the class instructor. An important aspect of peer assessment is that it engages students in dialogue with their classmates, commenting on each other's work rather than a one-way feedback system from instructor to student.

Boud, Cohen and Sampson (2001) discuss the merits of peer assessment and suggest that it can be part of an important strategy in the repertoire of approaches to teaching and learning. Peer assessment can be used in a more supportive way, rather than simply enabling students to grade each other. Peer assessment is seen as a reciprocal process in that the student providing feedback also benefits from increasing their own understanding. This is achieved by students having to critique and review someone else's work and thereby reflect on their own understanding or performance (Gillies & Ashman, 2003). A learning activity involving peer assessment may take a number of

forms. At its simplest, peer assessment may involve peers providing formative feedback to one another. With large numbers of students, where peers are working in groups, this feedback may be formative (e.g., informal feedback) or summative, whereby each group member provides marks or grades for their fellow peers, and may be one-to-one or many-to-many (Chin, 2007).

To enrich peer-assessment and use it productively, Black and Wiliam (1998) propose that students be trained to assess their peers purposefully, with the goal of improving learning. As students comment on their peers' work, they use informal language which is understandable to them. In addition, according to Herrera et al. (2007), given the concept of peer-assessment, students compare other students' work to the accepted criteria, which "enables them to discern outstanding elements of both their own and their classmate's performances and products" (p. 34). Again, Kwok (2008) performed a study investigating students' perceptions of peer evaluation and teachers' role in seminar discussion. He found that students viewed the experience of peer evaluation as enhancing their confidence and providing them the opportunity to exercise power of making judgments about their peer.

2.2.5.4 Conversations with Children

Conversations with children are a vital assessment practice that early childhood teachers can deploy in assessing children. The day-to-day conversations with children provide rich contexts for assessment of children's early learning and development. In order to maximise the potential of these conversations for assessment, it is essential that practitioners listen carefully so as to understand what the child is seeking to communicate, either through gesture, behaviour or language (MacNaughton & Williams, 2004).

Conversations with babies, toddlers or young children engage the practitioner in reflection and interpretation of their efforts to understand the child's intent. Skilful use of questioning during these conversations can elicit children's theories and understandings, enabling them to share feelings and engaging them in speculation and imaginative thinking (Fleer, 2003; Wood, 1992). Anning and Ring (2004) submitted that children's drawings can be understood as their personal narratives which they use to order and explain the complexity and their experiences of the world. Discussions with children about their drawings and listening to children explain their drawing to others can therefore give the early childhood teacher a rich insight into children's understandings, preoccupations, sense of identity, and interests.

2.2.5.5 Self-Assessment

Zimmerman (2002) asserted that, self-regulation, self-evaluation of the quality attributes of one's own work draws on metacognitive competencies (e.g., self-observation, self-judgment, task analysis, self-motivation among others). Additionally, there is evidence that students can improve their self-regulation skills through self-assessment (i.e., set targets, evaluate progress relative to target criteria, and improve the quality of their learning outcomes) (Andrade, Du, & Wang, 2008; Andrade, Du, & Mycek, 2010; Brookhart, Andolina, Zuza, & Furman, 2004).

According to Pausch and Zaslou, (2008), the only way any of us can improve is if we develop a real ability to assess ourselves and if we can't accurately do that, how can we tell if we're getting better or worse? Self-assessment is considered as a careful consideration of the quality of one's own work guided by a rubric or feedback of scoring one's own work and predicting one's likely score on an impending task or test (Brooks, 2002). Brooks further indicated that, what distinguishes self-assessment

practices from other assessment practices is that they are carried out by the student (Brooks, 2002) although the degree of autonomy from peers, teachers, or parents will vary in practice. Several studies have indicated that self-assessment has positive benefits for students and the most powerful promise of self-assessment is that, it raises student academic performance by teaching pupils' self-regulatory processes, allowing them to compare their own work with socially-defined goals and revise accordingly (Andrade, 2010; Black & Wiliam, 1998; Hattie & Timperley, 2007; Ramdass & Zimmerman, 2008).

Self-assessment is associated with improved motivation, engagement, and efficacy (Griffiths & Davies, 1993; Klenowski, 1995; Munns & Woodward, 2006), reducing dependence on the teacher (Sadler, & Good, 2006). It is also seen as a potential way for teachers to reduce their own assessment workload, making students more responsible for tracking their progress and feedback provision (Sadler, 2010; Towler & Broadfoot, 1992). Regardless of the benefits of self-assessment, Black and Wiliam (1998) however remain concerned about student readiness to self-assess or evaluate peers. They therefore proposed that once students acquire a clear picture of the outcome or purpose, "they become more committed and more effective as learners: their own assessment become an object discussion with their teachers and with one another" (p. 7).

According to Brookhart (2009), student self-assessment is not new because back in the 1930s and 1940s, there were numerous authors endorsing the use of student self-evaluation. However, self-assessment is seldom implemented in many classrooms and this is supported by a study conducted by Hunter, Mayenga and Gambell (2006) which found that 23% of the 4,148 Canadian secondary teachers sampled reported

never using self-assessment, with 58% reporting little self-assessment use. Only half of 346 surveyed upper secondary students in Finland reported participating in self-assessment (Lasonen, 1995). This limited implementation likely reflects the tensions teachers report between the use of student-led assessment practices and the externally and teacher-controlled summative results generally reported to stakeholders (Harris & Brown, 2010; Volante & Beckett, 2011).

Some techniques that teachers can employ in the classroom to ensure effective self-rating which requires students to judge quality or quantity aspects of their work using a rating system. In the classroom, checklists that remind students of important task characteristics or task processes are commonplace (Clarke, Timperley, & Hattie, 2003). Clarke (2005) has also created self-rating prompts that are more evaluative and task-oriented, that is, “a) I am pleased with my work because I...; b) Two improvements I have made are ...; c) I would grade myself A B C D E because I...; and d) Next time I need to focus on...” (p. 113).

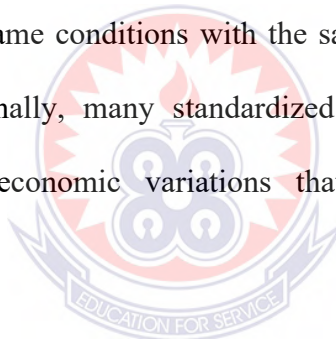
2.2.5.6 Play-Based Assessment

Play-based assessment is a valuable assessment form that teachers can use at different grade levels. Examples include pre-school children who are learning the names of objects, language learners who can just barely explain things in the new language, and upper grade levels who role play or dramatize concepts from the literature, history, concurrent life situations, and politics (Herrera et al., 2007). In addition, Herrera et al. (2007) indicate that assessment can take place in any manner but it does not mean that authentic assessment merely happens in non-traditional ways. Goodwin (2000) agrees “authentic assessment begins with teachers making it their business to purposefully watch, listen to, talk with, and think about the children in their classrooms” (p. 6).

Some teachers reflect on who these children are, the extent of what they know, and the way they learn, based on the evidence that they observe in the role-play (Herrera et al., 2007).

2.2.5.7 Standardized Tests

According to Hughes and Scott-Clayton, (2011) standardized tests are an early childhood education assessment tool that can be used to compare a child to the average child at the same stage of development. There are a number of standardized tests available for educators to use, including government regulated testing as well as tests designed by notable early childhood educators and researchers. One of the biggest downfalls of standardized testing, however, is the fact that they must be administered under the same conditions with the same directions as the original test was performed. Additionally, many standardized tests do not take into account regional, cultural and economic variations that may contribute to a child's developmental progress.



Standardized test assessment practices are mostly not preferred in young children's assessment processes. This is because trying to standardize the learning process at an early age is inappropriate due to the fact that it puts too much academic pressure on younger learners at that age (Hyson, 2003). Hanes (2010) stated clearly that "because young children are so diverse in their abilities and needs, assessment at the preschool level is particularly challenging" (p. 39). This may imply, using standardized test assessment at this stage would not deal efficiently and authentically with these diverse needs of children. Also, different studies support that it is inappropriate to employ a scattering of tests as a measure of success at the early years because of children's

varied abilities and needs (Epstein, Schweinhart, DeBruin-Parecki, & Robin, 2004; Horton & Bowman, 2002).

2.2.6 Challenges of Early Childhood Education Assessment

Despite the perceived advantages of carrying out assessment in early childhood settings, there are some challenges encountered by educators. Among these challenges are the following enumerated and discussed.

A major challenge that confronts educators in assessing children during early years education is the tensions arising from the different perspectives on children's learning and development. A study conducted by Nah (2014) in Korea for instance indicated that, educators are challenged with a disconnection between emphasising the traditional value of academic achievement in ECE and adopting the more constructivist approach that has been introduced in the 20th and the 21st century. This finding by Nah (2014) was supported by Basford and Bath (2014), who also argued that in the English context, there is a challenge in having children participate as agents in early childhood education and assessment because the framework provided is inclined towards achieving a measurable learning outcome. The authors further indicated that issues usually surface from this in practice, especially between assessment processes that ensure children's participation and those that involve a superficial record for the purposes of tracking and reporting development. Due to the range of perspectives influencing educators, as well as the mounting academic pressure set upon the ECE sector, a myriad of assessment approaches has been observed in early years' settings alongside the educators' conceptions of development and learning (DeLuca & Hughes, 2014) which may impact children's learning.

Another factor that hinders the implementation of collaborative and participatory assessment is the professional training of teachers (National Research Council, 2001). For effective assessment of children during their early years, there is the need for competent and knowledgeable educators (Basford & Bath, 2014; Buldu, 2010; National Research Council, 2001; Payler, 2009). Knowledge is seen as important in manoeuvring through the tensions and difficulties present in the field of early years assessment practices (Basford & Bath, 2014). Knowledge of the teachers is again essential as it help them to decide which among the various strategies to use considering the implications of these strategies within a given contexts (Payler, 2009).

Again, equipment, material, and financial support especially by the leadership of early childhood settings, are considered to be essential to effectively adopting the practice of documentation of children's progress (Buldu, 2010). The demand for time and effort spent on the different aspects of children's assessment were cited as potential roadblocks for its regular use in kindergarten classrooms, despite its perceived usefulness (Buldu, 2010; Nah, 2014). Process-oriented assessment was seen to be labour-intensive, as it involved copious amounts of observation and documentation (Chan & Wong, 2010). Again, pressure from parents often is considered a challenge to assessment practices in early years education. Parents do not really understand nor appreciate alternate assessment practices and therefore mount pressure on teachers to provide measurable scores for their wards' performances (National Research Council, 2001). This led most teachers to use teacher made tests or standardized tests which is deemed inappropriate during early years education.

Time was also found to be a major determinant in allowing an organic transition from educators employing a traditional individualistic documentation approach to a more sociocultural one (Fleer & Richardson, 2004). Through teacher observations and analysis of diary entries, Fleer and Richardson (2004) found that while there was initial discomfort in the process of documenting using a sociocultural approach and an uncertainty in what to record, over time the value of such an approach was acknowledged, with the participants slowly considering the socio-cultural context in the assessment process.

Furthermore, there are no established standards of assessing students especially children during their early years' education. Most of the previous reforms in Ghana for example lacked standards, even though, more often than not, policy makers and stakeholders in education talk of 'falling' standards. For assessment results to be meaningful and useful, they must be linked to clear development or knowledge continua, with benchmarks along the way to illustrate what progress looks like (Shepard, Kagan, & Wurtz, 1998). Lack of these standard have led teachers and early childhood programmes to develop standards on their own since it appears the central government is not ready for such an undertaking. This has therefore become a great challenge for teachers and early childhood programmes which results in caregivers, teachers and school proprietors running their own programmes and setting their own standards as and when it suits them.

Shepard (1994), writes about the 'negative history of standardized testing of young children in the past decade,' which includes a distortion of curriculum in the early grades, including a "skill-driven" "kindergarten curriculum" and "escalation of curriculum" or "academic trickle-down" (pp. 206-207). According to Shepard,

developmentally inappropriate instructional practices, characterized by long periods of seat work, high levels of stress, and a plethora of fill-in the-blank worksheets, placed many children at risk by setting standards for attention span, social maturity, and academic productivity that could not be met by many normal 5-year-old children. Anane (2007) describes influences that caused many teachers to align their curriculum and instruction to the specific focus of the tests that are nationally conducted by the West African Examination Council (WAEC) and the uses to which the results are put. Thus, the results have brought about a narrowing curriculum, a concentration on those skills most acquiescent to testing, a constraint on the creativity and flexibility of teachers. These outcomes represent a vast alteration in educational policy, aided and abetted by the inappropriate use of tests. It is therefore feared that this can tackle down and create an emerging crisis in public Early Childhood Education.

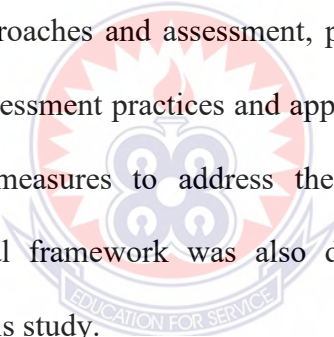
2.3 Conceptual Framework

Berman (2013) submitted that, conceptual frameworks provide a model for relationships between variables that may or may not imply a particular theoretical perspective, with the purpose of describing and predicting phenomenon. In similar vein, Miles and Huberman (1994) in their submission stated that, a conceptual framework “explains, either graphically or in narrative form, the main things to be studied, the key factors, concepts, or variables and the presumed relationships among them” (p. 18). In order to represent the various variables and the presume relationships among them as related to this study, the researcher developed a narrative framework for this study. The major aim or focus of the study was to examine the assessment practices among Early Childhood Education teachers in the Tema West Metropolis of the Greater Accra Region of Ghana. In order to achieve this aim, the study seeks to examine teachers’ perception and level of training on ECE assessment

in the schools. Again, the study seeks to ascertain the assessment strategies teachers used in the selected schools as well as the challenges teachers faced in assessing children in schools within the Tema West Metropolis as depicted in the figure respectively.

2.4 Chapter Summary

This chapter comprehensively discussed literature as related to this study. The review of related literature focused on both theoretical and empirical literature. The theoretical review adopted Title's Theory for Classroom Assessment Practice and supported by Maria Montessori's Model of Early Childhood Education. The empirical literature was reviewed on the concept of assessment in education, some Early Childhood Education approaches and assessment, perception about Early Childhood Education assessment, assessment practices and approaches, challenges of teachers in assessing children and measures to address the challenges of early childhood assessment. A conceptual framework was also design to show the concepts or variables understudy in this study.

The logo of the University of Education, Winneba, is a circular emblem. It features a central sunburst design with rays extending outwards. Below the sunburst, there are three stylized human figures or symbols. The entire emblem is encircled by a banner that reads "EDUCATION FOR SERVICE".

CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter comprised of the research design, population, sample and sampling techniques, instrumentation, data collection procedure, method of data analysis and ethical consideration.

3.1 Research Design

A research design is the overall plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process (Polit & Beck, 2004). Appropriate selection of research design for a study ensures its success and the fulfilment of the purpose to which the study is being conducted. Selecting a good research design therefore needs to be guided by an overarching consideration of whether the design does the best possible job of providing trustworthy answers to the research questions (LoBiondo-Wood & Haber, 2017).

The research design adopted for the purpose of this study was a descriptive survey design within a quantitative enquiry. Sukamolson (2007), describes descriptive survey as the design which encompasses the use of scientific sampling method with a designed questionnaire to measure a given population's characteristics through the utilization of statistical methods. Sukamolson further stated that, survey as a form of quantitative research is concerned with questionnaire design and questionnaire administration for the sake of gathering information from the population under study, and then making analysis in order to better understand their behaviour. Kerlinger cited in Gable, (1994) also sees survey research as social scientific research that focuses on

people, the vital facts about them, and their beliefs, opinions, attitudes, motivations as well as behavior. Descriptive survey design was appropriate for this study because the researcher believes that it made easy systematic collection and presentation of data as well as help gives a clear and comprehensive picture of teachers' assessment practices in the Tema West Metropolis, Ghana. Again, descriptive survey was used for the study because the researcher sought to assess the perception of the respondents which no other design can perfectly do except descriptive survey design. Furthermore, descriptive survey design was employed as the most suitable design for this study because of its relative low cost or cost effectiveness and short time used for data collection which does not involve any manipulation of variables.

Despite been effective and useful, the descriptive survey design is not without certain inherent weaknesses. According to Fraenkel and Wallen (2000) there are three major difficulties associated with this design which includes, the difficulty in ensuring that questions to be answered are clear, getting the respondents to answer questions thoughtfully and honestly and the difficulty in getting sufficient number of questionnaires completed and returned. In order to minimized these weaknesses therefore, adequate consultations were made by the researcher to ensure that the questionnaire was validated by experts and the suggestion effected before it was administered to the respondents. 100 percent return rate was ensured as the research waited and collected the questionnaires from the teachers on same day it was administered in their respective schools.

3.2 Population of the Study

Available statistics from the Statistical Units of the Tema West Metropolitan Educational directorate showed that there were 40 Public Schools in the Metropolis with an average of five public early childhood teachers in each school. The target population of the study therefore comprised of all the 40 public schools and 200 public early childhood teachers in the Tema West Metropolis. The accessible population also consisted of all the 40 Schools and all the 200 public early childhood teachers in the Metropolis. All these 40 schools were used for the study to ensure data were collected from a large range of respondents. Also, all the teachers were used due to the fact that they were Early Childhood Education teachers and hence will be in the position to provide relevant and concrete information for that study.

3.3 Sample and Sampling Techniques

The study employed census technique to select participants. By census technique, all the 40 schools and the 200 Early Childhood Education teachers in the metropolis were selected for the study. With census sampling, all the members or elements of the population or target population were selected for the research. The census technique was used for the study because the researcher wanted responses from different heterogeneous grouping. The term is applied to those situations where the researcher selects or samples all the members of the population and used them for the study (Denscombe, 2008).

Therefore, all the 40 public schools within the Tema West Metropolis were the sample unit for the study.

3.4 Instrumentation

The research instruments in this study included: structured questionnaire.

3.4.1 Questionnaire

Four Likert scale questionnaire was adopted to aid in the quantitative data collection. The questionnaire consisted of five sections, the first section focused on the demographic characteristics of the respondents, the second section dealt with the academic qualification or level of training of ECE teachers and the third section dealt with items relating teachers' perception about assessment in Early Childhood Education delivery. The fourth section focused on items relating to the assessment practices deployed by teachers in assessing children and finally, the five-section dealt with items relating to the challenges Early Childhood Education teachers encounter in the use of assessment practices.

A section of the questionnaire contained at least 4 items and at most 10 items. The nature of items on the questionnaire was the closed-ended type. This was to ensure easy and rapid response to the items and expression of oneself respectively. The questionnaire has options presented in four-point scale ranging from: Strongly agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). Correspondingly, each of those options were rated the following: SA (4), A (3), D (2) and SD (1). Four likert scale questionnaire was used because the researcher wants a specific user (respondent) opinion in order to ascertain the assessment practices of the teachers in the Tema Metropolis. The questionnaire was chosen because all the respondents were literate, and therefore could read and respond to the items. Again, questionnaires are easier to arrange and supply standardized answers, to the extent that all respondents are posed with exactly the same questions. The data collected hence are very unlikely

to be contaminated through variations in the wording of the questions or the manner in which the question is asked.

3.5 Pilot Testing

A pretest to determine the validity and reliability of the items and the questionnaire was taken prior to the actual study. The questionnaire items were tested on a small number of people before using them for the actual study. A pre-test of the questionnaire can reveal ambiguities, poorly worded questions, questions that not understood, and unclear choices, and can also indicate whether the instructions to the respondents are clear (Fraenkel and Wallen, 2000). The researcher selected 10 early childhood teachers from Tema Newtown Anglican and Manhean Primary School were for the pretest. Prior to the pilot test, face and content validity procedure conducted for the instrument. The face validity of the instruments for this study was established by giving the prepared instrument to the researcher's colleagues, and friends to scrutinize and make constructive criticisms. Suggestions from them on the instrument were considered before the instrument was administered to the participants. The content validity of the instrument was determined by expert in measurement and evaluation and the supervisor of the researcher in the Department of Early Childhood Education in the University of Education, Winneba. Suggestions from the supervisor and other experts were affected before the instrument was administered to the respondents. As a result of the pilot test, the wording of the items on the questionnaire that seemed ambiguous and misleading were reviewed and clarified. Appropriate revision was made on the questionnaire based on the outcome of the pilot test.

Reliability analysis was done using Cronbach's alpha reliability model. A reliability coefficient (r) of 0.70 or more is deemed as an acceptable measure of reliability because it falls within the threshold value of acceptability as a measure of reliability as noted by Dörnyei and Taguchi (2010). For the purpose of this study therefore, internal consistency reliability test was conducted for each research question. The first Research Question (RQ1) has a Cronbach alpha of .704, the second Research Question (RQ2) has .699, the third Research Question (RQ3) has .874 and the final Research Question has a Cronbach alpha of .757. The overall Cronbach alpha coefficient of the instrument was .896.

3.6 Data Collection Procedure

The researcher obtained an introductory letter from the Department of Early Childhood Education, Faculty of Educational studies, University of Education, Winneba to facilitate the process of data collection. Permission was sought from the appropriate Municipal Educational Office and the school authorities to enable the researcher to conduct the study. The purpose of the study was explained to the respondents with the various difficulties of the respondents rectified by the researcher.

3.7 Data Analysis Procedure

Data collected was analyzed using descriptive statistical tools such as mean, standard deviation, frequency and percentages. Specifically, Research Questions 1, 2, 3 and 4 were analyzed using mean and standard deviation while the demographic characteristics of the respondents were analyzed using frequencies and percentages. The responses from the questionnaire items were coded (Strongly Disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4) and analyzed through the help of the Statistical Product and Service Solutions (SPSS version 23). Hypothesis 1 was tested

using Independent-sample T-test and hypothesis 2 was tested using One Way ANOVA.

3.8 Ethical Considerations

The researcher has a moral obligation to strictly consider the rights of the respondents, who were expected to provide knowledge for this investigation (Speziale, Streubert & Carpenter, 2011). The researcher will request for permission to conduct the study. A written permission was therefore be obtained from the Department of Early Childhood Education, in the Faculty of Educational Studies in the University of Education, Winneba. Written permission (informed consent) was sought from respondents for the questionnaire administration and interviewing (Lo- Biondo Wood & Haber, 2017).

McGloin (2004) state that confidentiality means that no information that the respondent divulges is made public or available to others. The anonymity of a person or an institution is protected by making it impossible to link aspects of data to a specific person or institution. Confidentiality and anonymity were guaranteed by ensuring that data obtained were used in such a way that no one other than the researcher knows the source (Lodico, Spaulding & Voegtle, 2010). In this study no, actual respondent names were attached to the information obtained Serial numbers were used. According to Devos (2003) privacy refers to agreements between persons that limit the access of others to private information. In this study, the researcher ensured that when respondents described their experiences, the information will not be divulged. The respondents were informed that, they could withdraw from the study at any time if they wished to. This right was explained to them prior to engaging in the study.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This chapter presents results and discussion of the study. The study was purposed to examine the assessment practices among Early Childhood Education teachers in the Tema West Metropolis in the Greater Accra Region of Ghana. Four research questions guided the study and they sought to investigate the training of ECE teachers in the Tema West Metropolis, the perception of teachers about assessment in Early Childhood Education delivery, the assessment practices deployed by teachers in assessing children and the challenges Early Childhood Education teachers encounter in the use of assessment practices in the Tema West Metropolis, Ghana. Two hypotheses were also raised for the purpose of this study.

With regards to this, data presentation in this chapter was based on the various research questions and hypotheses in addition to the demographic data gathered on respondents. Descriptive statistical tools such as frequencies, percentages, mean and standard deviation were used to analyse the data collected from the questionnaire and presented in tabular form. Specifically, frequencies and percentages were used to analyse the demographic data of the respondents while mean and standard deviation were used to analyse data collected with regards to the various research questions. Independent sample T-test and One way ANOVA were used to test the hypotheses 1 and 2 respectively.

4.1 Demographic Data of Respondents

In order to ascertain the demographic characteristics of the respondents, the respondents were asked to provide information with regards to their sex, age range, academic and professional qualification. Data obtained on the demographic characteristics of the respondents were presented and analysed in Tables 1 to 4 respectively.

Table 1: Sex of Respondents

Sex	Frequency (F)	Percent (%)
Male	49	24.5
Female	151	75.5
Total	200	100.0

Field Data, 2021

Data from Table 1 indicated that, majority of the respondents who participated in the study were females. This is evidence from the table as 151 (75.5%) of the respondents were females while 49 (24.5%) were males.

Table 2: Age Range of Respondents

Age Range	Frequency (F)	Percent (%)
Below 25	3	1.5
26-30	46	23.0
31-35	48	24.0
36-40	78	39.0
41 and above	25	12.5
Total	200	100.0

Field Data, 2021

Table 2 illustrates the age range of the respondents involved in the study. Data in the table suggest that out of the 200 respondents used for the study, 78 (39.0%) were between the age range of 36 and 40, 48 (24.0%) were between 31 and 36years, 46 (23.0%) were between 26 and 30years. Also, 25 (12.5%) of the respondents were 40years and above while 3 (1.5%) of them were below 25years of age.

Table 3: Professional Qualification of Respondents

Professional Qualification	Frequency (F)	Percent (%)
Teachers Certificate 'A'	17	8.5
Diploma in Early Childhood Education	46	23.0
Diploma in Basic Education	56	28.0
Bachelor of Education (Early Childhood)	63	31.5
Bachelor in Basic Education	18	9.0
Total	200	100.0

Field Data, 2021

Data in Table 3 indicated that 63 (31.5%) of the respondent had Bachelor of Education (1st Degree) in Early Childhood Education while 46 (23.0%) had Diploma in Early Childhood Education. Again, 56 (28.0%) of the respondents had Diploma in Basic Education while 18 (9.0%) had Bachelor (1st Degree) in Basic Education. 17 (8.5%) respondents however possess Teacher Certificate 'A'. Data presented in the table suggest that majority of the respondents in the Tema West Metropolis used for the study were specialized in Early Childhood Education.

4.2 Analysis of Research Questions

Four research questions were analyzed and discussed for the purpose of this study. Descriptive statistical tools such as mean and standard deviation were used to analyze the quantitative data.

4.2.1. Research Question 1:

“What is the academic qualification or level of training of ECE teachers in the Tema West Metropolis, Ghana?”

The National Association for the Education of Young Children (NAEYC), (2007) stated that it is prudent for Early Childhood Education providers to be trained and equipped with the necessary skills and knowledge because teachers with required professional preparation provide more developmentally appropriate nurturing and responsive care and education experiences for young children especially during their early years' education. The first research question that guided the study therefore sought to assess the academic qualification or level of training of ECE teachers who deliver Early Childhood Education in the Tema West Metropolis, Ghana. Data obtained with respect to this research question was presented in Table 4 and analysed using mean and standard deviation.

Table 4 present response rating to various statements on the level of training of teachers who deliver Early Childhood Education in the Tema West Metropolis, Ghana. Data in the table suggest that the teachers were trained on assessment within the context of Early Childhood Education and this was evidenced in the score of mean (3.46) with a standard deviation of (.708). It could also be seen from the table that the respondents (Mean = 3.50; SD. = .634) understand that the purpose of ECE assessment is to determine whether pupils have mastered a learning objective. Table 4 again depicts that the respondents were in agreement that Early Childhood Education assessment should be age-appropriate (Mean = 3.60; SD = .558) and linguistically appropriate (Mean = 3.43; SD = .615) respectively. These responses could imply that the teachers used for the study understand the concept of developmentally appropriateness of assessment practices in the Tema West Metropolis.

Table 4: Results of the Training of Teachers on Assessment Practices

Statement	Total	Mean	SD
I have training on assessment within the context of Early Childhood Education	200 (100%)	3.46	.708
The purpose of ECE assessment is to determine whether pupils have mastered a learning objective.	200 (100%)	3.50	.634
Early Childhood Education assessment should be age-appropriate	200 (100%)	3.60	.558
Assessment during early years education should be linguistically appropriate	200 (100%)	3.43	.615
Giving appropriate comments for pupils' assessment results in ECE is more important than giving grades or marks	200 (100%)	3.68	.497
Parents are valuable source of information for children assessment during their early years	200 (100%)	3.56	.615
Early childhood assessment is to just prepare children for standardized examinations	200 (100%)	3.19	.903
Early childhood assessment helps pupils to make account of their learning progress	200 (100%)	3.36	.635
Mean of Means and Standard Deviation		3.47	.352

Field Data, 2021.

NB: SD = Standard Deviation.

Data in Table 4 showed that, almost all the ECE teachers (Mean = 3.68; SD = .497) used for the study believe that giving or passing appropriate comments for pupils' assessment results in ECE is more important than giving or awarding grades or marks. This response may imply that the teachers understand the importance of reinforcement in the form of positive and relevant comments and praises upon accomplishment of a given task. It was also evidenced (Mean = 3.56; SD = .615) from the table that parents are valuable source of information for children assessment during their early years. This could mean that the role of parents in the education of their children cannot be overemphasized and teachers in the Tema West Metropolis understand this. Data as presented in Table 4 also suggested that Early childhood

assessment helps pupils to make account of their learning progress (Mean = 3.36; SD = .635).

It was however interesting to find out that the teachers used for the study in the Tema West Metropolis attested and agreed (Mean = 3.19, SD = .903) that Early Childhood Education assessment is to just prepare children for standardized examinations. This response from the teachers could mean that they fully do not understand the relevance of assessment beyond the classroom walls. This is because ECE assessment is not just to or the sole purpose of ECE assessment is not just to prepare children for standardized examination although ECE assessment helps in doing so.

It could be deduced from the analysis of data gathered from the questionnaire regarding research question one that, the teachers in the Tema West Metropolis have been trained and hence have understanding of Early Childhood Assessment practices. This was evidenced in Table 4 as the responses of the teachers with respect to their level of training obtained an average mean of (3.47) with a corresponding standard deviation of (0.352). The responses of the teachers indicated that Early Childhood Education assessment needs to be age and linguistically appropriate, helps pupils to make account of their learning progress and the overall purpose of ECE assessment is to determine whether pupils have mastered a learning objective or not. Also, analysis of data showed that giving appropriate comments for pupils' assessment results in ECE is more important than giving grades or marks and parents are valuable source of information for children assessment during their early years. Despite the teachers' demonstration of these understandings of assessment, they still believe that Early childhood assessment is just to prepare children for standardized examinations only.

The findings with respect to the first research question were in line with several studies conducted by earlier researchers and scholars (Marriot & Lau, 2008; Ohlsen, 2007; Stiggins, 2001; Brooks and Brooks, 1999; Harlen, 2007; Soto & Swadener, 2002; Siegel, 1987; NAEYC cited in Hyson, 2007)). For instance, the National Association for the Education of Young Children (NAEYC), cited in Hyson (2007) emphasized that, early childhood educators with required professional preparation provide more developmentally appropriate, nurturing, and responsive care and education experiences for young children and this aligns with the submission in an Issue Brief by National Governors Association Centre for Best Practices cited in Reznitskaya & Wilkinson (2015) that, the knowledge and skills of early childhood care providers and teachers are critical factors in their delivery of high-quality developmental and educational experiences to young children. Similarly, Siegel (1987, p.51) indicated that, “due to the many functions performed by the ECE teacher; he/she must possess certain quality of education, greater theoretical knowledge of child development and learning.”

Harlen (2007) asserted that, assessment involves the process of collecting evidence and making judgments relating to outcomes such as students’ achievement of particular goals of learning or development. To Harlen, teachers must therefore be trained in order to have the pre-requisite knowledge and skills in assessing children. She maintained that, this will in the long run help teachers to make good and depicting judgement about children’s learning and progress. Similarly, according to Cavangah, Waldrip, Romanoski, Fisher and Dorman (2005), assessment forms and tasks selected by teachers and administrators depend on their knowledge and perception of assessment and therefore possessing adequate knowledge of assessment by teachers will help informed their choices.

4.2.2 Research Question 2

“What is the perception of teachers about assessment in Early Childhood Education in the Tema West Metropolis, Ghana?”

Gal, Schreur, and Engel-Yeger (2010) in their submission indicated that, teacher attitude, perception and views are one of the most important aspects of teaching and that negative attitudes and perceptions negatively affect the teaching practice in the classroom. Owing to this, it is paramount to assess the perception of teachers about assessment in Early Childhood Education in the Tema West Metropolis. The second research question therefore sought to assess the perception of teachers about assessment in Early Childhood Education in the Tema West Metropolis, Ghana. Table 5 presents a summary of the responses from the respondents in relation to this research question.

Table 5 present data with respect to the perception of teachers about Early Childhood Education assessment in the Tema West Metropolis. It could be observed from the table that the respondents (Mean = 3.62; SD = .506) used for the study were in agreement that early childhood assessment supports individual educational progress of children. Perhaps the respondents believe that assessment during early years education help identify weaknesses of children and how to overcome such weaknesses. The table again depicts that ECE assessment help determine suitable placement of children. This was evidenced as all the respondents (Mean = 3.60; SD = .492) homogeneously agreed to the statement.

Table 5: Analysis of Perception of Respondents about ECE Assessment

Statement	Total	Mean	SD
Early childhood assessment supports individual educational progress of children	200 (100%)	3.62	.506
ECE assessment help determine suitable placement of children	200 (100%)	3.60	.492
ECE assessment provide information to parents regarding their children's performance and progress	200 (100%)	3.53	.649
ECE assessment facilitate development of individual educational planning and the curriculum in general	200 (100%)	3.58	.534
ECE assessment identify children with developmental needs	200 (100%)	3.55	.608
ECE assessment provide guidance in referral of children to specialist	200 (100%)	3.55	.616
Mean of Means and Standard Deviation		3.57	.350
<i>Field Data, 2021.</i>	NB: SD = Standard Deviation.		

As presented in Table 5, it could be seen that the teachers (Mean = 3.53; SD = .649) used for the study perceived and agreed that ECE assessment provide information to parents regarding their children's performance and progress. This suggest that the ECE teachers at the Tema West Metropolis believe that assessment is a vital source of information for parents about their children progress in school. Data presented in Table 5 also suggested that ECE assessment facilitate development of individual educational planning and the curriculum in general (Mean = 3.58; SD = .534). This could imply that the respondents understand and perceive ECE assessment as a vital source of information in the designing of individual educational plan as well as the general curriculum. As presented in Table 5, the respondents used for the study in the Tema West Metropolis perceived ECE assessment to help identify children with developmental needs (Mean = 3.55; SD = .608) and also provide guidance in referral of children to specialist (Mean = 3.55; SD = .616) respectively. These responses could

mean that the teachers used for the study believe that it is through ECE assessment that children with special education needs are identified and referred as such.

Analysis of data obtained using the questionnaire with respect to the second research question suggested the teachers who deliver Early Childhood Education in the Tema West Metropolis possess or have positive perceptions about the need for assessing children during their early years' education. It was clearly demonstrated from the analysis of responses given by the teachers used for the study that Early childhood assessment supports individual educational progress of children, help determine suitable placement for children as well as provide information to parents regarding their children's performance and progress. Also, the teachers believe that Early Childhood Education assessment facilitate development of individual educational planning and the curriculum in general, help identify children with developmental needs and provide guidance in referral of children to specialist. The positive perception of Tema West Metropolis Early Childhood Education teachers about the need for early years' assessment of children was also evidenced in Table 5 as it recorded an average mean of (3.57) and a standard deviation of (.350).

The responses gathered with respect to research question two aligns with the findings of an earlier study conducted Goodrum, Hackling, and Rennie (2001) who in their study concluded that assessment is a key component of the teaching and learning process. Hence, including students' and teachers' perceptions in designing assessment tools would be considered reasonable, given the fact that both students' preferences and teachers' rationale might influence the way students proceed with learning and the way it is tested. In similar vein, a study conducted by Fennema and Romberg (1999), indicated that the way teachers perceive assessment may influence the way

they teach and assess their students. Chester and Quilter (1998) also believed that studying teachers' perceptions and practices of assessment is vital in the sense that it provides an indication of how different forms of assessment are being used or misused and what could be done to improve the situation. In a study they conducted on in-service teachers' perceptions of classroom assessment, standardized testing, and alternative methods, concluded that teachers' perceptions of classroom assessment affected their classroom assessment practices. Teachers who attached less value to classroom assessment used standardized tests most of the times in their classrooms. Teachers with negative experiences in classroom assessment and standardized testing are less likely to see the value and the need for various forms of classroom assessments for learners (Chester & Quilter, 1998).

4.2.3 Research Question 3

“What are the assessment practices deployed by teachers in assessing children in the Tema West Metropolis, Ghana?”

There are a number of assessment approaches and strategies documented in several studies. In young children's assessment process, early childhood teachers must apply different informal assessment practices to support children's learning and development. Observation, checklists, anecdotal records, running records, portfolios, rubrics, teacher-designed strategies, and performance-based strategies are defined and established informal assessment practices in Early Childhood Education (Guddemi & Case, 2004; Wortham, 2005). Although different strategies are applied to assess children's learning, observation has a role as the base of informal assessment because most of the critical information about children's development can be gathered by observing children's behaviors. With respect to this, it was paramount to investigate the assessment practices ECE teachers in the Tema West Metropolis employed and

used in assessing children during their early years' education. The third research question that guided the study therefore sought to investigate the assessment practices deployed by teachers in assessing children in the Tema West Metropolis, Ghana. Data obtained were presented on Table 6 and interpreted as such.

Table 6 presents the results of data collected with respect to the assessment practices ECE teachers deployed in assessing children in the Tema West Metropolis, Ghana. It could be seen from the table that the most commonly used assessment practices among the teachers were building of portfolio on the learning outcomes of children (Mean = 3.54; SD = .656), use of narrative observation (Mean = 3.26; SD = .711), use of informal conversation with children (Mean = 3.30; SD = .775), use of performance-based assessment (Mean = 3.24; SD = .772), self-assessment (Mean = 3.45; SD = .707) and peer-assessment (Mean = 3.28; SD = .892) among children as means of assessing their learning outcomes respectively. It was again shown in the table that the teachers in the Tema West Metropolis very often use observational tools such as anecdotal record (Mean = 3.18; SD = .928), checklist (Mean = 3.40; SD = .815), rating scale (Mean = 3.19; SD = .823) and time sample (Mean = 3.21; SD = .904) as means of assessing children learning outcome, education and social progress respectively.

Table 6: Results of Assessment Practices of Teachers

Statement	VO	O	S	N	Total	Mean	SD
I build portfolio on the learning outcomes of children to assess them	123(61.5%)	65(32.5%)	09 (4.5%)	03 (1.5%)	200(100%)	3.54	.656
I use narrative observation as a means of assessing children's learning	83(41.5%)	86(43.0%)	31 (15.5%)	00 (0.0%)	200(100%)	3.26	.711
I have informal conversation with children to assess learning outcomes	94(47.0%)	75(37.5%)	27 (13.5%)	04 (2.0%)	200(100%)	3.30	.775
I use teacher-made test (pencil & paper) to assess learning of children	94(47.0%)	67(33.5%)	28 (14.0%)	11 (5.5%)	200(100%)	3.22	.886
I use performance-based assessment in assessing learning of children	88(44.0%)	73(36.5%)	38 (19.0%)	01 (0.5%)	200(100%)	3.24	.772
I use standardized test to assess learning outcomes of children	89(44.5%)	73(36.5%)	24 (12.0%)	14 (7.0%)	200(100%)	3.19	.903
I use and encourage self-assessment among children	112(56.0%)	69(34.5%)	16 (8.0%)	03 (1.5%)	200(100%)	3.45	.707
I use and encourage peer-assessment among children	101(50.5%)	68(34.0%)	17 (8.5%)	14 (7.0%)	200(100%)	3.28	.892
I use anecdotal record as an observational tool to assess children	92(46.0%)	67(33.5%)	26 (13.0%)	15 (7.5%)	200(100%)	3.18	.928
I use checklist as an observational tool to assess children learning	119(59.5%)	47(23.5%)	30 (15.0%)	04 (2.0%)	200(100%)	3.40	.815
I use rating scale as an observational tool to assess children	87(43.5%)	67(33.5%)	43 (21.5%)	03 (1.5%)	200(100%)	3.19	.823
I use time sample as an observational tool to assess children's behaviors	97(48.5%)	56(28.0)	38 (19.0%)	09 (4.5%)	200(100%)	3.21	.904
Mean of Means and Standard Deviation						3.29	.530

*Field Data, 2021.***NB:** VO = Very Often; O = Often; S = Sometimes; N = Never; SD = Standard Deviation

Despite the use of informal assessment practices in the ECE centers in the Tema West Metropolis, data collected and presented in Table 6 suggest that the use of some formal assessment practices was common among the teachers used for the study. This was evidenced as data contained in the table showed that the teachers use standardized test (Mean = 3.19; SD = .903) and teacher-made test/pencil & paper (Mean = 3.22; SD = .886) respectively to assess learning outcome and progress of children.

Inferring from the analysis of data obtained with regards to research question three, it was revealed that Early Childhood Education teachers in the Tema West Metropolis employ and use several documented assessment practices (both alternative and traditional) in assessing children. This was seen from the data presented in Table 6 with Mean of Means value of (3.29) and, an Average Standard deviation of (0.530). Among alternative assessment practices used by the teachers in the metropolis were, building of portfolio, the use of observations in the form of anecdotal records, checklist, rating scale, time sample among others. Also, interview or have informal conversation, self and peer assessment as well as performance-based assessment are commonly used in the metropolis. It must be noted that, these alternative assessment practices are highly recommended to be used in assessing children during their early years' education.

These responses regarding the third research question fall within the parameter of studies conducted by earlier researcher and scholars. For example, William and Thompson (2008) indicated that, contrary to the traditional forms, learners and their peers play a considerable role in assessment process in formative or alternative assessment. Chappuis and Stiggins (2004), reinforce the above point by indicating that, 'classroom assessment

that involves students in the process and focuses on increasing learning can motivate rather than merely measure students' (p. 40). In similar vein, Dochy (1997), Black and Wiliam (1998), and Birenbaum (1996), observed that alternative assessment practices which involve students in the process of assessment does not only reduces the burden of work for the instructor, but also assures students that they are viewed as active members who are responsible for their own progress. Harlen (2006), also stated that, formative or alternate assessment functions as a cycle of events which identifies learner's position and his or her targeted goal. To Harlen therefore, students are active members of the class and the assessment process as opposed to the old version of assessment (traditional) in which students were simply receivers of information.

It is worth noting however that, the use of traditional assessment practices such as pencil and paper test is still common and very often used among ECE teachers in the Tema West Metropolis. This contradicts some earlier studies which advocate that, pencil and paper test are inappropriate and therefore should not be used during early years education. For instance, a study conducted by Chappuis and Stiggins (2004), indicated that students are perceived to be passive actors in the traditional form of assessment rather than active learners in the new form (formative assessment) who acquire the ownership of their learning. They further indicated that, due to this, traditional assessment practices must be avoided during early years' education. Similarly, Segers and Dochy (2001), stated that traditional assessment practices are focused on improving the cognitive side of instruction, i.e., the skills and knowledge that students are expected to develop within a short period of time and not, the holistic development of children.

4.2.4 Research Question 4

“What are the challenges Early Childhood Education teachers encounter in the use of assessment practices in the Tema West Metropolis, Ghana?”

The fourth and final research question that guided the study sought to investigate the challenges Early Childhood Education teachers encounter in the use of assessment practices in the Tema West Metropolis. Accurate assessment of children is disreputably difficult and hence needs clear guidelines regarding the nature, functions and the use of early childhood assessment practices that are appropriate for use in culturally and linguistically diverse situations for children at that level. It was vital to therefore investigate some of the challenges ECE teachers encounter in assessing children. Data collected regarding this research question was presented and analysed in Table 7.

Data presented in Table 7 indicated that the teachers used for the study agreed that lack of understanding of children’s assessment outcomes (Mean = 3.32; SD = .584) and effects of teachers’ belief and perception on assessment (Mean = 3.31; SD = .637) respectively hinders effective assessment of children during their early years’ education. These responses could imply that, ECE teachers used for the study in the Tema West Metropolis do not have adequate understanding of the use of children assessment outcomes .

Table 7: Results of Challenges ECE teachers face in Assessing Children

Statement	Total	Mean	SD
Lack or inadequate indoor and outdoor resources for assessing children	200 (100%)	3.46	.625
Lack of understanding of children's assessment outcomes	200 (100%)	3.32	.584
Overcrowding or large number of children in the classroom affects assessment processes	200 (100%)	3.55	.624
Excessive interference of parents in the assessment process of children during their early years	200 (100%)	3.52	.618
High demand or expectation of parents from teachers and children during their early years	200 (100%)	3.53	.649
Inadequate time for assessing children formatively	200 (100%)	3.40	.649
Effects of teachers' belief and perception on assessment	200 (100%)	3.31	.637
Mean of means and Standard Deviation		3.43	.406

Field Data, 2021.

NB: SD = Standard Deviation.

Again, it could be seen from the table that lack or inadequate indoor and outdoor resources (Mean = 3.46; SD = .625) is a challenge teacher faced in assessing children. Similarly, overcrowding or large number of children in the classroom (Mean = 3.55; SD = .624) is believed by the respondents to affects assessment processes in schools in the Tema West Metropolis. It could also be observed from the table that excessive interference of parents in the assessment process of children during their early years (Mean = 3.52; SD = .618) and high demand or expectation of parents from teachers and children during their early years (Mean = 3.53; SD = .649) respectively are challenges that affect the assessment practices of children in the Tema West Municipality. Finally, it was identified that inadequate time for assessing children formatively (Mean = 3.40; SD = .649) was a challenge for ECE teachers in the Tema West Metropolis.

Analysis of data with regards to the fourth and finally research question recorded in Table 7 indicated that, Early Childhood Education teachers in the metropolis face or encounter several challenges in their attempt to ensure the use of appropriate assessment practices (Mean of Means = 3.43; Average S.D = 0.406). Some of the challenges indicated by the teachers used for the study were inadequate indoor and outdoor resources for assessing children, lack of understanding of children's assessment outcomes, overcrowding or large number of children, excessive interference of parents in the assessment process of children, lack of commitment on the part of teachers to assess children formatively, lack of national assessment standard, inadequate time for assessing children formatively among others.

The responses from the teachers in relation to the challenges of assessing children were in line with several other studies (Anhwere, 2009; National Education Goal Panel (NEGP), 1998; Anane, 2007; Abdulai, 2014; Twum, 2016). For instance, the National Education Goal Panel (NEGP), 1998 stated that there are no established standards of assessing students especially children during their early years' education. Lack of these standards have led teachers and early childhood practitioners to develop standards on their own since it appears the central government is not ready for such undertaking. A study conducted by Abdulai (2014), also revealed that inadequacy of teaching and learning materials was identified as a major challenge associated with early childhood educational practices of which assessment is part. Also, Twum (2016) submitted that there is an inadequacy of teaching and learning materials such as picture cards, number cards, drawing cards, sand tray, picture slates and alphabetic cards among kindergarten schools in the Shama District for assessment purpose.

4.3 Testing of Hypotheses

Two hypotheses were raised to guide this study. They were tested, reported and results interpreted.

4.3.1 Hypothesis One

H₀ 1: There is no statistically significant difference between male and female teachers assessment practices in the Tema West Metropolis.

H₁ 1: There is a statistically significant difference between male and female teachers assessment practices in the Tema West Metropolis.

The first hypothesis (H₀ 1) sought to compare teachers' assessment practices based on their Sex in the Tema West Metropolis. In order to use the appropriate statistical test tool, a normality test of the variable (assessment practices) and test of homogeneity of variances was carried out and the result was presented with its interpretation.

Results of Normality test on Teachers' Assessment Practices

A normality test was conducted with the explore function on the SPSS. Test of Normality was employed to check the data distribution and the result was presented and interpreted. The result of the test of normality was shown in Table 8.

Table 8: Tests of Normality on Teachers' Assessment Practices

Variable	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Mean Score for Assessment Practices	.141	200	.000	.927	200	.000

Source: Statistics for Field Data, 2021

a. Lilliefors Significance Correction (p < 0.05)

Table 8 presents the normality test results of both Kolmogorov Smirnov and Shapiro Wilk. From the table, the values of the Kolmogorov Smirnov test (statistics = .141; $p = .000$) and the Shapiro Wilk test (statistics = .927; $p = .000$) for the variable distribution suggested a statistically significant difference, which means that the data distribution for the variable (Assessment Practices) is not normal.

Again, test of homogeneity of variance analysis was run as a means of determining the appropriate inferential statistics to be used. The result of the test was presented in Table 9 and interpreted. Results based on the test of homogeneity of variances in Table 9 reveal - a test statistic of 0.411 with a corresponding p -value of 0.522. Accordingly, since this value of 0.522 is greater than 0.05, we fail to reject the null hypothesis and thus, conclude that we do not have sufficient evidence to say that the variance in assessment practices of male teachers is significantly different from the assessment practices of female teachers. In other words, the variance in assessment practices of teachers in the Tema West Metropolis is equal.

Table 9: Result of Test of Homogeneity of Variances across Sex

		Levene Statistic	df1	df2	Sig.
Mean Score for Assessment Practices	Based on Mean	.411	1	198	.522
	Based on Median	.198	1	198	.657
	Based on Median and with adjusted df	.198	1	196.422	.657
	Based on trimmed mean	.247	1	198	.620

Source: Field Data, 2021

From the assumptions (normality and homogeneity of variances) tested; it could be concluded that a parametric statistical tool should be employed in statistical analysis involving the variable (assessment practices of teachers). This is because the variable (assessment practices of teachers) has equal or homogeneity of variances and since the parametric (independent sample t-test) is a robust statistical tool against normality, a parametric statistical tool was used. Based on the premises of the assumptions test results and the fact that the independent variable (sex) against which the dependent variable (assessment practices) was measured is categorical, independent-sample T-test was used in the analysis of this hypothesis and the results was presented in Table 10.

An independent-samples t-test was conducted to compare the assessment practices of teachers for Males and Females. The result shows that there were no statistically significant differences ($df = 198$; $t = 1.397$; $p = .164$) in scores for Males (Mean = 3.38; SD = .572) and Female (Mean = 3.26; SD = .515) teachers. The null hypothesis was therefore retained while the alternate hypothesis was rejected. This means that, assessment practices of teachers in the Tema West Metropolis are same across male and female categories. In other words, there is no difference in the assessment practices of teachers.

Table 10: Independent Samples-T test Results for Hypothesis 1

Variable	Sex	N	Mean	SD	T-test for Equality of Means				
					t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.
Assessment Practices of Teachers					1.397	198	.164	.122	.087
	Male	49	3.38	.572					
	Female	151	3.26	.515					

Source: Statistics for Field Data, 2021

a. Grouping Variable: Sex, $p > 0.05$

4.3.2 Hypothesis Two

H₀ 2: There is no statistically significant difference in teacher's assessment practices and their professional qualifications.

H₁ 2: There is a statistically significant difference in the assessment practices of teachers and their professional qualifications.

The second and final hypothesis (H₀ 2) sought to determine whether or not there is a statistically significant difference in the assessment practices of teachers based on their professional qualification in the Tema West Metropolis. As reported or established earlier, the variable (assessment practices of teachers) is not normally distributed. Test of homogeneity of variances was however carried out and the result was presented in Table 11 with its interpretation.

Table 11: Test of Homogeneity of Variances across Professional Qualification

		Levene Statistic	df1	df2	Sig.
Mean Score for Assessment Practices	Based on Mean	3.131	4	195	.016
	Based on Median	1.419	4	195	.229
	Based on Median and with adjusted df	1.419	4	172.814	.230
	Based on trimmed mean	2.879	4	195	.024

Source: Field Data, 2021

Test of homogeneity of variance results in Table 11 shows test statistic of 3.131 with a corresponding p -value of 0.016. Therefore, since this p -value of 0.016 is less than 0.05, we reject the null hypothesis and thus, conclude that the variance in assessment practices differ significantly across teachers' professional qualification.

The test of homogeneity showed that there is statistically significant difference in the assessment practices of teachers across their professional qualifications and the dependent variable (assessment practices of teachers) does also not meet the assumption of the normality. However, since the parametric (One Way ANOVA) is a robust statistical tool against normality, a parametric statistical tool was used. Based on this premise and the fact that the independent variable (professional qualification) has more than two categories or groupings therefore, parametric One-Way ANOVA statistical tool was used in the analysis of this hypothesis and result is presented in Table 12 and interpreted as such.

Table 12: One Way ANOVA Results for Hypothesis two (H₀ 2)

Variable	Professional Qualification	N	Mean	SD	F-value	df	p-level
Assessment Practices of Teachers					13.224	199	.000
	Teacher Certificate A	17	3.35	.436			
	Diploma in Early Childhood Education	46	3.44	.419			
	Diploma in Basic Education	56	3.08	.556			
	Bachelor of Education (Early Childhood)	63	3.50	.465			
	Bachelor in Basic Education	18	2.73	.399			
	Total	200	3.29	.530			

Source: Field Data, 2021 *Grouping Variable: Professional Qualification* *p < 0.05*

One way ANOVA analysis was conducted to determine whether or not there is a statistically significant difference in the assessment practices of teachers based on their professional qualifications. The results show that, there was a statistically significant difference across the various categories under teachers' professional qualification (*f*-value = 13.224; *df* = 199; *p*-level = .000) in scores for Teacher's Certificate 'A' (Mean = 3.35, SD = .436), Diploma in Early Childhood Education (Mean = 3.440, SD = .419), Diploma in Basic Education (Mean = 3.08, SD = .556), Bachelor of Education in Early Childhood (Mean = 3.50, SD = .465) and Bachelor in Basic Education (Mean = 2.73, N = .399). Since the *p*-value was less than 0.05, the null hypothesis was rejected while the alternate hypothesis was retained. This means that the use or choice of assessment practices of

teachers in the Tema West Metropolis is not the same across professional qualifications of the teachers. In other words, the assessment practices of teachers differ significantly across their professional qualifications.

As established, the assessment practices of teachers differ significantly across their professional qualifications and in view of this, a post hoc test using Tukey HSD test of multiple comparison was conducted to explore exactly where the differences among the groups exist. Summary of the result is provided in Table 13.

It is evidently shown in Table 13 that, there are significant difference in the professional qualification of Early Childhood Education teachers among Teacher Certificate “A” (Mean = 3.35, SD = .436) and Bachelor in Basic Education (Mean = 2.73, SD = .399), Diploma in Early Childhood Education (Mean = 3.44, SD = .419) and Diploma (Mean = 3.08, SD = .556) and Bachelor in Basic Education (Mean = 2.73, SD = .399) respectively, Diploma in Basic Education (Mean = 3.08, SD = .556) and Diploma in Early Childhood Education (Mean = 3.44, SD = .419), Bachelor of Education in Early Childhood (Mean = 3.50, SD = .465) and Bachelor in Basic Education (Mean = 2.73, SD = .399), Bachelor of Education in Early Childhood (Mean = 3.50, SD = .465) and Diploma in Basic Education (Mean = 3.08, SD = .556) and Bachelor in Basic Education (Mean = 2.73, SD = .399) respectively. Finally, there is a statistically significant difference in Bachelor of Basic Education (Mean = 2.73, SD = .399) and Teachers Certificate ‘A’ (Mean = 3.35, SD = .436), Diploma in Early Childhood Education (Mean = 3.44, SD = .419), Diploma in Basic Education (Mean = 3.08, SD = .556) and Bachelor of Education in Early Childhood (Mean = 3.50, SD = .465).

Table 13: Tukey HSD Test of Multiple Comparison

(I) Professional Qualification	(J) Professional Qualification	Mean	Std. Dev.	Mean Diff. (I-J)	Std. Error	Sig.
Teachers Certificate 'A'	Diploma in Early Childhood Education	3.44	.419	-.090	.135	.963
	Diploma in Basic Education	3.08	.556	.263	.132	.270
	Bachelor of Education (Early Childhood)	3.50	.465	-.153	.130	.763
	Bachelor in Basic Education	2.73	.399	.621*	.161	.001
Diploma in Early Childhood Education	Teachers Certificate 'A'	3.35	.436	.090	.135	.963
	Diploma in Basic Education	3.08	.556	.354*	.095	.002
	Bachelor of Education (Early Childhood)	3.50	.465	-.063	.092	.960
	Bachelor in Basic Education	2.73	.399	.712*	.132	.000
Diploma in Basic Education	Teachers Certificate 'A'	3.35	.436	-.263	.132	.270
	Diploma in Early Childhood Education	3.44	.419	-.354*	.095	.002
	Bachelor of Education (Early Childhood)	3.50	.465	-.417*	.087	.000
	Bachelor in Basic Education	2.73	.399	.358*	.129	.047
Bachelor of Education (Early Childhood)	Teachers Certificate 'A'	3.35	.436	.153	.130	.763
	Diploma in Early Childhood Education	3.44	.419	.063	.092	.960
	Diploma in Basic Education	3.08	.556	.417*	.087	.000
	Bachelor in Basic Education	2.73	.399	.774*	.127	.000
Bachelor in Basic Education	Teachers Certificate 'A'	3.35	.436	-.621*	.161	.001
	Diploma in Early Childhood Education	3.44	.419	-.712*	.132	.000
	Diploma in Basic Education	3.08	.556	-.358*	.129	.047
	Bachelor of Education (Early Childhood)	3.50	.465	-.774*	.127	.000

Source: Field Data, 2021

*. The mean difference is significant at the 0.05 level.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Overview

This chapter present the summary, conclusion and recommendations based on the findings of this study.

5.1 Summary

The main purpose of this study was to examine the assessment practices among Early Childhood Education teachers in the Tema West Metropolis of the Greater Accra Region of Ghana. Four research questions guided the study and these questions were:

1. What is the training of ECE teachers in the Tema West Metropolis, Ghana?
2. What is the perception of teachers about assessment in Early Childhood Education in the Tema West Metropolis, Ghana?
3. What are the assessment practices deployed by teachers in assessing children in the Tema West Metropolis, Ghana?
4. What are the challenges Early Childhood Education teachers encounter in the use of assessment practices in the Tema West Metropolis, Ghana?

In order to achieve the purpose of the study, a descriptive survey design within a quantitative enquiry was employed. The accessible population for the study comprised 200 Early Childhood Education teachers from 40 public basic schools within the Tema West Metropolis. A census sampling technique was used to sampled all 40 public schools in the metropolis while all the 200 Early Childhood Education teachers in the sampled schools were purposively selected and used for the study. For the purpose of data

collection, the study adopted and used questionnaire as its instruments. The questionnaire was administered to all members of the sampled population. Again, data obtained from the questionnaire were analyzed using descriptive statistical tools such as frequencies, percentages, mean and standard deviation presented in tabular form. Specifically, frequencies and percentages were used to analyze the demographic data of the respondents while mean and standard deviation were used to analyze data obtained in relation to the various research questions.

5.2 Findings of the Study

The following were the key findings of the study:

1. It has emerged from the analysis of data gathered regarding research question one that the teachers in the Tema West Metropolis have been trained and hence have understanding of Early Childhood assessment practices. This was demonstrated as the responses of the teachers among others indicated that Early Childhood Education assessment needs to be age and linguistically appropriate, should help pupils to make account of their learning progress and the overall purpose of ECE assessment must be to determine whether pupils have mastered a learning objective or not. Also, analysis of data showed that giving appropriate comments for pupils' assessment results in ECE is more important than giving grades or marks. Despite the teachers' demonstration of these understandings of assessment however, they still believe that Early childhood assessment is just to prepare children for standardized examinations only.
2. Again, it was revealed from the results of data with respect to the second research question that teachers who deliver Early Childhood Education in the Tema West

Metropolis possess or have positive perceptions about the need for assessing children during their early years' education. This was shown from the analysis of responses given by the teachers that Early childhood Education assessment supports individual educational progress of children, help determine suitable placement for children as well as provide information to parents regarding their children's performance and progress. Furthermore, the teachers believe that Early Childhood Education assessment facilitate development of individual educational planning and the curriculum in general, help identify children with developmental needs and provide guidance in referral of children to specialist.

3. Results of data obtained with regards to research question three revealed that Early Childhood Education teachers in the Tema West Metropolis use several documented assessment practices (both alternative and traditional) in assessing children. Among the alternative assessment practices used by the teachers in the metropolis were, building of portfolio, the use of observations in the form of anecdotal records, checklist, rating scale, time sample among others. Also, interview or have informal conversation, self and peer assessment as well as performance-based assessment are been deployed and used in the metropolis. It is worth stating however that, the use of traditional assessment practices such as pencil and paper test is still common among ECE teachers in the Tema West Metropolis.
4. With respect to the fourth and final research question, the study revealed that there are some challenges ECE teachers encounter in assessing children during

their early years. Among these challenges were inadequate indoor and outdoor resources for assessing children, lack of understanding of children's assessment outcomes, overcrowding or large number of children, excessive interference of parents in the assessment process of children, lack of commitment on the part of teachers to assess children formatively, lack of national assessment standard, inadequate time for assessing children formatively among others.

Results from the hypotheses raised revealed the following:

1. With respect to the first hypothesis, the assessment practices of teachers in the Tema West Metropolis are same across male and female categories. In other words, there is no statistically significant difference in the assessment practices of teachers based on their sex. Accordingly, the null hypothesis, "There is no statistically significant difference in the assessment practices of male and female teachers in the Tema West Metropolis" was retained while the alternate hypothesis "There is a statistically significant difference in the assessment practices of male and female teachers in the Tema West Metropolis" was rejected.
2. The results from the second hypothesis also showed that, there was a statistically significant difference across the various categories under teachers' professional qualification with respect to the assessment practices of teachers. This implies that the use or choice of assessment practices of teachers in the Tema West Metropolis is not the same across professional qualifications of the teachers. In other words, the assessment practices of teachers differ significantly across the teachers' professional qualifications. The null hypothesis "There is no statistically significant difference in teacher's assessment practices based on their professional

qualifications” was rejected while the alternate hypothesis “There is a statistically significant difference in the assessment practices of teachers based on their professional qualifications” was retained.

5.3 Conclusion

Based on the findings, the following conclusions were drawn:

1. It was concluded with respect to the first research question that Early Childhood Education teachers in the Tema West Metropolis have some level of training and understanding of Early Childhood assessment practices. However, the teachers still believe that Early childhood assessment is just to prepare children for standardized examinations only.
2. The study also concluded in relation to the second research question that teachers who deliver Early Childhood Education in the Tema West Metropolis possess or have positive perceptions about the need for assessing children during their early years’ education. It was revealed through the study that teachers in the Tema West Metropolis believe in early assessment of children because it serve as means of placement, diagnostic, referral and a source of gathering information to communicate to parent and other stake holders in the lives of children.
3. With respect to the third research question, the study concluded that, Early Childhood Education teachers in the Tema West Metropolis practice the use of some formative assessment practices among which were, building of portfolio, the use of observation, informal conversation, self and peer assessment as well as performance-based assessment. Notwithstanding this, the teachers still engage in the use of traditional assessment practices such as pencil and paper test.

4. Finally, the study concluded from research question four that major challenges that confront ECE teachers in assessing children during their early years are inadequate indoor and outdoor resources for assessing children, lack of understanding of children's assessment outcomes, overcrowding or large number of children, excessive interference of parents in the assessment process of children, lack of commitment on the part of teachers to assess children formatively among others.

5.4 Recommendation

Based on the findings and conclusions of the study, the following were recommended:

1. It is recommended that, Ghana Education Service (GES), Tema West Municipality should periodically organize in-service training for ECE teachers to abreast and upgrade their knowledge on the current/modern trends in assessing children learning and development. This will help the teachers to be aware of the new ways of teaching and assessing children during their early years.
2. Although the Early Childhood Education teachers used for the study have positive perception and understanding of the need to assess children during their early years' education, there is the need to motivate and encourage them to keep using and inculcating formative or alternate assessment practices in their teaching. This will enable the teachers to holistically assess children as well as monitor their progress academically and socially.

3. Regardless of the fact that Early Childhood Education in the Tema West Metropolis used varied alternate assessment practices, the use of traditional pen and paper test is common among them. It is recommended therefore that; the teachers should be sensitized on the negative effects of pen and paper test on children so as to discourage them from using these traditional forms of assessment practices which do not help the holistic development of children.
4. Finally, it is recommended that the coordinator of Early Childhood Education and the Director of Education in the Tema West Metropolis should identify other sources of funding like appealing to NGOs to help provide teaching and learning materials for teaching and assessing children in the metropolis. This will maximize effective teaching and assessment of children within the metropolis which will go a long way to ensure the holistic development of the children.

5.5 Suggestion for Further Study

1. The current study was limited in scope as it used only ECE teachers from the Tema West Metropolis. It is suggested therefore that, a region-wide and nation-wide study on assessment practices of ECE teachers be conducted. This will help the educational fraternity and other stakeholders to know the assessment practices of ECE teachers and the challenges these teachers face in assessing children during their early years so as to provide feasible solutions to rectify or minimize them.

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APPENDIX A
QUESTIONNAIRE FOR TEACHERS
UNIVERSITY OF EDUCATION, WINNEBA
SCHOOL OF GRADUATE STUDIES
FACULTY OF EDUCATIONAL STUDIES
DEPARTMENT OF EARLY CHILDHOOD EDUCATION

Dear Respondent,

My name is Agnes Amoah, a Master of Philosophy (M.Phil.) candidate of the aforementioned institution. As part of the requirements for completing my programme of study, I am undertaking a study which seeks to examine the assessment practices among Early Childhood Education teachers in the Tema West Metropolis, Ghana.

Your school is sampled to partake in the study and you are kindly encouraged to be frank with your responses to help achieve success in the research. You are assured that any information provided will be used only for academic purposes. Also, you are assured of the confidentiality and privacy of your responses. Thank you for your time.

SECTION A

Demographic Data

Please tick [] in the appropriate box.

1. Sex:

Male

Female

2. Age range:

Below 25

26-30

31-35

36-40

41 and above

3. Academic Qualification:

Middle School (MSLC)

S.S.S.C.E/ WASSCE/ GCE O Level

Diploma/ HND

Degree (1st, 2nd and 3rd)

Others, please specify

4. Professional Qualification:

Teachers Certificate 'A'

Diploma in Early Childhood Education

Diploma in Basic Education

Bachelor of Education (Early Childhood)

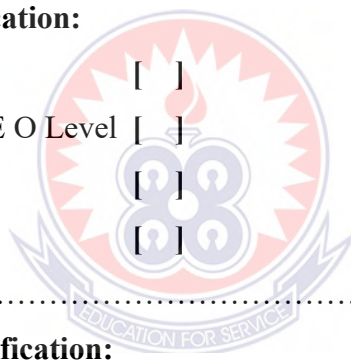
Bachelor in Basic Education

Others, please specify

Please use the key below to answer the items under sections B, C and E

KEY

Strongly Agree = **(SA)**; Agree = **(A)**; Disagree = **(D)**; Strongly Disagree = **(SD)**



SECTION B**Teachers' Perception about ECE Assessment**

S/N	Items	Responses			
		SA	A	D	SD
13	Early childhood assessment supports individual educational progress of children				
14	ECE assessment help determine suitable placement of children.				
15	ECE assessment provide information to parents regarding their children's performance and progress				
16	ECE assessment facilitate development of individual educational planning and the curriculum in general				
17	ECE assessment identify children with developmental needs.				
18	ECE assessment provide guidance in referral of children to specialist				

SECTION C**Level of Training of Teachers**

Please tick [√] in the appropriate box.

S/N	Items	Responses			
		SA	A	D	SD
5	I have training on assessment within the context of Early Childhood Education.				
6	The purpose of ECE assessment is to determine whether pupils have mastered a learning objective.				
7	Early Childhood Education assessment should be age-appropriate.				
8	Assessment during early years education should be linguistically appropriate.				
9	Giving appropriate comments for pupils' assessment results in ECE is more important than giving grades or marks.				
10	Parents are valuable source of information for children assessment during their early years.				
11	Early childhood assessment is to just prepare children for standardized examinations.				
12	Early childhood assessment helps pupils to make account of their learning progress.				

SECTION D
Assessment Practices of ECE Teachers

Use the scale: Very Often (VO); Often (O); Sometimes (S); and Never = (N).

S/N	Items	Responses			
		VO	O	S	N
19	I build portfolio on the learning outcomes of children in order to assess them.				
20	I use narrative observation as a means of assessing children's learning outcomes.				
21	I interview or have informal conversation with children to assess learning outcomes.				
22	I use teacher-made test (pencil and paper test) to assess learning outcomes of children.				
23	I employ and use performance-based assessment in assessing learning outcomes of children.				
24	I use standardized test to assess learning outcomes of children.				
25	I use and encourage self-assessment among children in order to assess learning outcomes				
26	I use and encourage peer-assessment among children in order to assess learning outcomes				
27	I use anecdotal record as an observational tool to assess children				
28	I use checklist as an observational tool to assess children learning outcome.				
29	I use rating scale as an observational tool to assess children				
30	I use time sample as an observational tool to assess children behaviour.				

SECTION E
Challenges Teachers faced in Assessing Children

S/N	Items	Responses			
		SA	A	D	SD
31	Lack or inadequate indoor and outdoor resources for assessing children				
32	Lack of understanding of children's assessment outcomes				
33	Overcrowding or large number of children in the classroom affects assessment processes				
34	Excessive interference of parents in the assessment process of children during their early years				
35	High demand or expectation of parents from teachers and children during their early years				
36	Lack of commitment on the part of teachers to assess children formatively				
37	Inadequate time for assessing children formatively				
38	Effects of teachers' belief and perception on assessment				

THANK YOU FOR YOUR PARTICIPATION

APPENDIX B

INTRODUCTORY LETTER FROM UEW



FES/DECE/S.6

June 15, 2021

TO WHOM IT MAY CONCERN

Dear Sir/Madam

INTRODUCTORY LETTER

I write to introduce to you **Ms. Agnes Amoah** with index number **8180190007** who is an M.Phil student in the above department. She was admitted in 2018/2019 academic year and has successfully completed her course work and is to embark on her thesis on the topic: "*Assessmet Practices among Early Childhood Education Teachers in the Tema West Metropolis, Ghana*"

Ms. Agnes Amoah is to collect data for her thesis, and I would be most grateful if she could be given the needed assistance.

Thank you.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'Yayra Dzakadzie', is written over a faint circular watermark of the University of Education, Winneba logo.

Yayra Dzakadzie, Ph. D
Ag. Head of Department



APPENDIX C

APPROVAL LETTER FROM GES

GHANA EDUCATION SERVICE

In case of reply the number and date of this letter should be quoted

My Ref. No: GES/GAR/TWVOL.1/02

Ref. No:.....



REPUBLIC OF GHANA

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6TH JULY, 2021

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LETTER OF INTRODUCTION

MS. AGNES AMOAH

I write to introduce the above named, **Ms Agnes Amoah**, a Master of Philosophy (M.Phil) student of the Department of Early Childhood Education, University of Education, Winneba.

She has successfully completed her **course work** and currently working on her thesis on the topic: "**Assessment Practice among Early Childhood Education Teachers in the Tema West Municipality**".

She is carrying out her study in selected schools in our municipality.

I would be grateful if you could offer her the necessary assistance and cooperation.

Thank you.


.....
ISAAC MACCARTHY-MENSAH (MR.)
MUNICIPAL DIRECTOR

CC:
ALL SISOs, TWME0