

UNIVERSITY OF EDUCATION, WINNEABA

**TEACHERS' ASSESSMENT PRACTICES ON EARLY CHILDHOOD
LEARNING IN SEFWI-WIAWSO MUNICIPALITY OF THE WESTERN
REGION OF GHANA**



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**A THESIS IN THE DEPARTMENT OF EARLY CHILDHOOD EDUCATION,
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DECLARATION

Student's Declaration

I, GEORGINA MARTIN, 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 in this university or elsewhere.

SIGNATURE..... DATE.....

Supervisor's Declaration

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

SUPERVISOR'S NAME: DR. AWINI ADAM

SIGNATURE..... DATE.....

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DEDICATION

To my Children (Pomaa, Ayeyi, Nyamedo, Nkukim and Bohyeba), who have been my source of strength and inspiration.



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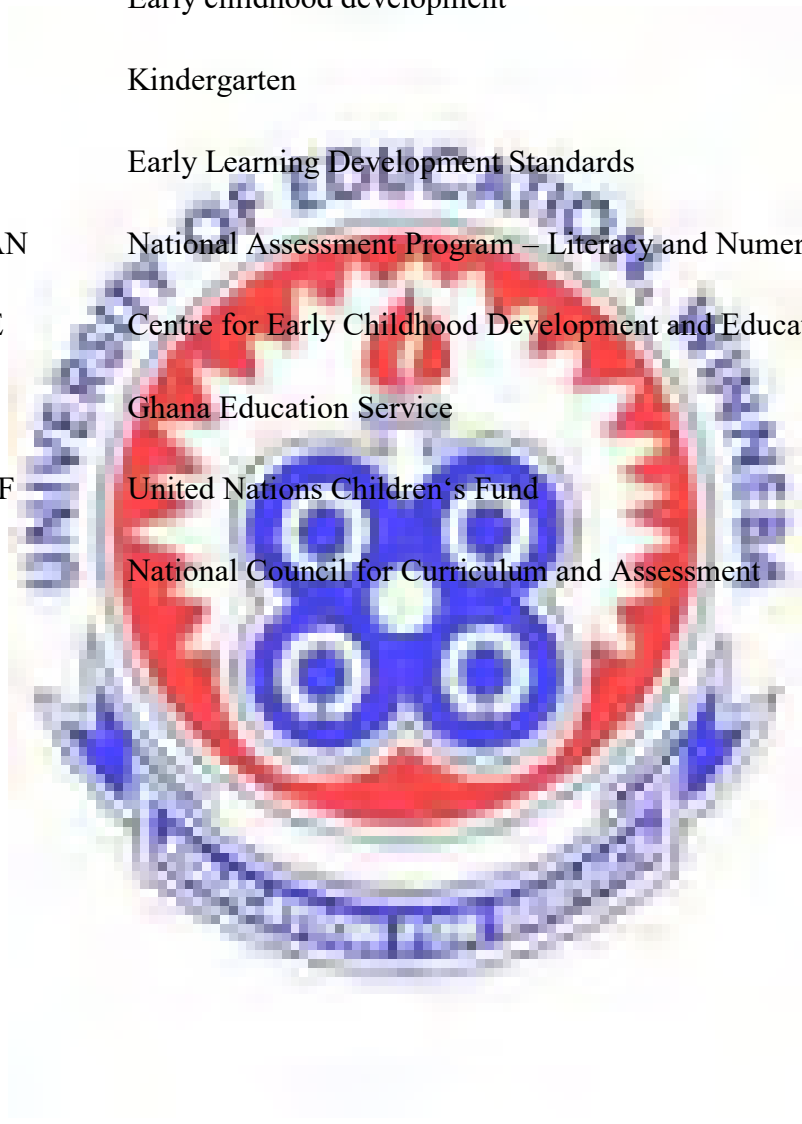
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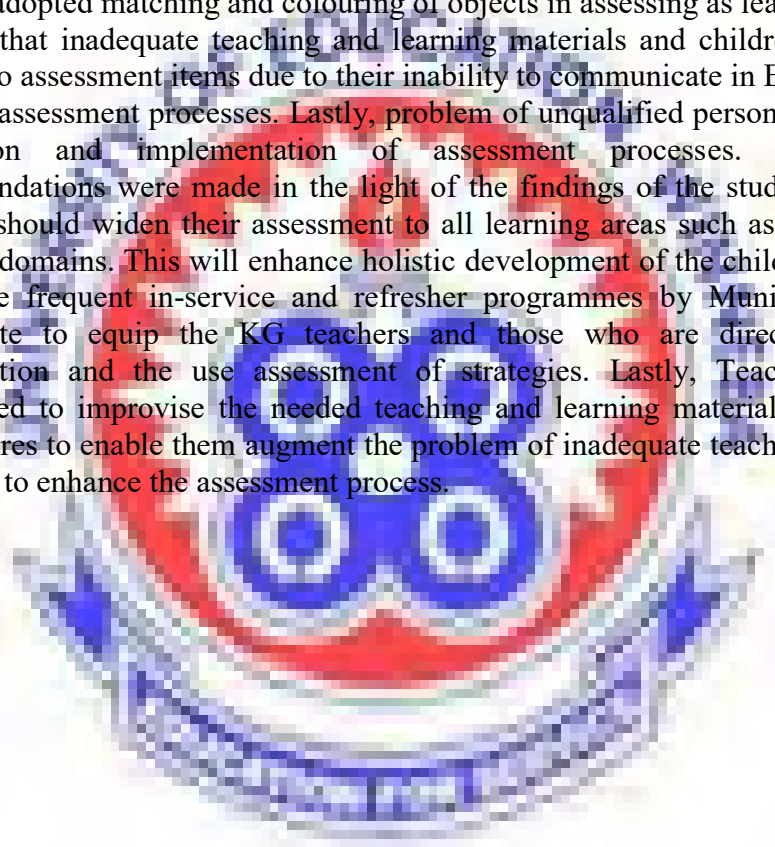
ABBREVIATIONS

EL	Early learners
EC	Early childhood
ECE	Early childhood Education
ECD	Early childhood development
KG	Kindergarten
ELDS	Early Learning Development Standards
NAPLAN	National Assessment Program – Literacy and Numeracy
CECDE	Centre for Early Childhood Development and Education
GES	Ghana Education Service
UNICEF	United Nations Children’s Fund
NCCA	National Council for Curriculum and Assessment



ABSTRACT

The purpose of the study was to explore teachers' assessment practices on Early Childhood learners in Sefwi - Wiawso Municipality of the Western Region of Ghana. Descriptive survey research design was used for the study. The sample size for this study was 110 people made up of 80 teachers, 29 Head teachers and 1 of Basic school coordinator. The instruments used for the study were close ended questionnaire and semi- structured interview guide. Purposive sampling techniques was used to select the sample. The data was analysed using themes approach and percentages and frequencies. Results from the areas or domains Early Childhood Education teachers assessed Kindergarten children during assessment process included social skills, cognitive skills, and language skills. Besides, the Kindergarten teachers used strategies such as structured text and hands-on activities to assess their pupils. Also, teachers adopted matching and colouring of objects in assessing as learners. The study revealed that inadequate teaching and learning materials and children's inability to respond to assessment items due to their inability to communicate in English language impeded assessment processes. Lastly, problem of unqualified personnel hindered the conduction and implementation of assessment processes. The following recommendations were made in the light of the findings of the study: Kindergarten teachers should widen their assessment to all learning areas such as, Emotional and affective domains. This will enhance holistic development of the child. Besides, there should be frequent in-service and refresher programmes by Municipal Education Directorate to equip the KG teachers and those who are directly involve on identification and the use assessment of strategies. Lastly, Teachers should be encouraged to improvise the needed teaching and learning materials at the various ECE centres to enable them augment the problem of inadequate teaching and learning materials to enhance the assessment process.



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Assessment practices at the early stages of education are very fundamental as it may determine the later growth of the child. Early childhood education (ECD) is the process of effecting developmental changes in children from birth to eight years (0-8). Such developmental changes are in the area of cognitive, physical, social and emotional which need to be assessed and nurtured. The White Paper on Education and Training defines ECD as the process by which children between the ages of zero to nine (0-9) grow and thrive in all respects (United Nations International Education Fund, 2005). The main focus of ECD is to ensure that children are thriving, by providing a solid foundation for physical, emotional, cognitive and overall healthy development of children (United Nations International Education Fund (UNICEF), 2005). Therefore, a critical factor that helps to know one's academic achievement is assessment of learners.

Assessment is recognized as an important aspect of the teaching and learning process. This is seen in the fact that in most educational policies, there is always a section that emphasises the assessment process and how it should be implemented in the classroom setting (UNICEF, 2005). Consequently, teachers are guided and are compelled to practice the whole idea of assessment in their respective class. Assessment is a complex concept within the teaching-learning process especially if it is contextualized in terms of early childhood education and the community's perceptions about its purpose. It is to emphasize that the complexity of assessment brings its critical role in the educational process. Primarily, assessment allows educators and other professionals to formulate relevant educational decisions (Taylor,

2003; Brady & Kennedy, 2003; Black & William, 2004). As Howell and Nolet (2000) asserted, “the information obtained from appropriate assessment procedures can be used to enhance the teaching- learning process”. It is in this reasoning that the concept of assessment has received a great deal of focus from politicians, the business world, and the community.

Assessment system increases student learning by producing workable data, evaluate the effectiveness of programs, and ensure that all learners are making progress toward achieving learning goals. Research has shown that data-informed decision-making on the part of educators leads to greater student achievement (Race, Brown & Smith, 2005). In addition, learners benefit when they understand the criteria for success and receive regular, descriptive feedback on their progress toward their goals.

Well-designed assessment practice can encourage active learning especially when the assessment delivery is innovative and engaging. Peer and self-assessment, for instance, can foster a number of skills, such as reflection, critical thinking and self-awareness – as well as giving students insight into the assessment process (Race, Brown & Smith, 2005). Discussing the ways in which you are assessing with your learners can also help to ensure that the aims and goals of the assessments are clear. A well designed assessment plan can also help do away with coping by reducing the ways in which teachers gather and report information. At the end of the day, taking some time to think about why, what and how teachers are going to assess the learners is a worthwhile investment of time. It can help ensure assessment skills and knowledge that you intended and it could open up new possibilities for different ways to assess the learners, some of which may be more efficient and effective (Race et al., 2005).

Although, education of children in early childhood education, especially on the aspect of assessment, remains a major challenge not only in Sefwi-Wiawso, but in Ghana and around the world, it is important to add that in the international contexts, there is a massive literature exemplifying the assessment practices of teachers in primary schools for children. Some studies have been conducted in the contexts of developed countries such as the US, UK, and Australia excluding developing countries. Baessa (2008) argues that there is the need for studies in general to focus on developing countries so that there is an equal balance of perspectives about certain issues in terms of contexts.

Within the early childhood education, there is a long established tradition of “following the child,” using observation as the primary means of tailoring instruction to the needs of individual children. Montessori cited in Lillard (1972) determined that education must have a new goal: to study and observe the child himself from the moment of his conception. Only in this way can a new education based on aiding the inner powers of the child be developed...” (p. 49). At the same time, current literature shows an increased focus on developmentally appropriate assessment and instruction of young learners among both ECE and national policy-makers. The increase in national attention on assessment and its potential to directly impact early childhood educators’ practices has resulted in a number of studies that have attempted to describe the current state of affairs in early childhood settings (Perie, Marion, Gong & Wurtzel, 2007; Race, Brown & Smith, 2005). In addition, organizations such as the National Association for the Education of Young Children (NAEYC) and the National Education Goals Panel (NEGP) in America have published both position and recommendation papers on the subject of assessment (NAEYC & NAECS/SDE, 2003; Shepard, Kagan, & Wurtzel, 1998).

The state -wide adoption of the Response to Intervention (RTI) Framework necessitates that educators would be well-versed on how to collect and interpret student data at the early stages of education (Perie, Marion, Gong & Wurtzel, 2007). Assessment requires a comprehensive assessment plan in the core content areas, the best practices and expected assessment literacy addressed in this document are applicable to all content areas, grades, and groups of students. While the purposes of assessment in early childhood classrooms and schools are the same as those for older children, the design of a comprehensive assessment system in early childhood is necessarily different because of the age of the child. Assessment of learners in this age range is significantly impacted by the nature of the young child. Early childhood development and learning is rapid, episodic, and highly influenced by experience. In the preschool and early elementary years, rates of development in all areas outpace growth rates at any other time and because children develop and learn so rapidly, assessments given at one point in time must be done well to reflect the child's abilities (Perie, et al., 2007).

Policies focused on child development connect to a subset of these goals rather well and have largely ignored others. Policies promote infant and child safety and physical health, but societal attention to children's mental health is much less universal. Education policies, starting with the common school and continuing through the No Child Left Behind Act of 2001, have been designed to ensure adequate assessment strategies. Until recently the very idea of defined expectations for what children should know and be able to do at particular times in these very early years of their lives was rejected by many in the early childhood field. Policy makers, researchers, program leaders, and teachers have historically depended on structural program and process standards (e.g., the qualifications of staff, group size and ratio,

nature of the curriculum, provisions for parental involvement, the nature of adult and child interaction) to assess whether a program was offering a quality experience for children. These sets of program and process standards exist in forms as diverse as the minimum regulations required for child care settings, to requirements for operating the early learners program (Birjandi, 2009).

In Early childhood education (ECE) policy, early learning and development standards (ELDS) for children between the ages of 4 and 5 year olds have been created and applied. Ghana's ELDS and indicators were successfully developed over several years after adoption of the National ECCD policy. Ministry of Education or Ghana Education Service MOE/GES, has applied the ELDS in revision of the KG curriculum and creation of assessment tools for KG learners, so that these resources are aligned (UNICEF, 2005). The Ghanaian curriculum planners and the entire Curriculum Research Development Division (CRDD) appear to have agreed on this very point the essential role of teachers in curriculum implementation and the very informal nature of assessment in Ghanaian kindergarten. At this stage, assessment must be as informal as possible. Teachers must avoid the temptation of subjecting children's work to formal assessment. Informal techniques such as observation, conversation, and gallery works enable children to go round to appreciate others' work (MOEYS, 2004). Even though the Ghanaian early childhood or kindergarten curriculum designers prescribe appropriate assessment practices, there is little or no evidence to show whether the teachers are following the approach prescribed or not. There are few or no studies on the entire assessment practices on the Ghanaian early childhood or kindergarten assessment.

Also, standards for early learning and development have been set for children between 4 and 5 year olds and progress toward data collection on developmental indicators has been accomplished through the creation of learner assessment tools for use in KG classrooms. These tools might be employed in gathering data on developmental progress of learners.

Upon all these standards set, teachers at early stages of education in the Sefwi-Wiawso Municipality of the Western Region of Ghana do not adhere to it. Thus, the domains or areas of assessment are not clearly seen in how teachers assess learners, the strategies used by teachers in assessing KG learners are sometimes not developmentally appropriate, the skills needed by teachers to assess KG learners are somehow inadequate and the challenges teachers face when assessing KG learners needs to be solved. This and many are the reasons the researcher wants to delve into the teacher's assessment practices on early childhood learners in Sefwi-Wiawso Municipality of the western region of Ghana.

1.2 Statement of the Problem

The process of assessing early childhood learners has existed for some time now. The domains of assessment are major issue in assessment of early childhood learners. Because if learners are assessed in all the domains, it ensures the holistic development of the learner. Professionals in early childhood education recognize very deeply that typical, healthy children develop at different rates in different domains (Jiban, 2013).

However, very little is known about teachers assessment practices of early childhood learners in Sefwi-Wiawso Municipality of the western region of Ghana. Even though assessment is seen as an important aspect of teaching and learning process and also ensure that, all learners are making progress in achieving learning

goals. An experience and interaction by the researcher appears that assessment practices of early learners have not been sufficiently dealt with in Sefwi-Wiawso Municipality of the western region of Ghana.

Despite these effects of assessment on learners, it appears the domains teachers assess on learners are not properly done. In addition, the strategies used by ECE teachers seems not to be developmentally appropriate and the skills that are needed by the teacher in the assessment of learners in ECE are not adequate. Furthermore, the challenges faced by teachers when assessing learners in ECE needs to be addressed. This study attempted to fill in the literature.

1.3 Purpose of the Study

The study attempted to examine teacher's assessment practices of early childhood learners in Sefwi-Wiawso Municipality in the Western Region of Ghana.

1.4 Objectives of the Study

The study sought to:

1. Examine the learning areas of early learners assessed by teachers at the ECE level at Sefwi- Wiawso Municipality
2. Identify assessment strategies teachers employ for ECE learners at Sefwi- Wiawso Municipality
3. Examine skills that needed by the teacher in assessing ECE learners at Sefwi- Wiawso Municipality
4. Analyse challenges teachers face when assessing ECE children at Sefwi- Wiawso Municipality

1.5 Research Questions

1. What learning areas of the child are assessed by teachers at the ECE level at the Sefwi-Wiawso Municipality?
2. What assessment strategies do teachers employ to assess learners in ECE at the Sefwi- Wiawso Municipality?
3. What skills are needed by the teacher in assessing ECE learners at the Sefwi-Wiawso Municipality?
4. What challenges do teachers face when assessing children in ECE at the Sefwi-Wiawso Municipality?

1.6 Significance of the Study

The findings from the study would help in reviewing the domains of assessment of early learners in Sefwi Wiawso Municipality. This would enable practitioners to know the exact domain they are to assess learners on. The study will also review the appropriate strategies used to assess early learners. This would help teachers to adapt to the strategies to ensure effectiveness in early learners' assessment in the municipality. Thirdly, the study would review the skills needed by teachers to assess early learners in the Municipality. This would inform Ministry of Education and other stake holders to organize workshops and in service training to equip teachers in their assessment practices.

Furthermore, the study would bring out the challenges Teachers face when assessing early learners in Sefwi Wiawso municipality. This would help the teachers and other stake holders to know how to address the challenges. Finally, the findings of this study would be used as a basis by other researchers to replicate the study in different classrooms and teachers within the Sefwi Wiawso context.

1.7 Delimitation

There are a lot of areas of research but the researcher decided to delve into teachers' assessment practices of early learners in Sefwi-Wiawso Municipality. Also, early childhood education starts from crèche to class three but the researcher decided to use kindergarten (one) because the new education reform make formal education starts from kindergarten. So to ensure proper assessment, it must begin from early stage to help it spread to the upper stages.

1.8 Limitation

The researcher had some challenges such as literature in Ghanaian context on assessment practices in early childhood education. Also some teachers unreadiness to responds to questionnaire was a challenge

1.9 List of Abbreviations



EL	Early learners
EC	Early childhood
ECE	Early childhood Education
ECD	Early childhood development
KG	Kindergarten
ELDS	Early Learning Development Standards
NAPLAN	National Assessment Program – Literacy and Numeracy
CECDE	Centre for Early Childhood Development and Education
GES	Ghana Education Service
UNICEF	United Nations Children's Fund
NCCA	National Council for Curriculum and Assessment

1.10 Definition of Terms

Assessment: the process of observing, recording, and otherwise documenting the work children do and how they do it, as a basis for a variety of educational decisions that affect the child, including planning for groups and individual children and communicating with parents

Early Childhood: Preschool and Kindergarten; in Montessori settings this is synonymous with the “primary classroom” which typically serves children between 3 and 6 years old

1.11 Organization of the Study

The study consists of five chapters. Chapter one provides the introduction of the study, background to the research problem, purpose of the study while chapter two is about the review of related literature of earlier studies conducted on the topic. In addition, chapter three discusses the methods and procedures, which were employed in executing the study and chapter four concerns with the presentation, analysis and discussion of the findings; with chapter five dealing with the summary, conclusions, recommendations and suggestion for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviewed related literature of earlier studies conducted on assessment practice process in early childhood schools. The related literature was reviewed from research articles, journal, and books. The areas discussed were:

- Theoretical frame work of the study
- Overview of assessment in the early childhood education
- Areas of assessment in early childhood education
- Assessment strategies used at early childhood education
- Challenges of early childhood assessment practices
- Skills required in early childhood assessment practices
- Summary of literature review

2.1 Theoretical Framework of the Study

The main theory underpinning the study is social development theory by Vygotsky (1978). The proponent of this social development theory opines that social interaction plays a fundamental role in the process of cognitive development. The research paper on formative assessment, commissioned by the National Council for Curriculum and Assessment (2001) at Washington underpins the theory behind the Aitears framework on *Eager to learn: Educating our pre-schoolers*, stresses the merit of using formative assessment in early years' settings, stating that educators' own assessments are a powerful influence on making decisions about children's learning and progress (Dunphy, 2008).

Aistear describes assessment as integral to educators' interactions with children, and defines it as "the on-going process of collecting, documenting, reflection on, and using information to develop rich portraits of children as learners in order to support and enhance their future learning (p. 72)" (NCCA, 2009). These four elements (collecting, documenting, reflecting on, and using information) do not happen exclusive of each other, but are rather used simultaneously depending on the educator's decision. Aistear describes good assessment practice as one that makes sense for children and benefits them. It involves not only children, but also their families, and employs a variety of methods over time.

Finally, good assessment practice is said to celebrate the "breadth and depth of children's learning and development" (p. 73). Aistear promotes the use of documentation as a record of children's learning and development, using a wealth of strategies to mark their achievements and plan for further learning. Documentation is also indicated as a useful tool to communicate children's setting experiences with parents, as well as to identify the additional needs which some children have, and in this way facilitate the provision of appropriate interventions. The educator's judgment, guided by their expertise, determines the content of the documentation, using it to invite educators to reflect and develop their practice.

According to the Aistear Síolta Practice Guide (NCCA, 2015), having this documentary evidence serves three purposes: It demonstrates children's competence and their achievement and progress in terms of dispositions, skills, attitudes and values, and knowledge and understanding. It also makes learning visible to practitioners, children, parents and other stakeholders. In doing this, documentation provides important information to help practitioners plan for children's further learning. (p. 2). The framework (NCCA, 2009) outlines five methods for collecting

assessment information, noting the importance of ethics in interacting with children and families. Aistear describes self-assessment as children reflecting on their own learning and development, and conversations as dialogues about adults and children's thoughts and actions. While most conversations happen spontaneously within settings, it is also possible to initiate planned conversations with children. Observation entails collecting information by watching and listening to children as a means to enrich their learning and development, while setting tasks calls on the educator to plan activities targeting different facets of learning and development.

Finally, testing is seen to affirm the information gathered about children, often using commercially available sets of criteria. These methods are distributed across the continuum between child-led and adult-led assessment, each having their own strengths and challenges, and using them in combination creates a more meaningful and genuine image of the child. Partnership in Assessment also considered as an integral component for supporting children's learning and development is working together with parents and families. A strong partnership with parents and families is cited as essential to quality service by Síolta (Centre for Early Childhood Development and Education [CECDE], n.d.), and is seen to facilitate effective and meaningful learning as valuable information about children is used for assessment and planning (NCCA, 2009). This collaboration supports educators in building a more holistic and accurate picture of a child, his or her capabilities and development, as the wealth of information from the home provides context and is taken into account in understanding each child (Chan & Wong, 2010; Gilkerson & Hanson, 2000; NCCA, 2009). Therefore, it is important for educators to ensure that there are opportunities available, both formally and informally, for regular communication with parents, and

both Síolta and Aistear provide concrete suggestions on how to carry this out in practice (CECDE, n.d.; NCCA. 2009).

Pertaining to assessment, some literature point to how educators can view this partnership as the mere gathering of information about children rather than actively inviting parents to be involved in the assessment process (Birbili & Tzioga, 2014). This is in spite of how parents were found to be capable and willing to take part in assessment processes and contribute informed insights about their children. The same research relates how ultimately, participants regarded parents as consumers of assessment, relaying information and output to them such as portfolios at the end of the year. Nevertheless, other authors describe partnership with parents as key to being better teachers, and outline possibilities of actively involving families in assessment (Gilkerson & Hanson, 2000).

2.2 Overview of Assessment in the Early Childhood Education

Assessment in the early years looks at, examines, and documents children's perceptions and capacities, seeking to understand how children think and learn, to track their progress, and further facilitate learning (Dunphy, 2008). It is a medium for social thinking and action, expressed through mutual feedback and dialogue (Fleer & Richardson, 2004). Gullo and Hughes (2011) describe effective assessment as continuous, comprehensive, and integrative, seeing it as a process, and as such be ongoing, use multiple sources of information, be integrated with teaching and curriculum and provide a means to communicate with others, including families, about children (p. 327)".

Wood and Attfield (2005) identify six forms of assessment: formative (interpreting children's progress and planning accordingly), impassive (assessment that is oriented to the child instead of external norms), diagnostic (observing specific

contexts and planning interventions), summative (overview of child's progress during a certain period), evaluative (reviewing the effectiveness of curriculum and provision), and informative (using assessment information to share with parents and other stakeholders). Having a holistic picture of the child entails using both formative and summative assessments, where the former is seen as a tool for planning while the latter gives a glimpse of a child's capacities during a given period (Linfield, Warwick & Parker, 2008). This allows not only for children's achievements to be recognised, but also their learning potential (Nutbrown & Carter, 2010). At the same time, assessment holds an evaluative purpose, which helps educators see how the interventions and support they have prepared impact children (Nutbrown & Carter, 2010; Wood & Attfield, 2005). Black (2013) affirms the integral role of both formative and summative assessment practices in teaching and learning, asserting that they must support each other. It can be seen, then, that assessment holds a knowledge function and an auditing function, both of which are interdependent of each other (Wood & Attfield, 2005). The knowledge function focuses on understanding children's needs, characteristics, and identities, as well as using assessment to delve deeper into curriculum and pedagogy (Wood & Attfield, 2005).

According to Taras (2005), Assessment practice in education and care can also be arranged into three categories: assessment of learning and development; assessment for learning and development and assessment as learning. Assessment of learning and development is the most common form of assessment. This is assessment of a child's learning at a particular point in time, and that summarises all of the learning and development that has preceded it (Taras, 2005). This kind of assessment can be large-scale assessment in a particular field, such as the National Assessment Program – Literacy and Numeracy (NAPLAN), in which an entire population of

children is assessed using a common assessment tool. It can also be a small scale assessment within an individual early childhood setting with the purpose of clarifying a child's learning in order to report that learning to families (Earl, 2003) for example, Transition Learning and Development Statements. Assessment for learning and development refers to the formative assessment that takes place in order for decisions to be made to inform the next stage of learning (Earl, 2003). As assessment for learning informs program planning decisions about individual children, assessments need to be taken on an on-going and individual basis. Assessment for learning assists early childhood professionals to make decisions about learning programs for children every day and is identified in the literature as essential for improving outcomes for children.

Hattie (2009) opines that within the formative assessment process, early childhood professionals gather evidence of children's learning and development, based on what they write, draw, make, say and do. They analyse this evidence and make inferences from it by applying their knowledge of child development theory, the child's social and cultural background and their knowledge of the five Learning and Development Outcomes in the curriculum frameworks (VEYLDF, Early Years Learning Framework, My Time Our Place: Framework for School Age Care). They also discuss their interpretation with the child and the child's family, as well as other professionals when appropriate, to develop a strong picture of the child's strengths, abilities and interests. Early childhood professionals then use this information to design effective programs for children that are responsive and evidence-based (Hattie, 2009). Assessment as learning and development occurs when the child is involved in the assessment process. Through this process the child has the opportunity to monitor what they are learning and use feedback to make adjustments to their understandings

(Earl, 2003). Assessment as learning is linked to higher levels of self-efficacy in children as they see a reward for their learning effort (OECD/ CERI, 2008). Assessment practice can be both formal and informal. Formal assessments typically involve reliable and valid standardised testing (Brown & Rolfe, 2005). Informal assessments, on the other hand include non-standardised testing and the performance on these assessments is not compared with other children (Brown & Rolfe, 2005). They typically include interviews with children and work sampling, and observation techniques such as running records, anecdotal records, checklists, rating scales and event and time sampling (MacNaughton, Rolfe & Siraj-Blatchford, 2010; NAEYC, 2009). All of these assessment tools are designed to gather information about the progress of children's learning and development (Mindes, 2003).

Meanwhile, the auditing function is more summative in nature, presenting a child's competencies alongside curriculum objectives or goals. What is most important in early years' assessment, Nah (2014) notes, is that it is utilized for the benefit of the children, rather than for the purposes of ranking them. Standardized assessments, where examiners strictly follow instructions for test administration, pose dangers in restricting the expression of diversity, and undervaluing children's individual needs and learning styles in ECE settings (Gullo, 2006; Wortham, 2003). There are instances that might necessitate this type of assessment, but educators should not depend solely on it and must remain aware of its limitations (Gullo, 2006).

To illustrate, depending on children's ability and ease to communicate, examiners could be left with the task to infer answers from their behaviours or to gather information from parent reports (National Research Council, 2001). Also, elicited responses from children may not fully represent their capabilities, as differences may exist in language used in tests and what children use in their daily

lives (Gullo, 2006). There is also the matter of validity and reliability in standardised instruments when considering the rapid development that young children undergo (Wortham, 2003). An emphasis on standardized assessment is also likely to narrow the curriculum, pushing educators to teach according to what skills are being assessed (Casbergue, 2010; Gullo, 2006). Furthermore, standardized assessments may hold biases that disadvantage children from different contexts (Gullo, 2006; National Research Council, 2001).

Bravery (2002) illustrates the implications of policies and practices contained in the social system, particularly what potential impact baseline assessment and standardised testing in the primary school have on different early years' settings. In a survey of educators conducted in Essex, responses indicate that some current assessment practices are mainly used for recording purposes rather than supporting curriculum planning. The author points out that without formative assessment, opportunities for children are learning and development may be overlooked. Nah (2014) has also observed that a systemic implementation of assessment through government intervention allowed for consistent practice with children and across areas of learning, as well as the involvement of families.

However, there were also perceived hindrances such as less time for engagement with children, the danger of overwhelming educators with a heavy workload, and the likelihood of generating rankings based on centre or children's achievement. Nonetheless, there have also been issues raised with regards to formative assessment. Bennett (2011) indicates six of them (definitional, effectiveness, domain-dependency, measurement, professional development, system), encouraging a critical position to the construction and practice of assessment and a careful stance in the assertions and expectations made from it. He notes an ambiguity

in the definition of formative assessment, which leads to a variability in its effectiveness. Bennett also suggests that more than pedagogical skills, formative assessment should be grounded within specific domains, and highlights the importance of interpreting evidence and the educator's knowledge as a key to successful implementation.

Additionally, Bennett (2011) stated that child outcomes were seen to be a means of assessing quality, which includes regular assessment, evaluation, and documentation across the different developmental domains. There was also a consensus about the need to involve children by consulting with and listening to them regarding matters that affect them, and ensure that policies and practice serve children's best interests.

2.3 Areas of Assessment in Early Childhood Education

2.3.1 Affective domain

Professionals in early childhood education recognize very deeply that typical, healthy children develop at different rates in different domains (Worth & Grollman, 2003). The preschool teacher is charged, every day, with observing children and communicating with them in ways that support their functioning, learning, and thinking in cognitive, social, physical, and emotional areas of development. The adult observes and interacts with children to gain information, then responds with activities, discussions, materials, and questions that encourage children to explore and learn more about the world around them. (Duschl et al., 2007; Gelman, Brenneman, Macdonald, & Román, 2009).

In short, it requires not just knowing what to teach but how to teach it based both on general understandings of development and on the needs and interests of individual learners with regard to science. Unfortunately, many preschool educators

report having concerns about their own knowledge of science and their ability to support children's learning in this domain (Greenfield, Jirout, et al., 2009). These concerns are not surprising given that early education teacher training programs do not emphasize science; either through classroom or practicum training (see Brenneman et al., 2009, for a review). As a result, the teacher who wants to support children's science learning often must spend extra time preparing to teach it by filling in his or her own knowledge gaps (Worth & Grollman, 2003).

Early Science Learning provides early educators with an assessment framework and strategies to systematically collect and use children's behaviour, language, and work products to guide instruction. Chittenden & Jones (1999) suggest that "a first purpose of assessment in early science education is to help teachers observe, record, and reflect upon children's investigations of the natural world" (p. 1). In this view, assessment is less about identifying children's strengths and weaknesses than about supporting teachers as observers and interpreters of children's knowledge-building processes so that they can better support these processes (Chittenden & Jones, 1999). A similar approach to early science assessment is a key part of the constructivist classroom (Edmiaston, 2002). Under this theoretical orientation, assessment serves dual purposes, to document and interpret children's knowledge and reasoning while simultaneously evaluating how classroom activities and instruction encourage or hinder learning.

Under both approaches described (Chittenden & Jones, 1999; ETS, n.d., Edmiaston, 2002), the evaluation process involves identifying evidence of children's science learning during everyday classroom activities by collecting data over time from multiple sources. These sources include actions, talk, and artefacts that children create individually and in collaborative groups. Individual student portfolios

composed of teachers' descriptions of on-going behaviour and conversations as well as children's work products (drawings, concept webs, science journals, sculptures, models, and so on) provide evidence used to assess children's understandings (Gelman et al., 2009; Worth & Grollman, 2003). This information is interpreted and applied to inform instruction and support new learning. As teachers practice these assessment procedures, they become more skilled as observers of children's scientific thinking and behaviour and are in an increasingly better position to support preschoolers' learning and development in science and other related domains.

The focus on collecting and interpreting anecdotes and documentation of children's science learning can also feed into *comprehensive* progress-monitoring tools that span critical learning and development domains that include, but are not limited to, science. Assessments such as the Work Sampling System (Dichtelmiller, Jablon, Marsden & Meisels, 2001), the Child Observation Record (High Scope Educational Research Foundation, 2003), and the Early Learning System (Riley-Ayers, Stevenson-Garcia, Frede & Brenneman, in press) provide structures for tracking student progress in science learning, and other learning areas, using portfolios to inform teacher report. Teachers who use the Galileo System (Bergan, Burnham, Feld, & Bergan, 2009), in which they judge whether particular readiness skills are learned based on having observed a child demonstrating the skill or knowledge under three different circumstances, similarly would benefit from gathering evidence of children's science learning as they complete their ratings. Assessments of this type do introduce data collection burdens on teachers.

However, such data collection is done with the goal of providing information about individual students as learners of science, math, language, literacy, socio emotional skills, motor skills, and so on, in order to help the teacher better tailor

instruction to children who require further support, or challenge, in a particular area. Results from these assessments can be used to provide local information for teachers and schools to assess individual learning profiles at particular time points, to track growth over time, and, when aggregated, to assess whether curricular programmatic goals are being met.

Gelman et al. (2009) opine that all the domains of development and learning physical, social and emotional, and cognitive are important, and they are closely interrelated. Children's development and learning in one domain influence and are influenced by what takes place in other domains. Children are thinking, moving, feeling, and interacting human beings. To teach them well involves considering and fostering their development and learning in all domains. Because this full spectrum of development and learning is fundamental to children's lives and to their future participation as members of society, early care and education must address all the domains.

Further, changes in one domain often facilitate or limit development in other areas. For example, when children begin to crawl or walk, they gain new possibilities for exploring the world, and their mobility affects both their cognitive development and sense of autonomy. Likewise, children's language development influences their ability to participate in social interaction with adults and other children; such interactions, in turn, support their further language development. A growing body of work demonstrates the relationship between emotional and social factors and children's academic competence and thus the importance of all these areas in educating young children. In brief, the knowledge base documents the importance of a comprehensive curriculum and the interrelatedness of the developmental domains in children's well-being and success.

Many aspects of children's learning and development follow well documented sequences, with later abilities, skills, and knowledge building on those already acquired. Human development research suggests that relatively stable, predictable sequences of growth and change occur in children during the first nine years of life. Predictable changes occur in all domains of development, although the ways that these changes are manifested and the meaning attached to them may vary widely in different cultural and linguistic contexts. Knowledge of how children within a given age span typically develop and learn provides a general framework to guide teachers in preparing the learning environment, considering curriculum, designing learning experiences, and teaching and interacting with children. Also important for educators to know are the sequences in which children gain specific concepts, skills, and abilities, building on prior development and learning. In mathematics, for example, children's learning to count serves as an important foundation for their acquiring an understanding of numerals. Familiarity with known learning sequences should inform curriculum development and teaching practice.

Development and learning proceed at varying rates from child to child, as well as at uneven rates across different areas of a child's individual functioning. Individual variation has at least two dimensions: the inevitable variability around the typical or normative course of development and the uniqueness of each child as an individual. Children's development follows individual patterns and timing; children also vary in temperament, personality, and aptitudes, as well as in what they learn in their family and within the social and cultural context or contexts that shape their experience.

All children have their own strengths, needs, and interests. Given the enormous variation among children of the same chronological age, a child's age is only a crude index of developmental abilities and interests. For children who have

special learning needs or abilities, additional efforts and resources may be necessary to optimize their development and learning. The same is true when children's prior experiences do not give them the knowledge and skills they need to thrive in a specific learning environment. Given this normal range of variation, decisions about curriculum, teaching, and interactions with children should be as individualized as possible. Rigid expectations of group norms do not reflect what is known about real differences in development and learning. At the same time, having high expectations for all children is essential, as is using the strategies and providing the resources necessary to help them meet these expectations.

2.3.2 Development and Learning result from a Dynamic and Continuous Interaction of Biological Maturation and Experience

Development is the result of the interplay between the growing, changing child and the child's experiences in the social and physical worlds. For example, a child's genetic makeup may predict healthy growth, but inadequate nutrition in the early years of life will keep this potential from being fulfilled. Conversely, the impact of an organic condition on a young child's learning and development can be minimized through systematic, individualized intervention. Likewise, a child's innate temperament—such as a predisposition to be either wary or outgoing—shapes and is shaped by how other children and adults interact with that child. In light of the power of biology and the effects of children's prior experiences, it is important for early childhood educators to maintain high expectations and employ all their knowledge, ingenuity, and persistence to find ways to help every child succeed. Early experiences have profound effects, both cumulative and delayed, on a child's development and learning; and optimal periods exist for certain types of development and learning to occur.

Children's early experiences, whether positive or negative, are cumulative. For example, a child's social experiences with other children in the preschool years may help him develop social skills and confidence that enable him or her to make friends in subsequent years, and these experiences further enhance the child's social competence and academic achievement. Conversely, children who fail to develop minimal social skills and thus suffer neglect or rejection from peers are at risk for later outcomes such as school dropout, delinquency, and mental health problems. Similarly, early stimulation promotes brain development and the forming of neural connections, which in turn enable further development and learning. But if the very young child does not get this stimulation, he is less able to benefit from subsequent learning opportunities, and a cumulative disadvantage is set in motion.

Intervention and support are more successful the earlier a problem is addressed. Prevention of reading difficulties, for example, is far less difficult and expensive than remediation. In addition, the literature shows that some aspects of development occur most efficiently at certain points in the life span. The first three years of life, for example, appear to be an optimal period for oral language development. Ensuring that children get the needed environmental inputs and supports for a particular kind of learning and development at its "prime time" is always the most reliable route to desired results.

2.3.3 Development Proceeds toward Greater Complexity, Self-Regulation, and Symbolic or Representational Capacities

A pervasive characteristic of development is that children's functioning becomes increasingly complex—in language, social interaction, physical movement, problem solving, and virtually every other domain. Increased organization and memory capacity of the developing brain make it possible with age for children to

combine simple routines into more complex strategies. The younger the child, the more she or he tends to think concretely and in the here and now. Yet in some ways, young children's thinking can be quite abstract. For example, pre-schoolers know that adding always makes *more* and subtracting makes *less*, and they are able to grasp abstract ideas about counting objects such as the one-to-one principle.

All young humans must negotiate the transition from total dependence on others at birth to competence and internal control, including learning to regulate their emotions, behaviours, and attention. For young infants, there are tasks such as learning to soothe themselves from arousal to a settled state. A few years later, self-regulation means developing the capacity to manage strong emotions and keep one's attention focused. Throughout the early years, adults play significant roles in helping children learn to self-regulate.

Caregivers are important in helping very young children to modulate their emotional arousal; for example, soothing babies and then helping them learn to soothe themselves. In the preschool years, teachers can help children develop self-regulation by scaffolding high-level dramatic play, helping children learn to express their emotions, and engaging children in planning and decision making.

During the early years of life, children move from sensory or behavioural responses to symbolic or representational knowledge. For example, young children are able to navigate their homes and other familiar settings by recall and sensory cues, but later they come to understand and can use abstractions such as *left* and *right* or read a map of the house. It is around age 2 that children begin to represent and reconstruct their experiences and knowledge. For example, children may use one object to stand for another in play, such as a block for a phone or a spatula for a guitar. Their ability to use various modes and media to convey their meaning

increases in range and scope. By the preschool years, these modes may include oral language, gestures and body movement, visual arts (drawing, painting, sculpting), construction, dramatic play, and writing. Their efforts to represent their ideas and concepts in any of these modes enhance the knowledge itself.

2.3.4 Children Develop best when they have Secure, Consistent Relationships with Responsive adults and Opportunities for Positive Relationships with Peers

From the earliest years of life, warm, nurturing relationships with responsive adults are necessary for many key areas of children's development, including empathy and cooperation, self-regulation and cultural socialization, language and communication, peer relationships, and identity formation.

When children and caring adults have the opportunity to get to know each other well, they learn to predict each other's signals and behaviour and establish attachment and trust. The first and most important relationships are those a child forms with parents or other primary caregivers. Forming one or more such attachments sets the stage for other relationships, as children move into the wider world beyond their immediate family. Young children benefit from opportunities to develop on-going, trusting relationships with adults outside the family and with other children. Notably, positive teacher-child relationships promote children's learning and achievement, as well as social competence and emotional development.

Nurturing relationships are vital in fostering high self-esteem and a strong sense of self-efficacy, capacity in resolving interpersonal conflicts cooperatively, and the sociability to connect with others and form friendships. Further, by providing positive models and the security and confidence to try new experiences and attempt

new skills, such relationships support children's learning and the acquisition of numerous capabilities.

2.3.5 Development and Learning occur in and are influenced by Multiple Social and Cultural Contexts

Understanding children's development requires viewing each child within the sociocultural context of that child's family, educational setting, and community, as well as within the broader society. These various contexts are interrelated, and all powerfully influence the developing child. For example, even a child in a loving, supportive family within a strong, healthy community is affected by the biases of the larger society, such as racism or sexism, and may show some effects of its negative stereotyping and discrimination.

Here *culture* is intended to refer to the customary beliefs and patterns of behaviour, both explicit and implicit, that are inculcated by the society—or by a social, religious, or ethnic group within the society—in its members. Even though culture is discussed often in the context of diversity and immigrant or minority groups, all of us are members of cultures and are powerfully influenced by them. Every culture structures and interprets children's behaviour and development in its own way. Early childhood teachers need to understand the influence of sociocultural contexts and family circumstances on learning, recognize children's developing competencies, and be familiar with the variety of ways that children may demonstrate their developmental achievements. Most importantly, educators need to be sensitive to how their own cultural experience shapes their perspective and to realize that multiple perspectives, not just their own, must be considered in decisions about children's development and learning.

As children grow up, they need to learn to function well in the society and in the increasingly global economy and to move comfortably among for the Education of Young Children groups of people from backgrounds both similar and dissimilar to their own. Fortunately, children are capable of learning to function in more than one social or cultural context and to make behavioural or linguistic shifts as they move from one context to another, although this complex ability does not occur overnight and requires adult support. Acquiring a new language or the ability to operate in a new culture can and should be an additive process, rather than causing the displacement of the child's first language and culture. For example, immigrant children are able to develop English proficiency without having to give up their home language, and it is important that they retain their fluency in the language of their family and community. Likewise, children who speak only English benefit from learning another language and can do so without sacrificing their English proficiency.

Always mentally active in seeking to understand the world around them, children learn in a variety of ways; a wide range of teaching strategies and interactions are effective in supporting all these kinds of learning.

Several prominent theories and bodies of research view cognitive development from the constructivist, interactive perspective. That is, young children construct their knowledge and understanding of the world in the course of their own experiences, as well as from teachers, family members, peers and older children, and from books and other media. They learn from the concrete (e.g., manipulatives); they also apparently are capable of and interested in abstract ideas, to a far greater degree than was previously believed. Children take all this input and work out their own understandings and hypotheses about the world. They try these out through interactions with adults and other children, physical manipulation, play, and their own

thought processes—observing what happens, reflecting on their findings, imagining possibilities, asking questions, and formulating answers. When children make knowledge their own in these ways, their understanding is deeper and they can better transfer and apply their learning in new contexts.

Using multiple teaching strategies is important in meeting children’s different learning needs.

The *Eager to Learn: Educating Our Pre-schoolers* report concluded:

Good teachers acknowledge and encourage children’s efforts, model and demonstrate, create challenges and support children in extending their capabilities, and provide specific directions or instruction. All of these teaching strategies can be used in the context of play and structured activities. Effective teachers also organize the classroom environment and plan ways to pursue educational goals for each child as opportunities arise in child-initiated activities and in activities planned and initiated by the teacher.

Thus, children benefit when teachers have at their disposal a wide range of teaching strategies and from these teachers select the best strategy to use in a situation, depending on the learning goal, specific context, and needs of individual children at that moment, including children who may need much more support than others even in exploration and play.

Play is an important vehicle for developing self-regulation as well as for promoting language, cognition, and social competence.

Children of all ages love to play, and it gives them opportunities to develop physical competence and enjoyment of the outdoors, understand and make sense of their world, interact with others, express and control emotions, develop their symbolic and problem-solving abilities, and practice emerging skills. Research shows the links between play and foundational capacities such as memory, self-regulation, oral language abilities, social skills, and success in school.

Children engage in various kinds of play, such as physical play, object play, pretend or dramatic play, constructive play, and games with rules. Observed in all young animals, play apparently serves important physical, mental, emotional, and social functions for humans and other species, and each kind of play has its own benefits and characteristics. From infancy, children act on the world around them for the pleasure of seeing what happens; for example, repeatedly dropping a spoon on the floor or pulling the cat's tail. At around age 2, children begin to demonstrate symbolic use of objects—for instance, picking up a shell and pretending to drink as from a cup—at least when they have had opportunities to observe others engaging in such make-believe behaviour.

From such beginnings, children begin to engage in more mature forms of dramatic play, in which by the age of 3–5 they may act out specific Documentations. Early childhood educators have historically valued and promoted child observation and program assessment as being important for high quality programs for children. Assessment is the process of gathering information about students in order to make decisions about their education. To get a well-rounded picture of the student's understanding and progress, the strategies used for assessment must be comprehensive. Unique talents, interests, knowledge, skills, and progress are documented by observing, collecting, and reviewing children's work over time. Teachers recognize that uneven development is normal and expected, allowing them to assess children fairly. Assessment must involve observing children regularly and collecting samples of their work. The physical products created can become part of a student portfolio, providing many examples of children's thinking over time (Buldu, 2010). In documentation, emphasis is placed on discovering what a child already knows and is able to do. Acknowledging student understanding promotes the child's

sense of competence and provides teachers with clues about what and how to teach. It gives a much more accurate picture than assessing them in a contrived setting. For example, asking a child to write an answer to a math problem may not show whether or not the child has problem solving skills or can add digits. The child may not understand the meaning of the problem, may have stayed up too late, or may be coming down with the flu. In contrast, daily observation as the child solves many kinds of problems enables the teacher to discover what he understands about addition and problem solving as well as other mathematical concepts (Buldu, 2010).

2.3.6 Evaluation

The next step in assessment is comparing the gathered information of each student to the standard. This step enables teachers to guide instruction, evaluate teaching strategies, track student progress, and identify students with special needs that require additional interventions or services. Although standards are designed to provide consistent expectations for all children, instruction must be moulded to fit each child's individual strengths and needs. The insights gained from early assessment can serve as the basis for instruction. As teachers observe students at work, they can modify the learning experiences offered to meet the individual needs of their students (Basford & Bath, 2014).

2.3.7 Family Communication

Families want to know how their child is doing in school, and family members appreciate specific examples of student progress. Showing examples from their child over time enables parents to personally assess the growth and progress of their child. It is essential to tell the whole story when reporting information about performance progress. For example, a first grade teacher may report that a first grade student made

excellent progress in learning the letter sounds. Although this may be true, it can give a misleading impression to parents. At the beginning of second grade the new teacher informs the parents that the child is reading far below grade level. Talking with families about standards, sharing student work samples, using rubrics in conferences, and differentiating between performance and progress are some ways to ensure that families are given an accurate picture of student learning (Basford & Bath, 2014).

2.4 Assessment Strategies used to assess early learners at the Early Childhood Education

Kern (2007) list five methods in their definition of assessment: –Assessment: A systematic procedure for obtaining information from observation, interviews, portfolios, projects, tests, and other sources that can be used to make judgments about children’s characteristics” (p. 27).

Herman (2005) offers the following list: –Potential assessment tools include: (1) record review/developmental history, (2) interviews, (3) observations, (4) checklists/ rating scales, (5) portfolios, and (6) tests” (p. 13). Birjandi (2009) offers three broad categories of assessment methods useful for formative purposes: observations, tasks, and interviews. Tasks include those on tests. Lidz and Gindis (2003) outline the following as the main assessment strategies.

2.4.1. Performance Assessment - Assess children as they participate in daily activities, write stories, solve problems and draw illustrations. Teachers observe and take brief notes on student discussions and interactions. Teachers review student work, determine strengths and weaknesses, and keep track of progress over time. Assessments are age appropriate, on-going, aligned with curriculum standards, and comprehensive.

Comprehensive Assessment- The range and scope of information and the type of data collected are based on the child's social, emotional, cognitive, and physical development. A child's success as a writer in first grade is tied to his fine motor development. A second-grade student's success in working in a cooperative learning group is dependent on both social and cognitive skills. Teachers need information about the student's strengths and weaknesses in all areas to enhance their decision making and guide their instruction strategies.

Standardized Tests Criterion Reference Tests compare students to a fixed standard or set criteria for measurement. Teachers plan how to prepare children to handle standardized tests successfully. Teachers recognize that the Criterion Reference Tests are based upon the core curriculum, and ensure that what they teach meshes with (but is not limited to) the curriculum goals evaluated by the tests. Teachers provide opportunities for children to practice and gain familiarity with the test format. Teachers develop a curriculum timetable for the year, making sure essential concepts are sequenced developmentally and allocated appropriate time slots. So many standardized tests are now required in school settings that teachers are seeking balance in the assessment process.

Self-Assessment Self-Assessment enables children to reflect on their progress. Teachers can help students assess their understanding by asking questions such as –What can I do very well? What are my personal strengths and interests? What skills can I improve? What is one thing on which I really want to work?" Teachers help model self-directed learning as they help each student learn the language and process of setting, recording, and evaluating goals. (See the self-assessment rubrics in the back of this section).

2.4.2 Rubrics:

Rubrics enable teachers and students to share a clear understanding of performance expectations that represent quality work. Motivation and objectivity are enhanced as students understand the criteria for the evaluation of their work. Children can reflect on and evaluate their own work with a clear understanding of standards. It is helpful to provide models to children showing examples of each level of the rubric. Children benefit from occasionally participating in the creation of a rubric for a class (Herman, 2005).

2.4.3 Visual Documentation

You have probably heard the phrase “seeing is believing” Visual documentation refers to collecting or photographing samples of a child’s work that portrays learning and development. Visual documentation provides a record that can be studied. Other assessment methods such as rating scales, checklists, anecdotal records all involve on-the-spot interpretation. This can make it difficult to be completely objective when recording the children’s behaviour.

The digital camera is a convenient way to visually document children’s development. The camera can be used to photograph children engaged in creating artwork, participating in dramatic play, or taking part in field trip activities. The camera can also be used to take pictures of a child’s accomplishments, such as artwork or building-block structures. In an infant program, the camera may be used to record self-feeding, playing peek-a-boo, sitting up, creeping, or walking. It can be used to record self-help skills such as dressing or brushing teeth. It is important to date all pictures taken on the digital camera for visual documentation. A brief description should also be recorded to show its significance (Buldu, 2010).

2.4.4 Anecdotal Records

The simplest form of direct observation is a brief narrative account of a specific incident called an anecdotal record. Often an anecdotal record is used to develop an understanding of a child's behaviour. Anecdotal records do not require charts or special settings. They can be recorded in any setting and require no special training. All you need is paper and a writing tool to record what happened in a factual, objective manner. The observation is open-ended, continuing until everything is witnessed. It is like a short story in that it has a beginning, middle, and end. The process of recording the incident requires a careful eye and quick pencil to capture all of the details. You will need to note who was involved, what happened, when it happened, and where it occurred. It needs to be done promptly and accurately (Chan & Wong, 2010).

2.4.5 Checklists

Another form of assessment is the checklist. Checklists are designed to record the presence or absence of specific traits or behaviours. They are easy to use and are especially helpful when many different items need to be observed. They often include lists of specific behaviours to look for while observing. Depending on their function, they can vary in length and complexity. Checklists may be designed for any developmental domain- physical, social, emotional, or cognitive). A checklist that is carefully designed can tell a lot about one child or the entire class. Checklists may be developed to survey one child or a group of children. The targeted behaviour are listed in logical order with similar items grouped together. Therefore, you can quickly record the presence or absence of a behaviour. Typically, a checklist indicates the presence of a behaviour. Checklists require structuring. You may be able to purchase

commercially prepared checklists. Most teachers working in child care centres structure their own (Chan & Wong, 2010)

2.4.6 Rating Scales

Rating scales, like checklists, are planned to record something specific. They are used to record the degree to which a quality or trait is present. Rating scales require you to make a judgment about the quality of what is being observed. Where a checklist only indicates the presence or absence of a trait, a rating scale tells how much or how little is present. As a result, objectivity could be hampered by the observer's opinion (Chilvers, 2002).

2.4.7 Portfolios Materials

A portfolio is a collection of materials that shows a person's abilities, accomplishments, and progress over time. Portfolios you create for the children in your care summarize each child's abilities. A portfolio includes items that show the child's growth and development over time. Documenting learning is an important skill for teachers to develop. Depending on the materials collected, the contents of a portfolio can be stored in a variety of forms. Some teachers prefer three ring binders. Others prefer to use boxes or large folders to store the portfolio contents (Chilvers, 2002).

2.4.8 Records

Look for the child's health records, report cards, artefacts, sketches, drawings, and writings. We can learn either directly from the above sources, or indirectly through information gathered by others. A combination of direct and indirect information provides a holistic understanding of the child and his/her family. The chart below offers examples of how to collect and organize information about a child.

2.4.9. Observation

Basford and Bath (2014) stated that simply watching children is much different than observing them. Through practice, caregivers must learn to closely observe children to better understand their actions and development. For a comprehensive assessment, observations should be made at a variety of children's activities and be on-going in order to fully see the progress of a child. Observations can be made with minimal or no intrusion into children's activities. Educators can observe all facets of development, including intellectual, linguistic, social-emotional, and physical development, on a regular basis.

Besides, Basford and Bath (2014) opine that assessments made during children's informal work and plays are most likely to give an accurate and balanced understanding of their learning and development. As you strive to understand each child, make sure:

- Assessment efforts are on-going, strategic, and purposeful. Plan and conduct both formal and informal assessments during the year. Strive to recognize children's continuous, positive development and learning. Use the results to shape program curriculum, adapt teaching styles, enhance parent communication, and evaluate program effectiveness.
- Information is integrated with curriculum content and goals. Plan for and incorporate assessment into your daily routine by thinking about the ways children are learning and developing. This will help everyone better understand how children are progressing and what needs to happen next.
- Methods are appropriate to children's ages and experiences. With young children, the most effective methods are observation, descriptive data, and collections of children's work. Steer clear of contrived activities designed to

test specific skills or abilities. Do consider input from families and children's evaluations of their own work.

- Children's progress is documented from anecdotal notes and parent comments.
- Formal assessments are used infrequently.
- Decisions that have a major impact on children, such as enrolment or placement, are never made on the basis of a single developmental assessment or screening device. Instead, they are based on multiple sources of relevant information-particularly teacher and parent observations. Keep in mind, an incorrect placement or enrolment can affect a child negatively for life. Decisions must be carefully based on a broad and balanced picture of the child's capabilities, development, and maturity. The younger the child, the greater the risk of assigning false labels.
- Developmental assessments are used to identify children who have special learning or developmental needs and to plan appropriate curriculum. Failure to evaluate and assess children's progress might mean that some children would be deprived of needed intervention at a time when these services could do the most good.
- Assessment recognizes individual variation, allowing for differences in learning styles and rates of learning. For example, in terms of literacy, multiple factors must be considered-the child's home language, stage of language acquisition, and whether the child has had the time and opportunity to develop proficiency in his or her home language, as well as in English (p. 119- 139).

Assessment addresses not only what children can do independently but also what they can do with assistance from other children or adults. By observing and documenting group projects and other collaborative work, teachers can learn about children as individuals as well as their roles in relationship to groups.

2.5 Skills needed by Teachers to Assess Learners in the Classroom

Skills in choosing appropriate, useful, administratively convenient, technically adequate, and fair assessment methods are prerequisite to good use of information to support instructional decisions. Teachers need to be well-acquainted with the kinds of information provided by a broad range of assessment alternatives and their strengths and weaknesses. In particular, they should be familiar with criteria for evaluating and selecting assessment methods in light of instructional plans (Anane & Anhwere, 2013).

Teachers who meet this standard will have the conceptual and application skills that follow. They will be able to use the concepts of assessment error and validity when developing or selecting their approaches to classroom assessment of students. They will understand how valid assessment data can support instructional activities such as providing appropriate feedback to students, diagnosing group and individual learning needs, planning for individualized educational programs, motivating students, and evaluating instructional procedures. They will understand how invalid information can affect instructional decisions about students. They will also be able to use and evaluate assessment options available to them, considering among other things, the cultural, social, economic, and language backgrounds of students (Anane & Anhwere, 2013).

Izard (2001) asserted that while teachers often use published or other external assessment tools, the bulk of the assessment information they use for decision-making comes from approaches they create and implement. Indeed, the assessment demands of the classroom go well beyond readily available instruments. Teachers who meet this standard will have the conceptual and application skills that follow. Teachers will be skilled in planning the collection of information that facilitates the decisions they will make. They will know and follow appropriate principles for developing and using assessment methods in their teaching, avoiding common pitfalls in student assessment. Such techniques may include several of the options listed at the end of the first standard. The teacher will select the techniques which are appropriate to the intent of the teacher's instruction.

Downs and Strand (2006) it is not enough that teachers are able to select and develop good assessment methods; they must also be able to apply them properly. Teachers should be skilled in administering, scoring, and interpreting results from diverse assessment methods.

Teachers who meet this standard will have the conceptual and application skills that follow. They will be skilled in interpreting informal and formal teacher-produced assessment results, including pupils' performances in class and on homework assignments. Teachers will be able to use guides for scoring essay questions and projects, stencils for scoring response-choice questions, and scales for rating performance assessments. They will be able to use these in ways that produce consistent results. Teachers will be able to administer standardized achievement tests and be able to interpret the commonly reported scores: percentile ranks, percentile band scores, standard scores, and grade equivalents. They will have a conceptual understanding of the summary indexes commonly reported with assessment results:

measures of central tendency, dispersion, relationships, reliability, and errors of measurement (Downs, & Strand, 2006).

Teachers will be able to apply these concepts of score and summary indices in ways that enhance their use of the assessments that they develop. They will be able to analyse assessment results to identify pupils' strengths and errors. If they get inconsistent results, they will seek other explanations for the discrepancy or other data to attempt to resolve the uncertainty before arriving at a decision. They will be able to use assessment methods in ways that encourage students' educational development and that do not inappropriately increase students' anxiety levels (Downs & Strand, 2006).

Fisher and King (1995) are of that assessment results are used to make educational decisions at several levels: in the classroom about students, in the community about a school and a school district, and in society, generally, about the purposes and outcomes of the educational enterprise. Teachers play a vital role when participating in decision-making at each of these levels and must be able to use assessment results effectively.

Fisher and King (1995) further stated that teachers who meet this standard will have the conceptual and application skills that follow. They will be able to use accumulated assessment information to organize a sound instructional plan for facilitating students' educational development. When using assessment results to plan and/or evaluate instruction and curriculum, teachers will interpret the results correctly and avoid common misinterpretations, such as basing decisions on scores that lack curriculum validity. They will be informed about the results of local, regional, state, and national assessments and about their appropriate use for pupil, classroom, school, district, state, and national educational improvement.

Geary (1995) asserted that grading is defined as indicating both a student's level of performance and a teacher's valuing of that performance. The principles for using assessments to obtain valid grades are known and teachers should employ them. Teachers who meet this standard will have the conceptual and application skills that follow. They will be able to devise, implement, and explain a procedure for developing grades composed of marks from various assignments, projects, in class activities, quizzes, tests, and/or other assessments that they may use. Geary further stress that teachers will understand and be able to articulate why the grades they assign are rational, justified, and fair, acknowledging that such grades reflect their preferences and judgments. Teachers will be able to recognize and to avoid faulty grading procedures such as using grades as punishment. They will be able to evaluate and to modify their grading procedures in order to improve the validity of the interpretations made from them about students' attainments.

Fisher and King (1995) stated that teachers must routinely report assessment results to students and to parents or guardians. In addition, they are frequently asked to report or to discuss assessment results with other educators and with diverse lay audiences. If the results are not communicated effectively, they may be misused or not used. To communicate effectively with others on matters of student assessment, teachers must be able to use assessment terminology appropriately and must be able to articulate the meaning, limitations, and implications of assessment results. Furthermore, teachers will sometimes be in a position that will require them to defend their own assessment procedures and their interpretations of them. At other times, teachers may need to help the public to interpret assessment results appropriately. Teachers who meet this standard will have the conceptual and application skills that follow. Teachers will understand and be able to give appropriate explanations of how

the interpretation of student assessments must be moderated by the student's socio-economic, cultural, language, and other background factors. Teachers will be able to explain that assessment results do not imply that such background factors limit a student's ultimate educational development (Fisher & King, 1995). They will be able to communicate to students and to their parents or guardians how they may assess the student's educational progress. Teachers will understand and be able to explain the importance of taking measurement errors into account when using assessments to make decisions about individual students. Teachers will be able to explain the limitations of different informal and formal assessment methods. They will be able to explain printed reports of the results of pupil assessments at the classroom, school district, state, and national levels.

2.5.1 Best Practices at the Kindergarten Level

Best practices at the kindergarten level include effective communication, according to research presented in 2010 in the Southern Regional Association of Teacher Educators Journal. Kindergarten teachers must network with other instructors and work with administrators. Instructors must also have the ability to explain child assessments to parents during open houses and special academic school meetings. The most important interpersonal skills for kindergarten teachers involve the ability to talk with students, and create a relaxed atmosphere that encourages young students to feel comfortable talking about academic subjects and personal problems that influence learning (Anane & Anhwere, 2013).

Effective assessment values cultural perspectives of children's learning. Children's learning and development is informed by their culture, values and experiences. Moreover, cultural background and language significantly influence the knowledge and vocabulary children have developed. Cultural background and

language also frame how, and upon what, children can be appropriately assessed (Gullo, 2005). Professionals therefore need to be aware of children and their family's cultural context. On this basis Apple (2000) suggests that approaches used for assessing children need to be culturally sensitive and interesting to children. Using assessment tools that are culturally, linguistically and developmentally appropriate assists the assessment process to be authentic. Further, the assessment process is facilitated when children's interests and daily activities are the base for collecting relevant evidence of the child's learning (Baldwin et al., 2009; Gullo, 2005).

It is also important that professionals take account of children's cultural context when analysing and interpreting the assessment data, so that an accurate picture is developed. Effective assessment incorporates children's views on their learning. The Early Years Learning Framework advocates that children are active participants in their own learning (Lidz, 2001).

It is important, therefore, that children are given the opportunity to actively contribute to assessments of their learning and receive feedback on their learning (Seitz and Bartholomew, 2008). There are a number of ways that children's participation can be facilitated. Shared sustained thinking can provide opportunities for incorporating children's views on their learning into formative assessment. Shared sustained thinking is an open-ended context for exploratory learning in which 'two or more individuals work together' in an intellectual way to solve a problem, clarify a concept, evaluate activities, or extend a narrative' (Sylva et al., 2010).

When children describe, explain and justify their thinking to others in shared sustained thinking, they develop meta-cognition and 'learn to learn' (Siraj-Blatchford, 2009). Shared sustained thinking provides opportunities for formative assessment because it enables early childhood professionals to build an understanding of

children's learning in order to make curriculum decisions. Research also indicates that effective assessment involves children having the time to express their opinions about what is recorded about their learning (Glazzard et al., 2010). According to the NAEYC (2009) children's own evaluations of their work are an important part of their individual assessment.

Other research suggests that there is great value in the feedback children receive on their own learning through the assessment process. Puckett and Black (2008) suggest that early childhood professionals should assist children to reflect on their own learning as well as assist them to set individual goals. Tayler and colleagues (2008) agree that children have the capacity not only to monitor their own progress but to form goals and shape their own future learning. Through feedback and interactions children are able to self-assess and form views about themselves as an effective learner (Tayler et al., 2008). Effective assessment takes families' perspectives into account. Families play an essential role in their child's learning and development and are a valuable source of information about their children (Baldwin et al., 2009; Gullo, 2005; Wortham, 2008).

Family's perspectives are particularly useful in providing information regarding a child's history, culture, disposition and abilities in different settings (Brink, 2002). They can also provide information about children's behaviour and learning in different settings. This is important with very young children, particularly in relation to temperament and behaviour (Neisworth & Bagnato, 2004). Including and valuing family perspectives in assessment, therefore, is a key feature of effective assessment (Glazzard et al., 2010, Grisham-Brown et al., 2006). This helps to develop the most accurate image of each child (Brink, 2002; Wortham, 2008). Further emphasising the importance of family's involvement in the assessment process is the

clear evidence that family involvement in their children's education has a positive impact on their children's overall learning and development (Beauty, 2002).

Building effective partnerships often requires early childhood professionals to initiate and promote connections and relationships with families. They can do this by reflecting on how much they value the contribution of parents to assessment and whether they consider parents as partners in children's education (Glazzard et al., 2010). Early childhood professionals who genuinely seek to understand families' perspectives about learning and their children are better prepared to be responsive within the family-professional collaboration (Puckett and Black, 2008). Carr and Harris (2001) support this view, suggesting that the best educational climate is collaborative. Family-Centred Practice for more information on working collaboratively with families. Effective assessment is meaningful for children when it is authentic. Assessments are most accurate and meaningful for children when they are conducted in the child's natural environment, are part of everyday learning experiences, and when they provide opportunities for feedback along the way (Hatch, 2010; Grisham-Brown et al., 2006). Authentic assessments capture children's competencies and incremental developments in their skills (Baldwin et al., 2009).

Glazzard and colleagues (2010) agree that assessing children based on observations in their environment through independent learning and adult directed learning is an effective assessment process for developing a comprehensive picture of the child's capabilities. Authentic assessments provide an opportunity for assessment that is free of the adult's own agenda. They are conducted in a variety of contexts such as home and care settings where children are familiar and comfortable in the environment (Losardo & Notari-Syverson, 2001) and are able to use familiar materials that are of interest to them. This helps to facilitate and maintain children's

own participation in the assessment (Losardo & Notari-Syverson, 2001). This form of assessment is also effective because it provides children with opportunities to demonstrate their skills across the various developmental domains and varying contexts (Losardo & Notari-Syverson, 2001). This contributes to more accurate assessment. Children's abilities are best displayed in environments where the child is most comfortable, providing familiarity while giving attention to culturally appropriate materials (Losard & Notari-Syverson, 2001).

Making assessment meaningful for children involves using tools that are appropriate for the child to use (Copple & Bredekamp, 2006). This includes measures which allow for the full range of children's competencies to be recorded (Bagnato, 2007). Essentially, using measures that children are interested in is the best approach to assessment and will yield the most valid information (Copple & Bredekamp, 2006). Using informal measures that do not significantly interfere with children's normal environments and movements is most likely to reflect children's full capabilities and understandings (Copple & Bredekamp, 2006).

Effective assessment uses multiple approaches that are appropriate for each child's competency. Children learn and demonstrate their learning in many ways, and should therefore be observed using a variety of tools and approaches and in a variety of contexts (Gullo, 2005). The NAEYC (2009) states that assessment is most effective when multiple methods are used to gather reliable and appropriate information about a child's learning and development (NAEYC, 2009). There is wide consensus in the research literature that a variety of formal and informal assessment tools give early childhood professionals and families a comprehensive view of children's learning and development (Brown & Rolfe, 2005; Glazzard et al., 2010; Grisham-Brown et al., 2006; Wortham, 2008). Moreover, Rinaldi (2006) suggests that when educators and

families combine their shared understandings, new understandings emerge that would not be possible from separate perspectives.

Hatch (2010) suggests that dynamic assessments enable effective assessment of young children. Dynamic assessment involves assessing what children are capable of doing independently as well as what they can do with the assistance of an adult. This creates a direct link between the teaching and assessment process (Hatch, 2010). With this in mind, assessments should be context and age appropriate, but they should also recognise the current capabilities (Gullo, 2005) and culture (Fleer, 2002) of each child. Copple and Bredekamp (2006) agree, stating that age appropriateness combined with assessments across different situations and settings are likely to ensure more effective assessment practice.

Recognising the idiosyncratic nature of learning, Puckett and Black (2008) also suggest that children should only be compared to their own developmental trajectory rather than compared to the average behaviour for a group. Multiple assessments occur over time and are holistic contribute to a complete picture of each child. Assessment for learning and development needs to take place continually, in more than one activity or setting, in order to generate a more accurate picture of each child's abilities. This allows for the dynamic and on-going nature of children's learning, but also recognises that children will behave in different ways, in different contexts and on different days (Sattler, 1998). By gathering data across a period of time, early childhood professionals gather a complete picture of each child's capabilities and record change and growth over time (Allen, 2007).

By collecting these data as they occur over time, early childhood professionals can later apply their professional knowledge to analyse the evidence to create a detailed picture of the child's capabilities (Bagnato, 2007). From this rich source of

evidence, professionals can make accurate inferences about each child's capabilities and their rate of learning and development. These inferences can serve to inform an evidence-based program that advances each child's learning and development. Gullo (2005) states the need for continual and comprehensive (or holistic) assessment. Continual assessment occurs when children are assessed over time with the view of tracking their progress. Baldwin, Adams and Kelly (2009) highlight the importance of continual assessment for the purposes of making decisions about individual development, learning programs and further assessment.

Copple and Bredekamp (2006) agree that on-going assessment of children's progress is central to planning and helps early childhood professionals to know the children with whom they work. Holistic assessment allows early childhood professionals to explore and assess the many aspects of children's learning and development in different contexts, environments and relationships. Holistic assessment enables professionals to develop a strong picture of the child's learning and development across all outcome areas. Professionals take objective, non-judgemental and accurate assessments of children's learning and development to be effective in gathering evidence of children's learning and development, early childhood professionals need to be effective, accurate and informed observers (Mindes, 2003).

It is important that the evidence collected through various forms of assessment reflects each child's abilities, and how they approach learning, as well as the outcomes of their efforts (Puckett & Black, 2008). Early childhood professionals, therefore, must be able to effectively observe children, choose the best method to record these observations and apply their professional expertise to interpret this evidence of learning and development (Mindes, 2003). The observation skills of early

childhood professionals are essential in providing a base for a supported and responsive curriculum (Baldwin et al., 2009); this includes the ability to critically reflect on the methods of observation (Lidz & Elliott, 2005).

2.6 Challenges of Early Childhood Assessment Practices

The assessment of young children is very different from the assessment of older children and adults in several ways. The greatest difference is in the way young children learn. They construct knowledge in experiential, interactive, concrete, and hands-on ways Lidz and Gindis (2003) rather than through abstract reasoning and paper and pencil activities alone. To learn, young children must touch and manipulate objects, build and create in many media, listen and act out stories and everyday roles, talk and sing, and move and play in various ways and environments. Consequently, the expression of what young children know and can do would best be served in ways other than traditional paper and pencil assessments.

Assessment is also challenging during early childhood because a child's development is rapid, uneven, episodic, and highly influenced by the environment (Lidz, 2001). A developing child exhibits periods of both rapid growth and frequent rest. Children develop in four domains physical, cognitive, social, and emotional and not at the same pace through each. No two children are the same; each child has a unique rate of development. In addition, no two children have the same family, cultural, and experiential backgrounds. Clearly, these variables mean that a "one-size-fits-all" assessment will not meet the needs of most young children (Lidz, 2001).

Another assessment challenge for young children is that it takes time to administer assessments properly. Assessments primarily should be administered in a one-on-one setting to each child by his or her teacher. In addition, a child's attention span is often very short and the assessment should therefore be administered in short

segments over a period of a few days or even weeks. While early childhood educators demand developmentally appropriate assessments for children, they often complain about the time it takes to administer them and the resulting loss of instructional time in the classroom. However, when quality tests mirror quality instruction, assessment and teaching become almost seamless, complementing and informing one another (Neuman, Copple & Bredekamp, 2000).

Despite the perceived advantages of carrying out assessment in early childhood settings, there are also challenges encountered by educators in realizing this in practice. For instance, a focus on ensuring a smooth transition from ECE to primary school, as well as demanding parental expectations, bring pressure to educators working in the sector (Mears, 2009). Research has also revealed tensions arising from the different perspectives on children and children's learning. For instance, Korean educators are challenged with a disconnect between emphasising the traditional value of academic achievement in ECE and adopting the more constructivist approach that has been introduced from the West (Nah, 2014).

This is also supported by Basford and Bath (2014), who argue that in the English context, there is a challenge in having children participate as agents in early childhood settings, not least because of frameworks with an inclination towards learning outcomes. They discuss the tensions that exist for practitioners who are influenced by competing assessment paradigms – the positivist, or developmental, and the sociocultural. The authors suggest that issues surface from this in practice, particular in assessment translate to a wide range of practices as educators seek to track children's learning alongside their conceptions of development and academics (DeLuca & Hughes, 2014).

For instance, Payler (2009) notes that settings that focused on learning outcomes and used scaffolding to achieve them seemed to reflect a negative perception of children as less able, which may affect their developing identities as learners. This was in contrast to settings seen to be oriented more towards care and socialisation that also promoted co-construction between adults and children. The author also presents an alternative approach observed in the preschool setting, characterised by facilitating predetermined goals in a collaborative environment. Be that as it may, it can also be gathered from research that educators are able to negotiate among the demands and expectations they are faced with, retaining some autonomy and adapting the demands and expectations to their curricular stance and assessment practice (Pyle & DeLuca, 2013).

While assessment profiles differ from one educator to the next, depending on their curricular priorities and approach, Pyle and DeLuca maintain that each has their strengths, and that there is potential in integrating them. A further challenge is with regard to the terms educators use when talking about assessment. For instance, seeking the perspectives of early years practitioners concerning baseline assessment in England, Chilvers (2002) noted the reluctance of practitioners to describe their practices as forms of baseline assessment. However, from the survey responses, it appears that most practitioners do conduct some form of baseline assessment through creating profiles and communicating with parents or previous educators.

In addition to this, there are also factors that may hinder the implementation of collaborative and participatory assessment, such as relevant professional training, a needed paradigm shift with regards to measurement and testing, and a reframing of expectations of families and the community (National Research Council, 2001). Both research studies and literature echo the need for competent and knowledgeable

educators to be able to implement effective assessment in the early years (Basford & Bath, 2014; Bennett, 2011; Buldu, 2010; Payler, 2009). Knowledge is seen as important in manoeuvring through the tensions present in the field (Basford & Bath, 2014), and to decide which among the various guidance strategies and their implications will be best to use in various contexts (Payler, 2009).

Aspects such as teacher structure, adult-child ratio, and group size were found to be associated with quality of early years' service provision, with the co-teacher structure, lower ratio, and smaller group size pointing to greater positive teacher behaviours and higher child care quality (Shim, Hestenes, & Cassidy, 2004). In the same research, the co-teacher structure is thought to be more collaborative and fosters a more constructive atmosphere for learning, creating a positive environment for educators.

Apart from this, other structural aspects such as 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 (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). 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 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.

2.7 Summary of the Literature

This chapter reviewed relevant related literature on the research topic, empirical literature and the theoretical framework. The chapter was discussed under the following subthemes: Theoretical frame work of the study. Overview of assessment in the early childhood education and areas of assessment. Besides, assessment strategies at early childhood education and skills required by early childhood education teachers and assessment practices were looked at. Besides, the challenge of early childhood assessment and factors affecting assessment practice were also looked at.

Even though, literature has reviewed overview of assessment in the early childhood education, domains of assessment, assessment strategies at early childhood education, skills required by early childhood education teachers, assessment practices were looked at. In addition, the challenge of early childhood assessment and factors affecting assessment practice were also looked at among others which are relevant to this study, most of the studies were done outside Ghana. From the above literatures none of the studies mentioned has tried to talk about teacher assessment practices in Sefwi-Wiawso Municipality. Therefore, there was a need for further research on teachers' assessment practices of early learners in Sefwi-Wiawso Municipality in Western Region of Ghana.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter describes procedures and the methods used in conducting the study. It includes the research approach, the research design, the population, sample and sampling techniques, instrumentation, procedure for data collection and data analysis. Besides, ethical considerations, the validity and reliability issues have been discussed.

3.1 Research Design

The researcher employed a descriptive survey design for this study to ascertain what was going on in the Schools. Descriptive survey design was used for the study because the study intended to explore teachers' assessment practices of teachers on early childhood learners in Sefwi-Wiawso Municipality. Descriptive research describes 'what'. It involves describing, recording, analysing and interpreting conditions that exist.

3.2 Study Site

Sefwi Wiawso is situated in the Northern part of Western Region of Ghana. It has the population of 139200 which consist of 69753 males and 69447 females (Ghana Statistical Services, 2010). Sefwi Wiawso is an agrarian dominated municipality. Thus 70% of the population are farmers while 30% are government workers and other businesses. It is an area of about 74 hectares of forest reserved which found along the road from Wiawso to Akomtobra.

The municipality is popularly known by the market centres at Edwenasi on Tuesday, Boako on Wednesday and Asawinso on Thursday where people come across the length and breadth of country to trade during these three days.

Educationally, there are about 157 primary schools which consist of 87 public primary school and 67 private primary school with enrolment of 15847, 805 Male and 7797 Females. In terms of staffing, it has 505 teachers, 395 train teachers which consist of 218 males and 177 females and untrained 110 of which 84 are males and 26 females.

In addition, the JHS has 109 schools with 64 public and 45 private with the enrollment of 7010 which consist of 3606 boys and 3404 girls. In terms of teachers it has about 349 teachers which consist of 286 trained and 63 untrained (Akomaning, 2018).

3.3 Population

The targeted population for the study was all kindergarten teachers and heads from public schools in the Sefwi Wiawso Municipality. The accessible population was 277 comprising 84 head teachers, 192 teachers who taught the Kindergarten pupils and 1 early childhood coordinator from the municipal office. Corbin and Strauss (2008) opined that population is set or collection of all elements possessing one or more attributes of interest. Population refers to any collection of specified groups of human beings or non-human entities (Creswell, 2014). These people were chosen because they performed key roles in the teaching and learning and assessment of early childhood learners in the Sefwi -Wiawso Municipality.

3.4 Sample Size and Sampling Techniques

The sample size for the study was 110 people. This comprised 80 early childhood teachers and 29 head teachers from selected public schools in the Municipality. Also, the Municipal basic school coordinator was selected.

Basic School coordinator	1
Head teachers	29
Teachers	80
Total	110

These people were chosen because they had experience as far as teaching and assessing early childhood children are concerned. Their daily active involvement with education and assessment process of the pupils was also a factor that necessitated this choice. Sampling is an important aspect of data collection (Creswell, 2014). It is that part of statistical practice concerned with the selection of an unbiased or random subset of individual observations within a population of individuals intended to yield some knowledge about the population of concern, especially for the purposes of making predictions based on statistical inference (Corbin & Strauss, 2008). A sample is a small subset of a larger population whose selection is based on the knowledge of the elements of a population and the research purpose (Babbie, 2004). Purposive sampling technique was used to select the 29 head teachers, 1 municipal basic school representative as well as the 80 KG Teachers to form the sample for the study. Purposive sampling represents a group of different non-probability sampling techniques. Also known as judgmental, selective or subjective sampling, purposive sampling relies on the judgment of the researcher when it comes to selecting the units (e.g., people, cases/ organisations, events, pieces of data) that are to be

studied. Usually, the sample being investigated is quite small, especially when compared with probability sampling techniques (Trochim, 2006).

3.5 Data Collection Instruments

The instruments that were used to gather the necessary data for the study were questionnaire and interview guide.

The researcher used a closed ended questionnaire to collect data because questionnaires are less expensive and require less time to administer. The questionnaire was a 4-point likert scale (1= Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree). The questionnaire consisted of four sections for municipal basic school coordinator, head teachers and teachers (A, B, C, and D). Section A collected data on respondents' background information. Section B, C and D had 20 items for municipal early childhood coordinator, head teachers and teachers that collected data on assessment practices in early childhood schools.

3.5.1 Interviews

Interview is an oral questionnaire administered face to face and gives immediate feedback. Semi-structured interview was used to collect data from the teachers who deputize for the head teachers at the ECE centers in the municipality. In all, 10 teachers were interview to elicit response. These heads were purposively selected to be interviewed because they had Kindergartens attached to the schools. The semi - structured interview suited the study because they were flexible and adaptable (Mears, 2009). The researcher developed semi-structured interview for the teachers who were nominal heads KGs so as to solicit their views on Teachers' Assessment practices on early learners in the Sefwi Wiawso municipality. The semi structured interview focused on the three objectives of the study: the main domains

ECE teachers assess during assessment, the strategies teachers use during assessment of their ECE learners, the skills that are needed by the teacher in assessing ECE learners and the challenges teachers face when assessing children in ECE.

3.6 Validity

Validity refers to the extent to which the research instrument serves the use for which it is intended (Mears, 2009). The instruments were first scrutinized by the researcher's course mates and it was later checked by the supervisor for the suitability of the items before pre-test. All the necessary corrections in the items were made and declared valid by the supervisor. This was done to establish content validity. Construct validity was also ensured by critically developing it within established theoretical framework.

3.7 Procedures for Data Collection

3.7.1 Procedural issues

A letter was sent to the head of schools where the study was conducted to seek permission to conduct the research in the setting. The people were informed before the questionnaire was distributed. The data gathered were kept confidential and the anonymity of the participants was protected by removing the contributor's name and other form of identification. Semi-structured interview was conducted to elicit responses from the respondents. Interview guides was developed based on the themes of the research questions posed for the study. Each interview session lasted for about 20 minutes.

3.7.2 Ethical consideration

Research ethics educates and monitors scientists conducting research to ensure a high ethical standard. Ethics are very paramount in research because, it guards against possible harmful effects of the research. Resnik (2010) contends that respondents need to give informed consent to participate. This means that they must be fully informed about the research in which the interview is going to be used. They must also be assured that their privacy and sensitivity will be protected and what is going to happen to their information after recording. Ethical norms promote the aims of research, such as knowledge, truth, and avoidance of error.

3.7.3 Piloting the instruments

A pilot study is a standard scientific tool for 'soft' research, allowing scientists to conduct a preliminary analysis before committing to a full-blown study or experiment (Resnik, 2010). The purpose of pilot exercise is to get the chaffs out of the instrument so that respondents in the main study will experience no difficulties in answering the questions during interview and responding to questionnaires. It also enables the researcher to carry out a preliminary analysis to see whether the wording and format of questions will present any difficulties when the main data are analyzed. The instrument was piloted with ten (10) respondents from the nearby town who were not part of the participants used for the study. Those people were chosen for the pilot exercise because; they have similar characteristics just as the sampled participants. The pilot instrument was given to ten selected people to gather their views and responses. The responses from the participants were been considered before the actual conducting of the interview and distribution of questionnaires. The pilot test was to ensure that the researcher gathers the relevant data for the research work.

3.7.4 Procedural issues

The researcher used questionnaire to gather data directly from the respondents. Responses to the questionnaire was either strongly agree‘ agree‘ strongly disagree‘ disagree‘ and the respondents were expected to tick one option under each item. The participants were informed and briefed on how to fill the questionnaire either to tick the option agree‘ or disagree‘ and against the various statements before the distribution of questionnaires started. The data gathered were kept confidentially. The anonymity of the participants was protected. During the process of data collection, the researcher was helped by a colleague from the town to administer and guide respondents to fill the questionnaires. After the questionnaires were answered the researcher collected them back and expressed her appreciations to the respondents for the kind support. The total responses were converted into percentage for simple analysis. Simple frequency table was used to present the data. The researcher used simple statistics which involve the use of; frequency table, percentages and figures in analyzing the data.

3.7.5 Interview

The head teachers were interviewed to elicit response for the study. Each respondent was given opportunity to respond to the questions raised for the study. The responses from the interview were recorded via field note and video recording. The interview took place during their free time. Each respondent was given equal opportunity to respond to the same questions.

3.8 Data Analysis Procedure

In analyzing qualitative data, it requires understanding on how to make sense out of text and images. Thematic approach was used to analyze the data collected. That is data for the study was analyzed based on each theme drawn from the research question raised. Also, the quantitative data analyzed using descriptive method involving percentages and frequencies.

3.9 Ethical Consideration

Research ethics educates and monitors scientists conducting research to ensure a high ethical standard. Ethics are very paramount in research because, it guards against possible harmful effects of the research. Resnik (2010) contends that respondents need to give informed consent to participate. This means that they must be fully informed about the research in which the interview is going to be used. They must also be assured that their privacy and sensitivity will be protected and what is going to happen to their information after recording. Ethical norms promote the aims of research, such as knowledge, truth, and avoidance of error.

I negotiated consent with all the participants, that is, the headteachers and teachers of kindergarten schools to voluntarily participate in this study. I explained to all the participants that confidentiality was going to be observed. No participants names were going to be used or written in the questionnaire for the sake of anonymity, letters of alphabets and numbers would be used instead. The names of the schools involved would be withheld to protect participants' identities. Before I commenced with interviews I ensured that the purpose of the study was well-understood by the participants and they were made to feel at ease before and during all the sessions.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

The study sought to explore teachers' assessment practices of early childhood learners in Sefwi-Wiawso Municipality. Questionnaires were administered to the two categories of respondents for the study; they KG teachers and the head teachers who did not have KGs attached to their schools. The respondents for the study were ECE Teachers and the head teachers who work directly with the Kindergarten pupils. The data gathered for the study were presented and discussed in this chapter.

4.1 Background Information about the Respondents

Table 4.1: Gender distribution of respondents

Gender	(F)	(%)
Male	27	(27.0)
Female	83	(83.0)
Total	110	(100)

Source: Field data (2018).

Table 4.1 represents the gender distribution of the respondents.

The table reveals that 27 (27.0%) were male respondents while 83 (83.0%) were female respondents. The 56 (56.0%) point gap between male and female respondents reflects the true picture of a female dominated teacher population among the kindergarten school teachers in the Sefwi-Wiawso Municipality.

Table 4.2: Age distribution of re

Age	Frequencies	
	Teachers (%)	Percentage (%)
Respondents		
20-30	70(70.0)	70(70.0)
31-40	25(25.0)	25(25.0)
41-50	10(10.0)	10(10.0)
Above 51	5(5.0)	5(5.0)
Total	110(110)	100(100)

Source: Field data (2018).

Table 4.2 represents the age distribution of the respondents.

From the table, 70 (70%) of early childhood teachers used for the study were between the ages of 20 and 30 years forming a vast majority. Also, 25(25%) fell within the age range of 31 and 40 years. Besides, 10(10%) were between the ages of 41 and 50 years with 5(5%) fallen between the age range of 51 and above years. From the table 4.2, it is obvious that more teachers who teach at the Kindergarten school in Sewfi Wiawso and between the ages of 20 and 30 are more than their other age groups during the period of the study.

Table 4.3: Qualification distribution of respondents

Qualification	Frequencies	
	Teachers (%)	Total (%)
Post-Secondary	24(19.0)	19(19.0)
Diploma in Education	74(73.0)	74(74.0)
Bachelor of Education	10(10.0)	10(10.0)
Master of Education	1(1.0)	1(1.0)
Total	110(100.0)	100(100.0)

Source: Field data (2018).

Table 4.3 represents the qualification distribution of the respondents.

The table that, 25 (25.2%) of the respondents had Post-Secondary qualification while 73 (73%) hold Diploma in Education. Also, 10 (10%) of the respondents had Bachelor of Education qualification with only 1 (1%) of the respondents holding Master of Education qualification. This indicated that more teachers who teach Kindergarten school in the Sefwi Wiawso during the period of the study had Diploma in Education.

Table 4.4: Teaching experience years of respondents

No of years in service	Frequencies	
	Teachers (%)	Total (%)
0	52(52.0)	52(52.0)
1-5	39(39.0)	29(29.0)
5-10	9(9.0)	9(9.0)
Above 10	10(10.0)	10(10.0)
Total	100(100.0)	100(100.0)

Source: Field data (2018).

Table 4.4 represents the teaching experiences of respondents.

The table indicates that 52 (52%) of the respondents had taught for less than one year while 39 (39%) of the respondents had taught between one to five years. Also, 9 (9%) of the respondents had taught between 5 to 10 years with only 10 (10%) of the respondents being in teaching service for 10 and above years. This indicated that more teachers who teach Kindergarten schools in the Sefwi Wiawso during the period of the study are inexperienced and therefore may not be experienced in assessment process.

1. Which areas of learning do teachers assess at the ECE level at the Sefwi-Wiawso Municipality?

To answer this question, items 1- 33 were used. Table 5 represents responses from teachers' items 1- 15 on the learning areas ECE teachers assess learners:

Table 4.5: Learning areas ECE teachers assess learners on

To answer this question, which sought to describe the learning areas ECE teachers assess learners on, teachers questionnaire items 1 –33 were used: Data from table 5 represents the views of teachers on items 1- 15 on learning areas ECE teachers assess learners on:

Learning Areas ECE Teachers Assess

Areas ECE teachers assess	S. A		Agree		Disagree		S. D		TOTAL	
	f	%	f	%	f	%	f	%	f	%
I assess learners understanding of the concept	69	(69.0)	30	(30.0)	0	(00.0)	1	(1.0)	100	(100.0)
I assess learners' ability follow simple instructions	80	(80.0)	19	(19.0)	0	(00.0)	1	(1.0)	100	(100.0)
I assess learners sorting, ordering and matching skills	74	(74.0)	23	(23.0)	0	(00.0)	3	(3.0)	100	(100.0)
I assess learners thinking ability	59	(59.0)	38	(38.0)	2	(2.0)	1	(1.0)	100	(100.0)
I assess learners speaking skills	76	(76.0)	20	(20.0)	2	(2.0)	2	(2.0)	100	(100.0)
I assess learners listening skills	61	(61.0)	34	(34.0)	1	(1.0)	3	(3.0)	100	(100.0)
I assess learners reading skills	68	(68.0)	30	(30.0)	1	(1.0)	1	(1.0)	100	(100.0)
I assess learners interaction skills	57	(57.0)	35	(35.0)	1	(1.0)	7	(7.0)	100	(100.0)
I assess learners participation in group activities	56	(56.0)	36	(36.0)	4	(4.0)	4	(4.0)	100	(100.0)
I assess learners self-confidence skills	55	(55.0)	43	(43.0)	1	(1.0)	1	(1.0)	100	(100.0)
I assess learners outdoor- indoor manipulative and play skills	43	(43.0)	53	(53.0)	3	(3.0)	1	(1.0)	100	(100.0)
I assess learners' grip of objects and writing tools	37	(37.0)	51	(51.0)	9	(9.0)	3	(3.0)	100	(100.0)
I assess learners writing skills	47	(47.0)	41	(41.0)	11	(11.0)	1	(1.0)	100	(100.0)
I assess learners drawing skills	50	(50.0)	43	(43.0)	4	(4.0)	3	(3.0)	100	(100.0)
I assess learners colouring skills	67	(67.0)	30	(30.0)	2	(2.0)	1	(1.0)	100	(100.0)

Source: Field data (2018).

Table 4.5 represent data gathered on learning areas teachers assess learners on. From the on the statement Learning Areas ECE teachers assess during assessment; it was found that ECE teachers assess cognitive skills during assessment for example: I assess learners understanding of the concept. Sixty-nine (69%) of the ECE teachers strongly agreed, thirty (30%) of the ECE teacher agreed, none of the ECE teachers disagreed, and one (1%) of the ECE teachers strongly disagreed that they assess

learners understanding of the concept. Also, eighty (80%) of the ECE teachers strongly agreed, nineteen (19%) of the ECE teachers agreed, none of the ECE teachers disagreed, with only one (1%) of the ECE teachers strongly disagreed that they assess learners' ability to follow simple instructions. Again, seventy four (74%) of the ECE teachers strongly agreed, twenty three (23%) of the ECE teachers agreed, none of the ECE teachers disagreed, and the remaining three (3%) of the ECE teachers strongly disagreed that they assess learners sorting, ordering and matching skills. Besides, on assessing learners' thinking ability, fifty nine (59%) of the ECE teachers strongly agreed, thirty eight (38%) of the ECE teachers agreed, with two teachers (2%) of the ECE providers disagreed, and the remaining one (1%) of the ECE teachers strongly disagreed that during assessment, they assessing learners' thinking ability. Lastly, on assessing learners' thinking ability was another cognitive skills ECE teachers assess during assessment; fifty nine (47%) of the ECE teachers strongly agreed, forty one (41%) of the ECE teachers agreed, with eleven teachers (11%) of the ECE providers disagreed, and the remaining one (1%) of the ECE teachers strongly disagreed that during assessment, they assess learners drawing skills.

Secondly, assessing learners' language skills was another sub theme which emerged the learning areas ECE teachers assess during assessment. Seventy six (76%) of the ECE teachers strongly agreed, twenty (20%) of the ECE teachers agreed, with two of the ECE teachers (2%) disagreed and the remaining two (2%) of the ECE teachers strongly disagreed that they assess learners speaking skills. Also, sixty one (61%) of the ECE teachers strongly agreed, thirty four (34%) of the ECE teachers agreed, two (2%) of the ECE teachers disagreed, with only three (3%) of the ECE teachers strongly disagreed that they assess learners listening skills. Again, sixty

eight (68%) of the ECE teachers strongly agreed, thirty (30%) of the ECE teachers agreed one (1%) of the ECE teachers disagreed, and the remaining one (1%) of the ECE teachers strongly disagreed that they assess learners reading skills.

Thirdly, assessing learners' social skills was another sub theme which emerged from the learning areas ECE teachers assess during assessment. On assessing learners' interaction skills, fifty seven (57%) of the ECE teachers strongly agreed, thirty five (35%) of the ECE teachers agreed, with two teachers (2%) of the ECE providers disagreed, and the remaining seven (7%) of the ECE teachers strongly disagreed that during assessment, they assess learners interaction skills. It was also clear that; fifty six (56%) of the ECE teachers strongly agreed, thirty six (36%) of the ECE teachers agreed, with four of the ECE teachers (4%) disagreed and the remaining four (4%) of the ECE teachers strongly disagreed that they assessed learners participation in group activities. Also, on the statement domain ECE teachers assess during assessment; I assess learner's self-confidence skills. Fiftyfive (55%) of the ECE teachers strongly agreed, forty three (43%) of the ECE teacher agreed, one (1%) of the ECE teachers disagreeing and strongly disagreeing respectively that they assess learners self-confidence skills.

Further, assessing learners' physical development skills was another sub theme which emerged from the learning areas ECE teachers assess during assessment. Forty three (43%) of the ECE teachers strongly agreed, fifty three (53%) of the ECE teachers agreed, three (3%) of the ECE teachers disagreed, with only one (1%) of the ECE teachers strongly disagreed that they assess learners outdoor- indoor manipulative and play skills.

Again, thirty seven (37%) of the ECE teachers strongly agreed, fifty one (51%) of the ECE teachers agreed nine (9%) of the ECE teachers disagreed, and the remaining three (3%) of the ECE teachers strongly disagreed that they assess learners' grip of objects and writing tools. Lastly, sixty seven (67%) of the ECE teachers strongly agreed, thirty (30%) of the ECE teachers agreed, with two of the ECE teachers (2%) disagreed and the remaining one (1%) of the ECE teachers strongly disagreed that they assess learners colouring skills.

Interview Responses from the Early Childhood Teachers

1. **Research Question One:** Which learning areas do teachers assess at the ECE level at the Sefwi-Wiawso Municipality?

In ensuring proper and holistic assessment among Kindergarten pupils, teachers do well to do comprehensive assessment of their children which involve physical, cognitive, emotion and social skills or development of their children. In doing comprehensive assessment, the following sub-themes were discussed.

Cognitive development or skills

Cognitive skills emerged as a sub theme under the main areas ECE teachers assessed under this, a teacher had this to say:

I assess learners understanding of the concept. This is done to assess their recall and retention knowledge (verbatim comment from Teacher A)

Another teacher stated that

I record whatever I see about learner based on time, date. In order to get holistic information about the pupils I assess them both inside and outside the classroom to ascertain the knowledge level (Comment from Teacher F)

A teacher also commented

I gather learners' exercises and other works for making decision about them. This is because I give the different work to assess their total cognitive development (Comment from Teacher D)

From the above comments on cognitive domain ECE teachers assess during assessment, it could be deduced that teachers assess pupils understanding of the concept knowledge level and their total cognitive development.

Language skills

Language skills was another sub theme which emerged from the learning areas ECE teachers assess during assessment

Views of one teacher is worthwhile

I assess learners speaking skills when they are talking to their friends on how to respond to their colleagues during conversation. Their ability to request for permission (Comment from Teacher B)

Another teacher stated that

I assess learners listening skills. I do this by giving them oral work and dictation in order to ascertain their level of development as far as their listening skills re concerned (Comment from Teacher G)

A teacher also commented

I assess learners reading skills. I give pupils short passages and selected words to assess their level of achievement (Comment from Teacher C)

Inferring from the above, it is the obvious in ECE teachers attempt to assess KG children's language skills; Kindergarten teachers in Sefwi Wiawso assess learner's speaking skills, reading skills and listening skills.

Social skills

Social skills emerged as a sub theme under the main domains ECE teachers assess during assessment

One teacher commented as follows:

I assess learners speaking skills; with this skill I use a lot of oral activities to help pupils develop their communication skills (Comment from Teacher E)

The view of one teacher is noteworthy here:

I write down information on learners when they are playing to gather adequate information about my pupils so as to take varied decision about them (Comment from Teacher H)

Another teacher intimated that:

I closely watch learners when they are performing an activity, watch them during classroom work and when they are doing co-curricular work such during ground work and playing activities (Comment from Teacher J)

Judging from the above, it is the obvious in ECE teachers attempt to assess KG children's social skills, Kindergarten teachers in Sefwi Wiawso assess learner's speaking skills how they play during play time, how they performing an activities individually and in group and social skills they exhibit.

2. What assessment strategies do teachers employ for learners in ECE at the Sefwi-Wiawso Municipality?

To answer this question, which sought to describe the strategies teachers employ for learner's assessment, teachers' questionnaire items 16 –33 were used: Data from Table 6 represents the views of teachers on items 16-24 on the strategies teachers use to assess ECE learners.

Table 4.6: Strategies ECE teachers use when assessing ECE learners

Strategies ECE teachers in assessing ECE learners	S Agree		Agree		Disagree		S. D		TOTAL	
	f	%	f	%	f	%	f	%	f	%
I closely watch learners when they are performing an activity	48	(48.0)	38	(38.0)	10	(10.0)	4	(4.0)	100	(100.0)
I gather learners exercises and other works for making decision about them	69	(59.0)	28	(28.0)	1	(1.0)	2	(2.0)	100	(100.0)
I take pictures of children art and play for assessment	48	(48.0)	41	(41.0)	7	(7.0)	2	(2.0)	100	(100.0)
I take and examines videos of learners dramatic play in and outside the class for assessment	35	(35.0)	28	(28.0)	30	(30.0)	7	(7.0)	100	(100.0)
I write down information on learners when they are playing	34	(34.0)	31	(31.0)	23	(23.0)	12	(12.0)	100	(100.0)
I record whatever I see about learner based on time and date	41	(41.0)	25	(25.0)	25	(25.0)	9	(9.0)	100	(100.0)
I write down beginning and end of every term	49	(49.0)	26	(26.0)	9	(9.0)	16	(16.0)	100	(100.0)
I assess learners specifically on different domains during exercise	46	(46.0)	41	(41.0)	8	(8.0)	5	(5.0)	100	(100.0)
I assess learners individually and in groups about their creative skills.	65	(65.0)	30	(30.0)	2	(2.0)	3	(3.0)	100	(100.0)

Source: Field data (2018).

Table 4.6, represents data gathered on strategies ECE Teachers use when assessing learners.

From the statements on strategies ECE teachers use when assessing ECE learners; it emerged from the responses from the teachers that, teachers used observation as a strategy during assessment; “closely watch learners when they are performing activities”. Forty eight (48%) of the ECE teachers strongly agreed, thirty eight (38%) of the ECE teachers agreed, ten (10%) of the ECE teachers disagreed, and four (4%) of the ECE teachers strongly disagreed that they closely watch learners when they are performing activities. Also, on taking videos of learners dramatic play in and outside the class for assessment, fifty nine (59%) of the ECE teachers strongly agreed, thirty eight (38%) of the ECE teachers agreed, with thirty teachers (30%) of the ECE providers disagreed, and the remaining seven (7%) of the ECE teachers strongly disagreed that during assessment, they take videos of learners dramatic play in and outside the class for assessment. Lastly, fifty six (46%) of the ECE teachers strongly agreed, thirty six (41%) of the ECE teachers agreed, with eight of the ECE teachers (8%) disagreed and the remaining five (5%) of the ECE teachers strongly disagreed that they assess learners specifically on different domains.

Secondly, a sub-theme which emerged from the strategies ECE teachers use when assessing ECE learners was using anecdotal records strategies. Sixty nine (69%) of the ECE teachers strongly agreed, twenty eight (28%) of the ECE teachers agreed, one (1%) of the ECE teachers disagreed, with only two (2%) of the ECE teachers strongly disagreed that they gather learners exercises and other works for making decision about them. Besides, Thirty four (34%) of the ECE teachers strongly agreed, thirty one (31%) of the ECE teachers agreed, with two three of the ECE teachers (23%) disagreed and the remaining twelve (12%) of the ECE teachers strongly

disagreed that they write down information on learners when they are playing. Lastly, Forty nine (49%) of the ECE teachers strongly agreed, twenty six (26%) of the ECE teachers agreed nine (9%) of the ECE teachers disagreed, and the remaining sixteen (16%) of the ECE teachers strongly disagreed that they write down beginning and end of term examination on chalkboard.

Besides, another strategy ECE teachers use when assessing ECE learners is the use of visual documentation. Forty eight (48%) of the ECE teachers strongly agreed, forty one (41%) of the ECE teachers agreed seven (7%) of the ECE teachers disagreed, and the remaining three (3%) of the ECE teachers strongly disagreed that they take pictures of children art and play for assessment.

Checklist is another strategy ECE teachers use when assessing ECE learners. On this strategy, forty one (41%) of the ECE teachers strongly agreed, twenty five (25%) of the ECE teachers agreed, twenty five (25%) of the ECE teachers disagreed, with only nine (9%) of the ECE teachers strongly disagreed that they record whatever I see about learner based on time and date. Lastly, on assessing learners specifically on different domains, sixty five (65%) of the ECE teachers strongly agreed, thirty (30%) of the ECE teachers agreed, with two teachers (2%) of the ECE providers disagreed, and the remaining three (3%) of the ECE teachers strongly disagreed that during assessment, they assess learners individually and in groups about their creative skills.

Interview Responses from the Early Childhood Teachers

Research Question Two: What assessment strategies do teachers employ to assess learners in ECE at the Sefwi-Wiawso Municipality?

In ensuring proper and comprehensive assessment, early childhood teachers employ array of strategies in the quest of obtaining valid and reliable result. The assessment strategies ECE teachers adopt in assessing ECE learners are observation, anecdotal records, visual documentation and checklist. Though 10 head teachers were interviewed but the responses were put together based on similarities that were in their response to the questions.

Observation

Observation is a strategy ECE teachers used when assessing their pupils.

Regarding strategies ECE teachers use in assessing ECE learners

Teacher F:

I closely watch learners when they are performing an activity in order to make judgment about their performance in activities.

Another teacher stated:

I assess learners on daily basis both in the classroom and outside classroom so as to gather the necessary information about them.
(Teacher I)

Another teacher stated:

Sometime I use group work to observe children's ability to socialize, tolerate and cooperate with their friend in and outside the classroom
(Teacher C)

Inferring from the above comments, it is clear that observation is an assessment strategy ECE teachers use in assessing ECE learners. ECE teachers observe children individually and in a group. They also observe children during in class activities and outside classroom.

Anecdotal records

The emerging sub-theme coping strategies are discussed below.

One of the participants stated:

I used structured text and hand on activities to assess my children in order to get vital information to make the necessary decision. They sometimes come to the board and deliver (Teacher G)

Another teacher stated:

I write down information on learners when they are playing. This helps me to gather the necessary information about them to make decision (comment from Teacher E)

A teacher has this to say:

I record whatever I see about learner based on time, date. I write down beginning and end of every term. This helps me to get necessary information about the children in order to take vital decision about the children (Teacher C)

Inferring from the above comments it is clear that ECE teachers adopt anecdotal record strategy to assess their pupils. These include recording the vital information about the children.

Visual documentation

Another area was the use of visual documentation strategy

View of a teacher worthwhile here

I take pictures of children art and play for assessment. Most children love drawing and matching objects so I used them frequently to assess them (Teacher B)

Another teacher stated that

I take and examine videos of learners' dramatic play in and outside the classroom to assess their emotional, affective and mental development (Teacher A)

Grounded from the above comments, it is clear that ECE teachers used pictures of children art and play for assessment. They also use videos of learners' dramatic play to gather the necessary information of the pupils.

Checklists are strategies ECE teachers use when assessing the pupils

A teacher stated:

I use writing and listening activities to assess the level of my pupils achievement level. It is common practice I apply. Also, I test their mind by using questions and answers orally or written which help me to ascertain whether they have understood that I have taught (Teacher B)

I assess learners specifically on different domains. I used prepared items to gather necessary information about the children I teach in order to make decision about them. (Teacher G).

Grounded from the above comments it is clear that ECE teachers adopt Checklists strategies such as structured writing and listening and questionnaire in assessing as ECE learners.

Research Question Three

What skills are needed by the Teacher in assessing ECE learners at the Sefwi-Wiawso Municipality?

To answer this question which, sought to describe the skills needed teachers to assess ECE learners, teachers' questionnaire items 25-33 were used: Data from Table 6 presents the views of teachers on items 25-29 on the Skills needed by teachers to assess ECE learners:

Table 4.7: Skills needed by the teachers in assessing ECE learners

Skills needed	S. A		Agree		Disagree		S. D		TOTAL	
	f	%	f	%	f	%	f	%	f	%
I am well trained to assess learners	59	(59.0)	37	(37.0)	3	(3.0)	1	(1.0)	100	(100.0)
I understand assessment methods appropriately for instructional decisions	59	(59.0)	38	(38.0)	3	(3.0)	0	(0.0)	100	(100.0)
I need writing and reporting skills to administer, scoring and interpreting the results of both externally-produced and teacher-produced assessment methods	51	(51.0)	38	(38.0)	10	(10.0)	1	(1.0)	100	(100.0)
I have the skills to use assessment results when making decisions about learners.	56	(56.0)	32	(32.0)	11	(11.0)	1	(1.0)	100	(100.0)
I have skills in communicating assessment results to pupils, parents, other lay audiences, and other educators.	54	(54.0)	33	(33.0)	12	(12.0)	1	(1.0)	100	(100.0)

Field data (2018).

Table 4.7, represents the data gathered on skills needed by the teachers in assessing ECE learners

From the question, skills needed by the teachers in assessing ECE learners; I am well trained to assess learners. Fifty nine (59%) of the ECE teachers strongly agreed, thirty seven (37%) of the ECE teachers agreed, three (3%) of the ECE

teachers disagreed, and one (1%) of the ECE teachers strongly disagreed that they are well trained to assess learners. Fifty nine (59%) of the ECE teachers strongly agreed, thirty eight (38%) of the ECE teachers agreed, three (3%) of the ECE teachers disagreed, with none of the ECE teachers strongly disagreed that they understand assessment methods appropriately for instructional decisions.

Fifty one (51%) of the ECE teachers strongly agreed, thirty eight (38%) agreed, ten (10%) disagreed, and the remaining one (1%) strongly disagreed that they need writing and reporting skills to administer, scoring and interpreting the results of both externally-produced and teacher-produced assessment methods. On the statement; I have the skills to use assessment results when making decisions about learners. , fifty six (56%) of the ECE teachers strongly agreed, thirty two (32%) of the ECE teachers agreed, with eleven teachers (11%) of the ECE providers disagreed, and the remaining one (1%) of the ECE teachers strongly disagreed that conducting ECE assessment, they have the skills to use assessment results when making decisions about learners.

Lastly, 54(54%) of the ECE teachers strongly agreed, thirty three (33%) of the ECE teachers agreed, twelve (12%) of the ECE teachers disagreed, with only one (1%) of the ECE teachers strongly disagreed that they have skills in communicating assessment results to pupils, parents, other lay audiences, and other educators.

Interview Responses from the Early Childhood Teachers

Research Question Three: What skills are needed by the Teacher in assessing ECE learners at the Sefwi-Wiawso Municipality?

In order for the preschool teachers to conduct proper assessment, they need to acquire some vital skills in order to achieve comprehensive assessment of their children. Skills required and employed by kindergarten teachers to successfully assess their ECE children appeared as sub-theme for the study are analysed below:

I need training to enhance my skills in order to administer, score and interpret the results of both externally-produced and teacher-produced assessment methods (Comment from Teacher A)

Another teacher asserted that:

In order to ensure proper and holistic assessment process I need good skills in communicating assessment results to pupils, parents, other lay audiences, and other educators. (Comment from Teacher H)

Also, a teacher said that:

I don't just assess children after assessment sake, I use the information I obtain to make very importance decision. For me to do that I should understand assessment methods appropriately for instructional decisions. They also, analytic skilled in developing assessment methods appropriate for instructional decisions (Comment from Teacher C)

A comment from another:

Proper communication skill is very vital ingredient in assessment process. This is because after assessment if one cannot communicate the result to the child's parent and other players in the education of the children for decision to be made, then the circle of assessment has not completed (Comment from Teacher D)

It can be deduced from the responses of the teachers that in order for the teachers to comprehensively assess their children they need to possess some vital skills such as need training to enhance my skills in order to administer score and interpret the results good communication in order to communicate assessment results

to pupils and parents. Besides, they also need analytic skills in developing assessment methods appropriate for instructional decisions.

Research Question Four

What challenges do teachers face when assessing children in ECE at the Sefwi-Wiawso Municipality?

To answer this question, which sought to describe the challenges teachers to assess ECE learners, teachers' questionnaire items 30 –33 were used: Data from table 6 represents the views of teachers on items 30-33 on the challenges faced by teachers in assess ECE learners:

Table 4.8: Challenges teachers face in assessing children in ECE

Challenges	S A		Agree		Disagree		S D		TOTAL	
	f	%	f	%	f	%	f	%	f	%
Inadequate time affect assessment process of my learners	39	(39.0)	29	(29.0)	18	(18.0)	14	(14.0)	100	(100.0)
Uncooperative attitude of some parents and children to participate in assessment process affect assessment process in early childhood settings	50	(50.0)	21	(21.0)	14	(14.0)	15	(15.0)	100	(100.0)
Lack of qualified personnel hinder the implementation of collaborative and participatory assessment	36	(36.0)	27	(27.0)	17	(17.0)	20	(20.0)	100	(100.0)
Inadequate equipment and materials in my school hinders the early learners assessment process	62	(62%)	19	(19%)	12	(12%)	7	(7%)	100	(100.0)

Field data (2018).

Table 4.8, presents data gathered on challenges teachers face in assessing children in ECE. From the statement on challenges teachers face in assessing children in ECE; inadequate time affect assessment process of my learners. Thirty nine (39%) of the ECE teachers strongly agreed, 29 (29%) of the ECE teachers agreed, eighteen

(18%) of the ECE teachers disagreed, and 14 (14%) of the ECE teachers strongly disagreed that inadequate time affect assessment process of my learners.

Fifty (50%) of the ECE teachers strongly agreed, twenty one (21%) of the ECE teachers agreed, fourteen (14%) of the ECE teachers disagreed, with fifteen (15%) of the ECE teachers strongly disagreed that uncooperative attitude of some parents and children to participate in assessment process affect assessment process in early childhood settings.

Thirty six (36%) of the ECE teachers strongly agreed, twenty seven (27%) of the ECE teachers agreed seventeen (17%) of the ECE teachers disagreed, and the remaining twenty (20%) of the ECE teachers strongly disagreed that lack of qualified personnel hinder the implementation of collaborative and participatory assessment.

Lastly, sixty two (62%) of the ECE teachers strongly agreed, nineteen (19%) of the ECE teachers agreed twelve (12%) of the ECE teachers disagreed, and the remaining seven (7%) of the ECE teachers strongly disagreed that inadequate equipment and materials in my school hinders the early learners assessment process

Interview Responses from the Early Childhood Teachers

Research Question Four: What challenges do teachers face when assessing children in ECE at the Sefwi-Wiawso Municipality?

Challenges teachers face in assessing children in ECE

In assessing preschool children, Kindergarten teachers face a lot of difficulties which involve both financial and inadequate material and other factors. Participants responses are presented below.

Also, a teacher said that:

Inadequate Teaching Learning Materials is affecting our work. This is because we do not have enough materials to carry out our assessment process for our pupils. The children find it difficult when you are using the English Language to teach, they only need method of teaching like using TLM. Teacher learner material so if we do not have enough materials if affect the assessment process. (Teacher I)

A comment from another:

Because some of the children don't like come to school regularly when it is time for assessment, the absenteeism of the children pose problem when you are assessing. Uncooperative attitude of some parents and children to participate in assessment process also affect assessment process in early childhood settings (Teacher B)

Also, a teacher said that:

One problem teacher encountered from the pupils is that, some pupils have difficulty giving feedback during assessment. Since most children are old enough, they have difficulty responding to written work. (Teacher J)

Another teacher asserted that:

Most of us are not well vest in the assessment of kindergarten children. In view of that the only method we usually use is writing and reading. There is also problem of unqualified personnel which hinders the implementation of collaborative and participatory assessment (Teacher D)

It is clear from the responses that in the process of Kindergarten teachers assessing their pupils they are faced by some factors which impede the smooth operation of their work. These among others include; Inadequate teaching and learning materials and children inability to respond to assessment items due to their inability to communicate in English language. Also, uncooperative attitude of some parents and children to participate in assessment process couple with the children irregularities in school impede assessment process. Lastly, problem of unqualified personnel hinders the conduction and implementation of assessment process.

4.2 Discussion of the Findings

Research Question One: What are the main learning areas ECE teachers assess?

From Table 4.5, on the statement learning areas ECE teachers assess during assessment; it was found that ECE teachers agreed that they assessed the cognitive skills of their learners. It was also obvious from the interview responses on learning areas ECE teachers assessed during assessment that teachers assess pupils' understanding of the concept, knowledge and their total cognitive development. For instance, on the statement, I assess learners understanding of concepts, vast majority of the ECE teachers strongly agreed with few of the of the ECE teachers strongly disagreed that they assess learners understanding of the concept.

The above analysis is in line with Gelman, Brenneman, Macdonald and Román (2009) who opined that the preschool teacher is charged, every day, with observing children and communicating with them in ways that support their functioning, learning, and thinking in cognitive, social, physical, and emotional areas of development. The adult observes and interacts with children to gain information, then responds with activities, discussions, materials, and questions that encourage

children to explore and learn more about the world around them. Meeting all these, the teachers need to understand child development and the expected sequences of learning across multiple domains.

Also, measures used to assess effects of the Preschool Pathways to Science have included tasks similar to those used in developmental work, such as tests of children's understanding of the sources of their knowledge or their knowledge about setting up an informative experimental test (Gelman et al., 2009). Lastly, Tomlinson and Hyson (2012) stated that young children's social/emotional growth and learning occurs as a result of their interactions with others and is interconnected with their development in the physical and cognitive domains. Relationships with adults and children in the preschool environment exert a powerful positive influence on children's social/emotional development (Tomlinson & Hyson, 2012).

Preschool teachers support young students' developing self-concepts and self-esteem by talking with them about their actions and accomplishments and by always showing respect for their feelings and cultures. Throughout the day, teachers coach and guide children as they interact with each other, and they support children's social skills and problem-solving abilities. Within this community of learners, children develop the social and emotional competencies they need to fully immerse themselves in the preschool day and become successful learners.

Besides, assessing learners' language skills been another sub theme which emerged from the learning areas ECE teachers assess during assessment about 90% of the ECE teachers agreed they assess children language skills. It was also clear from the interview responses that ECE teachers assessed KG children's language skills; Kindergarten teachers in Sefwi Wiawso assess learner's speaking skills, reading skills and listening skills. For instance, on the statement, I assess learners speaking skills,

majority of the ECE teachers agreed, and with the few of the ECE teachers disagreeing that they assess learners speaking skills. Also, about 80% of the ECE teachers agreed, with hand few of them disagreeing that they assess learners listening skills.

The above analysis is in agreement with Chittenden and Jones (1999) who opine that Early Science Learning provides early educators with an assessment framework and strategies to systematically collect and use children's behaviour, language, and work products to guide instruction. The authors suggest that "a first purpose of assessment in early science education is to help teachers observe, record, and reflect upon children's investigations of the natural world" (p. 1). In this view, assessment is less about identifying children's strengths and weaknesses than about supporting teachers as observers and interpreters of children's knowledge-building processes so that they can better support these processes (Chittenden & Jones, 1999).

Furthermore, social skills were another sub theme which emerged from the learning areas ECE teachers assessed during assessment. As many as 90% of the respondents agreed that they use diverse strategies such as learner's interaction skills and participation in group activities. For instance, on the statement, I assess learners' interactional skills, almost all the ECE teachers agreed, thirty with the rest disagreeing that during assessment, they assess learners interaction skills. Also, 92% of the ECE teachers agreed, while the remaining 8% of the ECE teachers disagreed that they assessed learners participation in group activities. It was also clear from the interview responses that in ECE teachers attempt to assess KG children's social skills, Kindergarten teachers in Sefwi-Wiawso assessed learner's speaking skills how they play during play time, how they performing an activity individually and in group and social skills they exhibit. The revelation above is in line with Chittenden and Jones

(1999) who stipulated that the evaluation process involves identifying evidence of children's science learning during everyday classroom activities by collecting data over time from multiple sources. These sources include actions, talk, and artifacts that children create individually and in collaborative groups. Individual student portfolios composed of teachers' descriptions of on-going behaviour and conversations as well as children's work products (drawings, concept webs, science journals, sculptures, models, and so on) provide evidence used to assess children's understandings (see also Gelman et al., 2009; Worth & Grollman, 2003). This information is interpreted and applied to inform instruction and support new learning. As teachers practice these assessment procedures, they become more skilled as observers of children's scientific thinking and behaviour and are in an increasingly better position to support pre-schoolers' learning and development in science and other related domains.

Tomlinson and Hyson (2012) stated that young children's social/emotional growth and learning occurs as a result of their interactions with others and is interconnected with their development in the physical and cognitive domains. Relationships with adults and children in the preschool environment exert a powerful positive influence on children's social/emotional development. A high quality preschool program requires dedicated and qualified teaching staff, working in partnership with children's families, to systematically assist children in developing social competence and confidence.

Lastly, Tomlinson and Hyson further stated that as children move through the preschool day, their teachers carefully observe and listen to them and adapt their responses to suit individual children's social and emotional needs. Preschool teachers support young students' developing self-concepts and self-esteem by talking with them about their actions and accomplishments and by always showing respect for

their feelings and cultures. Throughout the day, teachers coach and guide children as they interact with each other, and they support children's social skills and problem-solving abilities. Within the community of learners, children develop the social and emotional competencies they need to fully immerse themselves in the preschool day and become successful learners.

Teachers who use the Galileo System (Bergan, Burnham, Feld, & Bergan, 2009), in which they judge whether particular readiness skills are learned based on having observed a child demonstrating the skill or knowledge under three different circumstances, similarly would benefit from gathering evidence of children's science learning as they complete their ratings.

More so, physical development skills were discussed as the learning areas ECE teachers assessed during assessment. About 85% agreed that they assess learners' outdoor- indoor manipulative and play skills of the children. For instance, on the statement, I assess learner's outdoor- indoor manipulative and play skills, vast majority of the ECE teachers agreed with few of them disagreeing that they assess learners outdoor- indoor manipulative and play skills. Again, majority of the ECE teachers agreed with the rest of them disagreeing that they assess learners' grip of objects and writing tools. This is in agreement with Bergan et al. (2009) who opine that, a high-quality preschool program requires dedicated and qualified teaching staff, working in partnership with children's families, to systematically assist children in developing manipulative competence and confidence. As children move through the preschool day, their teachers carefully observe and listen to them and adapt their responses to suit individual children's social, physical and emotional needs.

Research Question 2: What assessment strategies do teachers employ for learners in ECE at the Sefwi-Wiawso Municipality?

From Table 4.6, on the question strategies ECE teachers use when assessing ECE learners; it emerged from the responses from the teachers that, about 86% of teachers used observation as a strategy during assessment while the rest disagreed. It was also obvious from the interview responses that teachers used observation as an assessment strategy in assessing ECE learners. For instance, on the statement, I closely watch learners when they are performing in-door and out-door activities, majority of the ECE teachers chose agreed, while the rest chose disagreed that they closely watch learners when they are performing activities. Also, teachers observed children individually and in a group. The above analysis is in conformity with Forman and Hall (2005) who made the case for determining children's beliefs, expectations, and assumptions through observation to spark meaningful, high-level quality conversations with them. They contend while observation is helpful for learning about children's interests, developmental levels, skills, and personalities, it does not actually lead to having more breadth and depth in conversations that support learning. This breadth and depth can only be achieved by looking deeper than just a transcription of what children say and do, and contemplating the meaning behind these.

Also, focal to assessment is the practice of observation, a process used to inform educators on supporting children's learning and recognising their progress (Linfield et al., 2008). Observation is also a tool for reviewing characteristics of the curriculum its –strengths, weaknesses, gaps, and inconsistencies (p. 113)” as well as the provision provided (Nutbrown & Carter, 2010). However, observation is meaningless without reflection. The value of this process is seen when time is taken to

contemplate and interpret what has been observed to plan and guide curriculum and practice (Hayes, 2007; Nutbrown & Carter, 2010).

Glazzard and colleagues (2010) agree that assessing children based on observations in their environment through independent learning and adult directed learning is an effective assessment process for developing a comprehensive picture of the child's capabilities.

In addition, Basford and Bath (2014) stated that simply watching children is much different than observing them. Through practice, caregivers must learn to closely observe children to better understand their actions and development. For a comprehensive assessment, observations should be made at a variety of children's activities and be on-going in order to fully see the progress of a child. Observations can be made with minimal or no intrusion into children's activities. Educators can observe all facets of development, including intellectual, linguistic, social-emotional, and physical development, on a regular basis.

Secondly, anecdotal records emerged as strategies ECE teachers use when assessing ECE learners. Majority of the ECE teachers agreed that they used anecdotal records as a means of obtaining information from the children. It was also obvious from the interview responses ECE teachers adopt anecdotal record strategy to assess their pupils. For instance, I record whatever I see about learner based on time, date. Besides, majority of the ECE teachers agreed while the remaining teachers disagreed that they write down information on learners when they are playing.

These include recording the vital information about the children. The above revelation is in agreement with what Chan and Wang, (2010) said that, anecdotal can be recorded in any setting and required no special training. All you need is paper and a writing tool to record what happened in a factual, objective manner. The observation

is open-ended, continuing until everything is witnessed. It is like a short story in that it has a beginning, middle, and end. The process of recording the incident requires a careful eye and quick pencil to capture all of the details. You will need to note who was involved, what happened, when it happened, and where it occurred. It needs to be done promptly and accurately.

Thirdly, visual documentation was another strategy ECE teachers used when assessing ECE learners. Majority of the ECE teachers agreed to the above statement. It was also clear from the interview responses that ECE teachers used pictures of children art and play for assessment. For instance, on the statement, used videos of learners' dramatic play to gather the necessary information of the pupils, majority of the ECE teachers agreed, while few of the ECE teachers disagreed that they take pictures of children art and play for assessment.

The above responses are in line with Katz and Chard (1996) who opine that documentation when done well, is said to promote quality in early childhood programs by enhancing children's learning, showing serious consideration for children's idea and work, being an avenue for planning and evaluation with children, fostering parent appreciation and participation, operating as a kind of educator research, and making children's learning visible (Katz & Chard, 1996).

Again, documentation leads to a critical examination of discourses about children and childhoods prevailing in practice (less disciplining). The democratic practice of evaluation within the ECE sector indicates a collaboration and co-construction of knowledge and learning that the whole community identifies with (Moss, 2008). The lack of involvement of children in assessment and documentation processes is considered a missed opportunity to allow for children's self-expression (Bath, 2012). Children take an active part in conversations where they have interest

and knowledge about the topic, the likelihood of which increases when educators allow for them to communicate and be listened to (Carr, 2011).

Karlsdóttir and Garðarsdóttir (2010) support the view of children as capable beings and reinforce the value of documentation in the ECE context. Children are found to be skilful communicators and the documentation process makes way for meaningful dialogue to occur between educators and children (Buldu, 2010). Through documentation, children's strengths and capabilities are made known to educators, which serve as an informative tool for planning and self-reflection (Buldu, 2010; Karlsdóttir & Garðarsdóttir, 2010).

More so, as findings suggest, documentation enhances the process of supporting and scaffolding children's learning (Buldu, 2010; Karlsdóttir & Garðarsdóttir, 2010). The movement away from a deficit model emphasises children's self-awareness, and documentation has been shown to encourage self-evaluation and peer assessment which contributes to increasing motivation and an interest in learning (Buldu, 2010).

Nevertheless, the challenge of involving children in reflecting on visual documentation was acknowledged, with particular reference to the time needed to adapt to the changes in the setting dynamic and assessment process (Karlsdóttir & Garðarsdóttir, 2010). Besides, it might be argued that, in spite of the issues associated with formative assessment, it does yield some benefit in the ECE context. Research evidence suggests that formative assessment has a positive impact in providing cognitive challenge and developing a partnership between children and adults to support learning (Siraj-Blatchford et al., 2002). Research also supports the value that documentation adds to formative assessment, and how it may serve as a means to address the challenges linked to traditional, standardised assessments, creating the

opportunity for educators to have a richer understanding of children's holistic development (Casbergue, 2010).

Also, Buldu (2010) who study focused on educators developing the documentation panels themselves, which were then shared with children and parents. Both the content and process are important in pedagogical documentation, as the content offers concrete and visible illustrations of pedagogical work while the process provides an avenue for reflective practice (Dahlberg et al., 2007).

Buldu (2010) further opined that visual documentation refers to collecting or photographing samples of a child's work that portrays learning and development. Visual documentation provides a record that can be studied. Other assessment methods such as rating scales, checklists, anecdotal records all involve on-the-spot interpretation. This can make it difficult to be completely objective when recording the children's behaviour.

Fourthly, checklist is another strategy ECE teachers use when assessing ECE learners. On this strategy, almost all the ECE teachers who responded to the questionnaire agreed to the statement grounded from the interview responses it was clear that ECE teachers adopt checklists strategies such as structured writing and listening and questionnaire in assessing as ECE learners. For instance, on the statement I assess learners specifically on different learning areas, about majority of the ECE teachers agreed with the rest of the ECE teachers answering disagreed. The above analysis is in line with Chan and Wong (2010) who asserted that checklists may be designed for any developmental domains - physical, social, emotional, or cognitive). A checklist that is carefully designed can tell a lot about one child or the entire class. Checklists may be developed to survey one child or a group of children. The targeted behaviour are listed in logical order with similar items grouped together.

Therefore, you can quickly record the presence or absence of a behaviour. Typically, a checklist indicates the presence of a behaviour. Checklists require structuring. You may be able to purchase commercially prepared checklists. Most teachers working in child care centres structure their own (Chan & Wong, 2010)

Research Question 3: What Skills are needed by the teachers in assessing ECE learners?

From Table 4.7, on the question, skills needed by the teachers in assessing ECE learners; the teachers should be skilled in assessment. Majority of the ECE teachers agreed that they should be skilled in assessment. For instance, on the statement, I am, well trained to assess learners, majority of the ECE teachers agreed to the above statement while few of the them disagreed that they understand assessment methods appropriately for instructional decisions. The analysis above is in line with Anane and Anhwere (2013) who opine that skills in choosing appropriate, useful, administratively convenient, technically adequate, and fair assessment methods are prerequisite to good use of information to support instructional decisions. Teachers need to be well-acquainted with the kinds of information provided by a broad range of assessment alternatives and their strengths and weaknesses. In particular, they should be familiar with criteria for evaluating and selecting assessment methods in light of instructional plans.

Better still, teachers who meet this standard will have the conceptual and application skills that follow. Teachers will be able to use the concepts of assessment error and validity when developing or selecting their approaches to classroom assessment of students. Teachers will understand how valid assessment data can support instructional activities such as providing appropriate feedback to students, diagnosing group and individual learning needs, planning for individualized

educational programs, motivating students, and evaluating instructional procedures. Teachers will understand how invalid information can affect instructional decisions about students. They will also be able to use and evaluate assessment options available to them, considering among other things, the cultural, social, economic, and language backgrounds of students (Anane & Anhwere, 2013).

In addition, Geary (1995) asserted that while teachers often use published or other external assessment tools, the bulk of the assessment information they use for decision-making comes from approaches they create and implement. Indeed, the assessment demands of the classroom go well beyond readily available instruments. Teachers who meet this standard will have the conceptual and application skills that follow. Teachers will be skilled in planning the collection of information that facilitates the decisions they will make. They will know and follow appropriate principles for developing and using assessment methods in their teaching, avoiding common pitfalls in student assessment. Such techniques may include several of the options listed at the end of the first standard. The teacher will select the techniques which are appropriate to the intent of the teacher's instruction.

Besides, majority of the respondents agreed that the understanding of assessment methods was appropriately for instructional decisions. For instance, on the statement, most ECE teachers agreed with few of the ECE teachers opted disagreement. Their views were supported by Downs and Strand (2006) who posit that it is not enough that teachers are able to select and develop good assessment methods; they must also be able to apply them properly. Teachers should be skilled in administering, scoring, and interpreting results from diverse assessment methods.

More so, teachers who meet this standard will have the conceptual and application skills that follow. They will be skilled in interpreting informal and formal teacher-produced assessment results, including pupils' performances in class and on homework assignments. Teachers will be able to use guides for scoring essay questions and projects, stencils for scoring response-choice questions, and scales for rating performance assessments. They will have a conceptual understanding of the summary indexes commonly reported with assessment results: measures of central tendency, dispersion, relationships, reliability, and errors of measurement (Downs, & Strand, 2006).

Again, majority of the ECE teachers agreed that they need writing and reporting skills to administer, score and interpret the results of both externally-produced and teacher-produced assessment methods. For instance, on the statement, nearly all the ECE teachers agreed with section of them disagreeing to the statement. This is in agreement with Fisher and King (1995) that, teachers must routinely report assessment results to students and to parents or guardians. In addition, they are frequently asked to report or to discuss assessment results with other educators and with diverse lay audiences. If the results are not communicated effectively, they may be misused or not used. To communicate effectively with others on matters of student assessment, teachers must be able to use assessment terminology appropriately and must be able to articulate the meaning, limitations, and implications of assessment results. Furthermore, teachers will sometimes be in a position that will require them to defend their own assessment procedures and their interpretations of them.

Furthermore, teachers who meet this standard will have the conceptual and application skills that follow. Teachers will understand and be able to give appropriate explanations of how the interpretation of student assessments must be moderated by the student's socio-economic, cultural, language, and other background factors. Teachers will be able to explain that assessment results do not imply that such background factors limit a student's ultimate educational development (Fisher & King, 1995). They will be able to communicate to students and to their parents or guardians how they may assess the student's educational progress. Teachers will understand and be able to explain the importance of taking measurement errors into account when using assessments to make decisions about individual students.

More so, majority of the teachers responded that they have the skills to use assessment results when making decisions about learners few of them disagreeing to it. For instance, on the statement; I have the skills to use assessment results when making decisions about learners. Almost all of them agreed whiles disagreed that conducting ECE assessment, they have the skills to use assessment results when making decisions about learners. This is in line with, what Downs and Strand (2006) said that teachers will be able to apply the concepts of score and summary indices in ways that enhance their use of the assessments that they develop. They will be able to analyse assessment results to identify pupils' strengths and errors (Downs & Strand, 2006). Fisher and King (1995) are of that assessment results are used to make educational decisions at several levels: in the classroom about students, in the community about a school and a school district, and in society, generally, about the purposes and outcomes of the educational enterprise. Teachers play a vital role when participating in decision-making at each of these levels and must be able to use assessment results effectively.

When using assessment results to plan and/or evaluate instruction and curriculum, teachers will interpret the results correctly and avoid common misinterpretations, such as basing decisions on scores that lack curriculum validity. Teachers who meet this standard will have the conceptual and application skills that follow. They will be able to devise, implement, and explain a procedure for developing grades composed of marks from various assignments, projects, in class activities, quizzes, tests, and/or other assessments that they may use. Geary (1995) asserted, that grading is defined as indicating both a student's level of performance and a teacher's valuing of that performance. The principles for using assessments to obtain valid grades are known and teachers should employ them.

Fisher and King (1995) further stated that teachers who meet this standard will have the conceptual and application skills that follow. They will be able to use accumulated assessment information to organize a sound instructional plan for facilitating students' educational development. Geary further stress that teachers will understand and be able to articulate why the grades they assign are rational, justified, and fair, acknowledging that such grades reflect their preferences and judgments. Teachers will be able to recognize and to avoid faulty grading procedures such as using grades as punishment. They will be able to evaluate and to modify their grading procedures in order to improve the validity of the interpretations made from them about students' attainments.

Lastly, majority of the respondents who answer the questionnaire that they need skills in communicating assessment results to pupils, parents, other lay audiences, and other educators. This confirms the literature that, best practices at the kindergarten level include effective communication, according to research presented in 2010 in the Southern Regional Association of Teacher Educators Journal.

Kindergarten teachers must network with other instructors and work with administrators. Instructors must also have the ability to explain child assessments to parents during open houses and special academic school meetings. The most important interpersonal skills for kindergarten teachers involve the ability to talk with students, and create a relaxed atmosphere that encourages young students to feel comfortable talking about academic subjects and personal problems that influence learning (Anane & Anhwere, 2013).

It can be deduced from both interview and questionnaire responses that in order for the teachers to comprehensively assess their children, they need to possess some vital skills such as writing and reporting skills to enhance my skills in order to administer score and interpret the results good communication in order to communicate assessment results to pupils and parents. Besides, they also need analytic skilled in developing assessment methods appropriate for instructional decisions.

What Challenges do teachers face in assessing ECE learners in Sefwi-Wiawso Municipality?

From Table 8, on the statement challenges teachers face in assessing children in ECE; some of the respondents agreed that inadequate time affect assessment process of their learners. Besides, majority of the ECE teachers agreed that uncooperative attitude of some parents and children to participate in assessment process affect assessment process in early childhood settings. In addition, 63%, of the ECE teachers agreed that lack of qualified personnel hinder the implementation of collaborative and participatory assessment.

It was clear from the findings that in the process of Kindergarten teachers assessing their pupils, they are faced by some factors which impede the smooth operation of their work. These among others include; Inadequate teaching and learning materials and equipment. For instance, some of the respondents agreed that inadequate equipment and materials in schools hinders the early learners' assessment process. This is in line with study by National Research Council (2001) which stated that there are other factors that may hinder the implementation of collaborative and participatory assessment, such as relevant professional training, a needed paradigm shift with regards to measurement and testing, and a reframing of expectations of families and the community. Apart from this, other structural aspects such as 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 (Buldu, 2010).

Furthermore, children inability to respond to assessment items due to their inability to communicate in English language. The above analysis is in conformity with Basford and Bath (2014), who argue that in the English context, there is a challenge in having children participate as agents in early childhood settings, not least because of frameworks with an inclination towards learning outcomes. They discussed the tensions that exist for practitioners who are influenced by competing assessment paradigms – the positivist, or developmental, and the sociocultural. The authors suggest that issues surface from this in practice, particular in assessment translate to a wide range of practices as educators seek to track children's learning alongside their conceptions of development and academics (DeLuca & Hughes, 2014). Again, Payler (2009) notes that settings that focused on learning outcomes and used scaffolding to achieve them seemed to reflect a negative perception of children

as less able, which may affect their developing identities as learners. This was in contrast to settings seen to be oriented more towards care and socialisation that also promoted co-construction between adults and children. The author also presents an alternative approach observed in the preschool setting, characterized by facilitating predetermined goals in a collaborative environment. Be that as it may, it can also be gathered from research that educators are able to negotiate among the demands and expectations they are faced with, retaining some autonomy and adapting the demands and expectations to their curricular stance and assessment practice (Pyle & DeLuca, 2013).

Also, uncooperative attitude of some parents and children to participate in assessment process couple with the children irregularities in school impede assessment process. For instance, majority of the ECE teachers agreed that uncooperative attitude of some parents and children to participate in assessment process affect assessment process in early childhood settings. This is in agreement with the literature that, despite the perceived advantages of carrying out assessment in early childhood settings, there are also challenges encountered by educators in realizing this in practice. For instance, a focus on ensuring a smooth transition from ECE to primary school, as well as demanding parental expectations, bring pressure to educators working in the sector (Mears, 2009). Research has also revealed tensions arising from the different perspectives on children and children's learning. For instance, Korean educators are challenged with a disconnect between emphasising the traditional value of academic achievement in ECE and adopting the more constructivist approach that has been introduced from the West (Nah, 2014).

Lastly, problem of unqualified personnel hinders the conduct and implementation of assessment process. For instance, some of the ECE teachers agreed that lack of qualified personnel hinder the implementation of collaborative and participatory assessment. The above revelation was confirmed by Buldu (2010) who stipulated that other factors such as unqualified personnel, 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 (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).

Assessment is also challenging during early childhood because a child's development is rapid, uneven, episodic, and highly influenced by the environment (Shepard, Kagan & Wurtz, 1998). A developing child exhibits periods of both rapid growth and frequent rest. Children develop in four domains physical, cognitive, social, and emotional and not at the same pace through each. No two children are the same; each child has a unique rate of development. In addition, no two children have the same family, cultural, and experiential backgrounds. Clearly, these variables mean that a "one-size-fits-all" assessment will not meet the needs of most young children (Shepard, et al.1998).

It was observed that some of the respondents agreed that inadequate time affect assessment process of their learners and this was supported by Neuman, Copple & Bredekamp, (2000) who asserted that another assessment challenge for young children is that it takes time to administer assessments properly. Assessments primarily should be administered in a one-on-one setting to each child by his or her teacher. Neuman et al. (2000) further opined that a child's attention span is often very

short and the assessment should therefore be administered in short segments over a period of a few days or even weeks. While early childhood educators demand developmentally appropriate assessments for children, they often complain about the time it takes to administer them and the resulting loss of instructional time in the classroom. However, when quality tests mirror quality instruction, assessment and teaching become almost seamless, complementing and informing one another (Neuman, Copple & Bredekamp, 2000).

In addition to this, there are also factors that may hinder the implementation of collaborative and participatory assessment, such as relevant professional training, a needed paradigm shift with regards to measurement and testing, and a reframing of expectations of families and the community (National Research Council, 2001).

Assessment is also challenging during early childhood because a child's development is rapid, uneven, episodic, and highly influenced by the environment (Shepard, Kagan & Wurtz, 1998). A developing child exhibits periods of both rapid growth and frequent rest. Children develop in four domains physical, cognitive, social, and emotional and not at the same pace through each. No two children are the same; each child has a unique rate of development. In addition, no two children have the same family, cultural, and experiential backgrounds. Clearly, these variables mean that a "one-size-fits-all" assessment will not meet the needs of most young children (Shepard, et al., 1998).

Another assessment challenge for young children is that it takes time to administer assessments properly. Assessments primarily should be administered in a one-on-one setting to each child by his or her teacher. In addition, a child's attention span is often very short and the assessment should therefore be administered in short segments over a period of a few days or even weeks. While early childhood educators

demand developmentally appropriate assessments for children, they often complain about the time it takes to administer them and the resulting loss of instructional time in the classroom. However, when quality tests mirror quality instruction, assessment and teaching become almost seamless, complementing and informing one another (Neuman, Copple & Bredekamp, 2000).



CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter deals with the summary, conclusions and recommendations made on the findings from the study which was on teachers' assessment practices of early childhood learners in Sefwi-Wiawso Municipality

5.1 Summary

The purpose of the study was to explore teachers' assessment practices of early childhood learners in Sefwi-Wiawso Municipality in the Western Region of Ghana.

It specifically sought to:

- i. Examine the main learning areas ECE teachers assess learners at Sefwi Wiawso Municipality.
- ii. Investigate the strategies ECE teachers use in assessing Learners at Sefwi Wiawso Municipality.
- iii. Examine the skills that are needed by the teachers in assessing ECE learners at Sefwi Wiawso Municipality.
- iv. Explore the challenges teachers face when assessing ECE learners at Sefwi Wiawso Municipality.

The study employed the descriptive survey design. The instruments for data collection were a semi-structured interview and close ended questionnaire. The sample involved 110 respondents made up of 80 early childhood teachers 29 head teachers from selected public schools and 1 early childhood coordinator in the

municipality out of total population of 276. Municipal coordinator of early childhood Education was purposively sampled while the head teachers and the teachers were conveniently sampled. The data was analysed using thematic approach and descriptive method involving percentages and frequencies and the findings were observed:

5.2 Summary of Major Findings

The study revealed that, the learning areas ECE teachers assess during assessment involved assessing pupils understanding of the concept, knowledge level, and their total cognitive development. It is also obvious that in ECE, teachers assessed KG children's social skills. Besides, Kindergarten teachers in Sefwi Wiawso assessed learners' language skills during playing time on how they performing activities individually and in groups and on the kind of social skills they exhibit.

More so, the results of the study revealed that KG teachers used strategies such as observation to assess their pupils. Besides, they adopted anecdotal records analyses strategy in assessing as ECE learners. Also, teachers adopted visual documentation and checklist in assessing as ECE learners.

Furthermore, the study revealed that in order for the teachers to comprehensively assess their children they need to possess some vital skills such as writing and recording skills to enhance my skills in order to administer score and interpret the results good communication in order to communicate assessment results to pupils and parents. Besides, they also needed analytical skills in developing assessment methods appropriate for instructional decisions.

Besides, on the factors which impede process of Kindergarten teachers' assessment, the study revealed that inadequate teaching and learning materials and children inability to respond to assessment items due to their inability to communicate

in English language. Also, uncooperative attitude of some parents and children to participate in assessment process couple with the children's irregularities in school impede assessment process. Lastly, problem of unqualified personnel hinders the conduction and implementation of assessment process.

5.3 Conclusions

Based on the findings, the study revealed the learning areas ECE teachers assess during assessment included pupils understanding of the concept knowledge level and their total cognitive development. It is also obvious that in ECE teachers assess KG children's social skills. Besides, Kindergarten teachers in Sefwi Wiawso assess learners' language skills during playing time on how they performing activities individually and in groups and on the kind of social skills they exhibit.

Additionally, the KG teachers use strategies such as observation to assess their pupils. Besides, they adopt anecdotal records strategy in assessing as ECE learners. Also, teachers adopt visual documentation and checklist in assessing as ECE learners.

To add with, the factors which impede process of Kindergarten teachers' assessment, the study revealed that inadequate teaching and learning materials and children inability to respond to assessment items due to their inability to communicate in English language. Also, uncooperative attitude of some parents and children to participate in assessment process couple with the children irregularities in school impede assessment process. Lastly, problem of unqualified personnel hinders the conduction and implementation of assessment process.

Lastly, the study revealed that in order for the teachers to comprehensively assess their children, they need to possess some vital skills such as writing and recording skills to enhance my skills in order to administer score and interpret the results good communication in order to communicate assessment results to pupils and

parents. Besides, they also need analytic skill in developing assessment methods appropriate for instructional decisions

The researcher wishes to conclude that the authorities of Ghana Education Service should equip the Kindergarten schools with adequate teaching and learning materials so to minimise the problems. Besides the Ghana Education Service should post qualify Kindergarten to the schools in Wiawso Municipality in order for them to carry comprehensive assessment. In addition, there should be frequent in-service and refresher programmes so as to equip the KG teachers and those who are directly involve on identification and the use assessment strategies.

5.4 Recommendations

The following recommendations were made in the light of the findings of the study:

1. KG teachers should widen their assessment to all learning areas such as, Emotional and affective domains. This will enhance holistic development of the child.
2. Teachers should use other strategies like, rating scales, portfolio assessment to enhance their practice in early childhood education.
3. The authorities of Municipal Education Directorate should organise frequent in-service and refresher programmes so as to equip the KG teachers with the needed skills such as writing and reporting skills to interpret and report assessment scores to parents and all those who matter.
4. Teachers should be encouraged to improvise the needed teaching learning materials at the ECE centres to help teachers assess learners in all the learning areas.

5.5 Suggestions for Further Research

The following areas are suggested for further research:

Explore pre-service teachers' assessment practices in early childhood colleges of education in Ghana.



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APPENDICES

APPENDIX A

LETTER OF INTRODUCTION FROM THE DEPARTMENT



FES/DECE/S.6

16th February, 2018

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Dear Sir/Madam,

INTRODUCTORY LETTER

The bearer of this letter, Ms./Mr./Mrs./Rev./Sis. *Georgina Martha* with index number *8160119016* is a Second Year M.Phil student in the Department of Early Childhood Education, University of Education, Winneba.

He/she is to collect data as part of the requirement in the University in your noble institution. I shall be grateful if he/she is offered the necessary assistance needed in that direction.

Thank you.

Yours faithfully,

SAMUEL OPPONG FRIMPONG (PH.D.)
AG. HEAD OF DEPARTMENT

DEPT. OF EARLY CHILDHOOD CARE & DEVELOPMENT
UNIVERSITY OF EDUCATION
P. O. BOX 25
WINNEBA




APPENDIX B

LETTER OF INTRODUCTION FROM THE MUNICIPAL DIRECTORATE

GHANA EDUCATION SERVICE
(WESTERN REGION)

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

E-mail: wiaawsoeod@gmail.com
My Ref. No.: MECW:
Your Ref No.:


REPUBLIC OF GHANA

Municipal Education Office
P.O. Box 75
Sefwi Wiawso


17th August, 2018

INTRODUCTORY LETTER
MISS. GEORGINA MARTIN
UNIVERSITY OF EDUCATION, WINNEBA

The bearer of this letter Miss. Georgina Martin is a student of University of Education, Winneba, she is pursuing Master of Philosophy Programme in Early Childhood Education, and has been permitted by the Municipal Directorate of Education to enter your school and collect data in connection with her programme of study.

I shall be grateful if you could cooperate with her and provide her the necessary information.

I count on your co-operation.


(THOMAS C. ACHEAMPONG)
MUNICIPAL DIRECTOR OF EDUCATION
SEFWI WIAWSO

ALL PUBLIC AND PRIVATE
PRIMARY SCHOOLS

APPENDIX C

QUESTIONNAIRE FOR EARLY CHILDHOOD TEACHERS

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF EARLY CHILDHOOD

The following items have been designed to gather data on Teachers' assessment practices on early learners in Sefwi-Wiawso Municipality. This is purely an academic exercise and the response you would provide will be treated as confidential.

Instruction: Please tick [] boldly against your responses.

SECTION A

Background Information of the Teachers

Sex:

Male [] Female []

Ageyears

20-30 [] 31-40 [] 41-50 [] 51and above []

Qualification

Post- secondary [] Diploma in education [] Bachelor of education []

Master of education [] Number of years taught 1-5 [] 5-10 [] 10 – []

SECTION B: Teachers' of assessment practices of early childhood learners in Sefwi-Wiawso Municipality.

The table below presents data on teachers' assessment practices of early childhood learners in Sefwi-Wiawso Municipality Where 1 is Strongly Disagree, 2 is Disagree, 3 is Agree, and 4 is Strongly Agree please indicate your preferred option by ticking in the appropriate box.

Learning areas ECE teachers assess during assessment	4	3	2	1
I assess learners understanding of concepts				
I assess learners ability to remember simple instructions				
I assess learners sorting, ordering and matching skills				
I assess learners thinking ability				
I assess learners speaking skills				
I assess learners listening skills				
I assess learners reading skills				
I assess learners interactional skills				
I assess learners participation in group activities				
I assess learners self-confidence skills				
I assess learners outdoor- indoor manipulative and play skills				
I assess learners' grip of objects and writing tools				
I assess learners skills				
I assess learners drawing skills				
I assess learners colouring skills				

Strategies ECE teachers in assessing ECE learners	4	3	2	1
I closely watch learners when they are performing in-door and out-door activities				
I gather learners exercises and other works for making decision about them				
I take pictures of children art and play for assessment				
I assess learners when performing group assignments				
I take videos of learners dramatic play in and outside the class for assessment				
I write down information on learners when they are playing				
I record whatever I see about learner based on time, date etc.				
I write down information about Learners from beginning and end of every term				
I assess learners specifically on different learning areas				

I assess learners individually and in groups about their creative skills				
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Skills needed by the Teacher in assessing ECE learners	4	3	2	1
I am well trained to assess learners				
I understand assessment methods appropriately for instructional decisions				
I need writing and reporting skills to administer, scoring and interpreting the results of both externally-produced and teacher-produced assessment methods				
I have the skills to use assessment results when making decisions about learners.				
I have skills in communicating assessment results to pupils, parents, other lay audiences, and other educators.				

Challenges teachers face in assessing children in ECE	4	3	2	1
Inadequate time affect assessment process of my learners				
Uncooperative attitude of some parents and children to participate in assessment process affect assessment process in early childhood settings				
Lack of qualified personnel hinder the implementation of collaborative and participatory assessment				
Inadequate equipment and materials in my school hinders the early learner's assessment process				

APPENDIX D

INTERVIEW GUIDE FOR REGULAR PEERS

Main learning areas ECE teachers assess during assessment

What domain/area do you concentrate when you are assessing your children?

Prompts:

- a. Any other areas do you assess?
- b. What other domain/areas do you assess?
- c. Can you tell me more?

Strategies ECE teachers use in assessing ECE learners

- a. What method you use to assess your ECE pupils?
- b. What other methods do you employ when assessing your ECE children?
- c. What other strategy do you use during assessment?

Skills needed by the Teacher in assessing ECE learners

- a. What kind of skills do you need to assess your children?
- b. Any other skills you require?
- c. What other skills do you need in other to assess your children?

Challenges teachers face in assessing children in ECE

- a. What are some of the problems you face in assessing your children?
- b. What other problem do you face?
- c. What other problem do you face when assessing your children?