CHALLENGES KINDERGARTEN TEACHERS FACE IN ADMINISTERING ASSESSMENT TOOLS TO CHILDREN WITH INTELLECTUAL DISABILITIES IN THE KUMASI METROPOLIS

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Abstract

**Purpose:** The purpose of this study was to examine the challenges kindergarten teachers face in administering assessment tools to children with intellectual disabilities in the Kumasi Metropolis.

**Methodology:** Regarding the methodology, a descriptive survey design was adopted using a sample of 120 early childhood teachers from 22 public inclusive schools in the Kumasi Metro. Purposive sampling technique was used to select all 22 public inclusive schools, while convenience sampling technique was employed to select the actual respondents for the study. Questionnaire was used to gather the research data. Means (M) and Standard deviations (SD) were used as statistical tools to analyze the data.

**Findings:** The findings revealed that most public kindergartens teachers in the Kumasi metropolis admitted not being confident enough to try out authentic assessments like portfolios, learning logs, journals, projects graphic organizers, concept mapping and rubrics on children with intellectual disabilities in inclusive public schools (M=3.84, SD=.575, KS=.620) due to inadequate professional guidance. It was therefore recommended that teachers should be equipped with skills and morale in administering authentic assessment practices to learners with intellectual disabilities. The study would serve as an important reference source for inclusive public and private kindergarten teachers, headmasters/mistresses, Teacher Education Division (TED), Early Childhood Care and Development Division (ECCDD) and Special Education Division (SED) of the Ghana Education Service (GES), University of Education (UEW) and the Institute of Education, (IoE) of the University of Cape Coast, (UCC) and other private educational institutions that train teachers in their effort to improve the management of testing with the adequate information about what is actually involved in assessment practices in the Early Childhood Centres.

**Unique contribution to theory, practice and policy:** Besides, the study would contribute to the improvement of testing practices, specifically, on children with intellectual disabilities on construction, administration, and scoring of teacher-made tests in the inclusive early childhood centres. The constructivist learning theory by Lev Vygotsky, which was adopted for this study, postulated that children learn best when they are allowed to construct a personal understanding based on experiencing things and reflecting on those experiences.

**Keywords:** Assessment Tools, Children, Intellectual Disabilities, Kindergarten, Teachers.
INTRODUCTION

Teaching, as a practice is hinged on assessment: for there cannot be effective teaching without further assessing whether what has been taught has gone down well or not. Hence assessment is an important component of teaching (Dhindsa, Omar, & Waldrip, 2007, p.1261). According to Lumadi (2013), nobody denies that assessment plays an integral part in the teaching, learning, and entire educational process. Similarly, Heaton (1975) states, “both testing and teaching are so closely interrelated that it is virtually impossible to work in either field without being constantly concerned with the other”.

The term assessment means different things to different people. Nitko (2001) cites the American Federation of Early childhood teachers, National Council on Measurement in Education and National Education Association, who see assessment as a method of obtaining information that is used to make decision about learners’ curriculum and programme and national policy. From this, assessment can be viewed as a means of collecting information about learners in order to help in making decisions concerning the learners’ wellbeing in terms of the curriculum and programme and national policies on education. This implies that the information collected from assessment should be that which could be used by tutors to help learners to enhance their academic performance.

Green and Lewis (1986) on the other hand viewed assessment as the estimation of the relative magnitude, importance or value of an individual’s work or performance observed. According to them, assessment is not just the collection of the information but looking at how valuable the information that has been collected is the focus of assessment. Early childhood teachers usually do this as they observe their learners at work in school and through the conduct of various tests and other assignments periodically. In assessment, early childhood teachers communicate with learners through various means in order to gather meaningful information to make decisions concerning different aspects of learners. Tamakloe, Amedahe and Atta (2005), maintained that “assessment occurs when one person through some kind of interaction with another, obtains and interprets information about that other person in terms of his knowledge and understanding or abilities or attitudes” (p. 176). Airasian (1991) also sees assessment to be a process whereby information about a learner is collected, interpreted and synthesized to assist in decision making. It is imperative to note that most teachers are challenged in using assessment tools in their classrooms. This made the researcher to assess challenges kindergarten teachers face in administering assessment tools to children with intellectual disabilities in the Kumasi Metropolis.

Objectives of the Study

To investigate:

- Assessment tools teachers employ in supporting the learning needs of children with intellectual disabilities in inclusive early childhood centres in the Kumasi metropolis.
- Problems faced by kindergarten teachers in administering assessment tools to children with intellectual disabilities in inclusive early childhood centres in the Kumasi metropolis.
Research Questions

The study was guided by the following research questions:

- What assessment tools do teachers employ in supporting the learning needs of children with intellectual disabilities in inclusive early childhood centres in the Kumasi metropolis?
- What problems do kindergarten teachers face in administering assessment tools to children with intellectual disabilities in inclusive early childhood centres in the Kumasi metropolis?

Significance of the Study

The study could serve as an important reference source for inclusive public and private kindergarten teachers, headmasters/mistresses, Teacher Education Division (TED), Early Childhood Care and Development Division (ECCDD) and Special Education Division (SED) of the Ghana Education Service (GES), University of Education (UEW) and the Institute of Education, (IoE) of the University of Cape Coast, (UCC) and other private educational institutions that train teachers in their effort to improve the management of testing with the adequate information about what is actually involved in assessment practices in the Early Childhood Centres. It is hoped that the study would complement studies already undertaken in this subject matter. Besides, the study could contribute to the improvement of testing practices, specifically, on children with intellectual disabilities on construction, administration and scoring of teacher-made tests in the inclusive early childhood centres.

Challenges of Early Childhood Teachers about Assessment Practices

Eshun Bassaw, Kankam, Bordoh and Korang (2014) conducted a study to investigate the influence of authentic assessment on classroom practices of early childhood teachers and the challenges they encounter in the Social Studies classroom in Ghana. The study used a descriptive case study design and it involved 10 senior high schools and twenty early childhood teachers randomly sampled from fifty-seven (57) senior high schools in the Central Region of Ghana. Semi-structured interview guide was the main instrument used for data collection. The research found out that the forms of authentic assessment some early childhood teachers used in their classrooms were limited due to examination policies, time, resources and assessment methods employed by their schools. Furthermore, they revealed that most early childhood teachers they observed were not using assessment techniques that involved learners in the teaching and learning process. Again, they indicated that some early childhood teachers revealed that using the authentic assessment would delay them in completing topics in their syllabuses given to them. The inference is that, Early Childhood teachers really problems in their attempt to implement assessment practices at the Early Childhood Centres.

Beckmann, Senk and Thompson (1997) in their study conducted in USA identified three reasons why early childhood teachers do not use multiple assessment methods. First, some early childhood teachers had limited knowledge of different forms of assessment. Second, early childhood teachers felt they had no time to create/develop assessment. Third, early childhood teachers felt there was little or no professional guidance; therefore, early childhood teachers were
not confident enough to try out authentic assessments. Despite the rich results and improved academic work assessment presents to early childhood teachers in relation to their learners’ outcome, assessment faced is with a number of challenges. Palomba and Banta (1999b) indicated that measures are labour intensive as a significant amount of time and care must be set aside by early childhood teachers for planning and using assessment. Again, it is not clear that measures can be generalized to the learner population. This lowers the level of generalization and can affect the perceived validity of the use of assessment measure. Assessment is challenged in terms of the knowledge required to learn and execute. As the role of learner assessment is changing today, it is largely because today’s learners face a world that demands knew knowledge and abilities, and the need to become life-long learners in a world that demand competences and skills not yet defined (Segers, Dochy & Cascallar, 2003).

The information age is characterized by a steadily growing, dynamic and changing mass of information in terms of assessment. Learners and early childhood teachers need digital literacy, but also a variety of competences in order to function well in the information society. Birenbaum (1996) has analyzed and categorized these competences and skills concerning assessment in the following way: (a) cognitive competences such as problem solving, critical thinking, formulating questions, searching for relevant information, making informed judgements, efficient use of information, conducting observations, investigations, inventing and creating new things, analyzing data, presenting data communicatively, oral and written expression; (b) meta-cognitive competences such as self-reflection, or self-evaluation (c) social competences such as leading discussions, persuading, cooperating, working in groups, etc. and (d) affective dispositions such as perseverance, internal motivation, self-efficacy, independence, flexibility, or coping with frustrating situations.

Assessments take more time to administer, often are tied directly to specific curriculum and instructional programs or particular assignments, and take more time for scoring, reporting back the results, and putting the results to effective use with learners than do standardized tests (Reeves, 2007). According to Reeves (2007), the assessment challenge, at both the district and school levels, is to develop the capacity of classroom early childhood teachers to evaluate learner work in shared and common ways, often using established rubrics or scoring criteria to evaluate learner products and performances.

**Forms of Assessment**

**Formative Assessment**

According to McTighe and O’connor (2009) formative assessment is generally carried out throughout a course or project and is also referred to as “educative assessment,” as used to aid learning. In an educational setting, formative assessment might be a teacher or the learner, providing feedback on a learner’s work and would not necessarily be used for grading purposes. Formative assessments in education can be of many kinds and could espouse investigative test or diagnostic test, standardized tests, quizzes, oral question, or draft work. Formative assessments are carried out concurrently with instructions. Formative assessments aim to see if the learners understand the instruction before doing a summative assessment (McTighe & O’connor).
By definition, Airasian (1991) opinionated that formative assessments are interactive and are used primarily to form or modify an ongoing learning process or learning activity. Formative assessment is focused on improving learner motivation and learning with the goal of producing higher-quality work or thinking. It is important to realise that there are two different spectators for formative assessment (Edmund, 2006). According to Edmund (2006), formative assessment concerns early childhood teachers and many of the early childhood teachers may check for learner understanding by asking questions or by observing learners as they discuss a topic in small groups. In formative assessment, early childhood teachers are informally “collecting data” that will help them determine what needs to happen next in instruction and early childhood teachers serve as the data users. Formative assessment also concerns learners as they need to know what would move their responses to questions. Formative assessment is about providing immediate feedback to learners concerning what has been learnt. It is believed that providing learners with effective feedback can increase learner achievement significantly (Marzano, Pickering, & Pollock, 2001).

According to Palomba and Banta (1999), formative assessment is often done at the beginning or during a programme, thus providing the opportunity for immediate evidence for learner learning in a particular course or at a particular point in a program. Formative assessment in the classroom is noted to be one of the most common assessment techniques that early childhood teachers use and purpose of the technique is to improve quality of learner learning (Palomba & Banta, 1999). As an important component of teaching and learning, formative assessment in the classroom can lead to curricular amendments when specific courses have not met the learner learning outcomes (Palomba & Banta). According to Angelo and Cross (1993), formative assessment in the classroom can also provide important programme information when multiple sections of any course is taught because it enables programmes to examine if the learning goals and objectives are met in all sections of the course. It also can improve instructional quality by engaging the faculty in the design and practice of the course goals and objectives and the course impact on the programme (Bardes & Denton, 2001).

Formative assessment in the classroom has been the focus of almost major stakeholders in an attempt to synthesize the research studies on classroom assessment. Synthesis of more than 250 studies concerning formative assessments as opposed to summative assessment conducted by Black and Wiliam (1998), revealed that formative assessment produces more powerful effect on learner learning. In his review of the research, Crooks (2001) was of the view that effect sizes for summative assessments are consistently lower than effect sizes for formative assessments when it comes to assessment in the classroom. It can be said that classroom formative assessment data can contribute to a comprehensive assessment plan by enabling capacity to identify particular points in a programme to assess learning and monitor the progress being made towards achieving learning outcomes (Bardes & Denton, 2001).

In terms of merit, Sasser (2018) indicated that formative assessments are not graded and this takes the anxiety away from learners. It also detaches the thinking that they must get everything right. Instead, they serve as a practice for learners to get assistance along the way before the final tests. Early childhood teachers usually check for understanding in the event that learners are struggling during the lesson. Early childhood teachers address these issues early on instead of
waiting until the end of the unit to assess. Early childhood teachers have to do less re-teaching at the end because many of the problems with mastery are addressed before final tests (Sasser, 2018). According to Sasser (2018), the goal of formative assessment is to gauge learner learning and adapt content accordingly. Since it is “low stakes,” to Sasser, formative assessments should be used to monitor learner learning qualitatively as opposed to examine it quantitatively (final exam). Therefore, when assessing for learning, formative assessment is the way to go; when assessing the measure of learning, summative assessment is best. Reddy (2018) was of the view that formative assessment is necessary and important for behaviour change among learners. In order to face unexpected outcomes and respond to emergent properties, formative assessment is mandatory. Reddy (2018) outlined some merits of formative assessment: The main intention of formative assessment is that it helps in the development of knowledge and skills for the learners. With this category of assessment, the instructors, leads or early childhood teachers are able to identify the needs of the individuals and direct them towards their objectives or educational goals. The individual’s hindrances and difficulties are found out by this method and appropriate remedies are applied to overcome them. With assessment the upcoming lesson or task is also planned. With formative assessment, an assessment is offered by the instructor or teacher to make sure that the individuals have mastered the concept that has been taught to them.

Formative assessment is beneficial as it plans for the future where any methods related to teaching or other career tasks can be altered. Weakness is diagnosed at an early stage and remediation is made. By this way the individuals are kept of track and move towards progress with continuous feedback. Future planning in case of any change in the methods of teaching or given task is planned well ahead, with formative assessment. Formative assessment covers up a wide range of diagnostics that are required by the learners or individuals. The feedback is a main parameter which enables learners to reflect what they are learning and know the reason for the same. Formative assessment assists individuals enhancing their performance and producing successful outcomes.

Summative Assessment

According to Mctighe and O’Connor (2005), summative assessment is generally carried out at the end of a course or project. In an educational setting, summative assessments are typically used to assign learners a course grade. Summative assessments are evaluative. Summative assessments are made to summarize what the learners have learned, and to determine whether they understand the subject matter well. This type of assessment is typically graded and can take the form of tests, exams or projects. Summative assessments are often used to determine whether a learner has passed or failed a class.

Summative assessment looks at whether a learner has achieved the desired learning goals or met standards (Edmonds, 2006). In the classroom, summative assessments usually occur at the end of instruction and documents what learners have learned. Looking at the grades in a teacher's grade book should give an idea of what the key instructional goals or outcomes were for a grading period. These grades most likely represent summative assessments (tests, quizzes, projects, reports, written assignments) that tell the teacher whether the learner has mastered the skills or learned the content. A key aspect of summative assessment is determining the level to which
learners need to “master” the content and thinking. Tests that define “mastering” content at the level of memorizing events, names, and facts are less likely to be building learners' thinking skills than tests that ask learners to write about big conflicts or themes that recur over time. According to Reddy (2018), summative assessment is one that takes place at the end of the assessment cycle. It is a type of assessment that judges the worth of the task by the end of program activities. The main focus of summative assessment is based on the outcome. Summative assessments can also be mentioned as assessments technique that is used to measure the outcome of individuals or learners. Similarly, in education, summative assessment is used to assess learners on what they have learned. Reddy (2018) suggest the following merits of summative assessment: Repeated practice test for low-achieving learners lowers their self-confidence and self-esteem. The summative assessment results have a negative effect on low achievers when they are more pronounced for learners than for schools or authorities. Secondary school low-achievers may perform in a worse manner as they are failing in the course of time. It is also considered as a limiting process for the able individuals. Anxiety is another reason which is caused in a test especially amongst girls and leads to expanding the gap between higher and low achieving individuals.

The instructors and early childhood teachers work towards the test and deviate themselves from curriculum and content. There can be chances for distortion in terms of teaching techniques. The other disadvantage is that summative assessment questions may not be framed in a manner similar to formative assessment. The instructors and early childhood teachers may themselves have to dedicate more time for summative assessment which may not actually enhance individual’s knowledge. With all this, early childhood teachers also adopt some didactic teaching style which may not be perfect and comfortable for many learners.

Assessments Tools

There are various techniques of assessing learners. The most common means by which early childhood teachers attempt to assess their learners are tests and examinations (Tamakloe, Amedahe & Atta, 2005). These techniques include, but are not limited to paper and pencil test and performance task. Other means of assessing learners are through the responses of learners in class, homework performance, and observation of learners, interviews/conference with learners, learners’ presentations and portfolios.

Paper and Pencil Test

This is often the first choice used for formal assessment because of its practicality (Ormrod, 2008). The assessment requires learners to write independently or to demonstrate understanding of concepts. A teacher gives seatwork as well as homework to learners for them to respond in writing. These help the learners to practice the learning target.

Portfolios

Another alternative assessment tool that has attracted widespread popular attention is portfolios. Portfolios are collections of learner work gathered over time. The contents of portfolios can range from comprehensive coverage containing materials that are quite selective, containing only a limited number of learner-selected items. Learner portfolios offer a range of flexibility that
makes the method attractive to a wide range of teachers and programs. Portfolio assessment offers many advantages, but Frazier and Paulson (1992) note that the primary value of portfolios is that they allow learners the opportunity to evaluate their own work. Further, portfolio assessment offers learners a way to take charge of their learning; it also encourages ownership, pride, and high self-esteem.

**Learning Logs and Journals**

Learning logs and journals are tools designed to cause learners to reflect on what they have learned or are learning. When used properly, they encourage learner self-assessment and provide a mechanism for making connections across the various subject matter areas. The fundamental purpose of learning logs and journals is to “allow learners to communicate directly with the teacher regarding individual progress, particular concerns, and reflections on the learning process” (Herman, Aschbacher, and Winters, 1992).

Learning log distinguishes itself from journal in the sense that, it usually consists of short, objective entries under specific heading such as problem solving, observations, questions about content, lists of outside readings, homework assignments, or other categories designed to facilitate recordkeeping (Burke 1994). Learner responses are typically brief, factual, and impersonal. On the contrary, journals typically include more extensive information and are usually written in narrative form. They are more subjective and focus more on feelings, reflections, opinions, and personal experiences. Journal entries are more descriptive, more spontaneous, and longer than logs. They are often used to respond to situations, describe events, reflect on personal experiences and feelings, connect what is being learned with past learning, and predict how what is being learned can be used in real life (Burke, 1994).

**Projects**

According to Burke (1994), many different types of projects can be developed to challenge learners to produce something rather than reproduce knowledge on traditional tests. Projects allow learners to demonstrate a variety of skills including communication, technical, interpersonal, organizational, problem-solving, and decision-making skills. Projects also provide learners with opportunities to establish criteria for determining the quality of the planning and design processes, the construction process, and the quality of the completed project.

**Rubrics**

Among the most common methods for learner self-assessment are scoring rubrics. Marzano, Pickering, and McTighe (1993) have defined rubrics as “a fixed scale and list of characteristics describing performance for each of the points on the scale” (p. 10). Rubrics are scoring devices (or tools) that are designed to clarify, communicate, and assess performance. They are grading tools containing specific information about what is expected of learners based on criteria that are often complex and subjective. Rubrics typically contain two important features; they identify and clarify specific performance expectations and criteria, and they specify the various levels of learner performance. In their simplest form, rubrics are checklists requiring a “yes” or “no” response.
METHODOLOGY

The Descriptive survey study was employed in this study. According to Phillips and Burbules, the use of a quantitative approach such as surveys “does not attempt to describe the total reality about, say, a classroom; rather, it seeks to develop relevant true statements” (2000). It encompasses decisions about how the research is conceptualized, the conduct of the research and the type of contribution the research is intended to make to the development of knowledge in a particular field of study (Cheek, 2008).

Design

The descriptive design was seen appropriate for this study because it tend to lead the researcher to draw meaningful conclusions from the study. Babbie (1990) noted that it helps to generalize from a sample to a population so that inferences can be made about some characteristic, attitude, or behaviour of this population. Hence, other research designs were seen inappropriate.

Population

The population for the study included all 1,139 teachers from 158 public kindergartens in the Kumasi metropolis. However, 120 teachers were drawn from 22 public inclusive kindergartens in the Kumasi metropolis. There are 158 public kindergartens in the Kumasi metropolis. There are 1,139 teachers: of which 568 are trained (thus have earned at least diploma in the teaching profession) whilst the other 571 are untrained (have earned senior high school certificate).

Sample Size

A sample size of 120 teachers was involved in the study from a total number of 22 public inclusive kindergartens. In all 158 public kindergartens in the Kumasi metropolis, only 22 of these schools include children with intellectual disabilities in their early childhood level, thus from kindergarten to primary three. The researcher exercised prudence in ensuring that the sample represents the wider features of the population (Cohen, Manion and Morrison, 2007).

Sampling Procedure

The researcher employed the Purposive sampling method in selecting all the twenty-two (22) public intellectually inclusive schools. Secondly, the Convenience sampling method was adopted in selecting teachers from kindergarten one (1) & two (2) and primary one to three as these are the Early Childhood classes. A case was also made for early childhood centres that had more than two kindergarten teachers. A self-designed questionnaire was used for the study. A questionnaire was used for the study because it offered the researcher the opportunity to sample the perceptions of a larger population.

The information that was gathered from the study using the questionnaires was checked for accuracy, clarity of expression, and completeness. The responses to the questionnaires were organised and analysed with respect to the research questions on which the instruments were design for the study using frequency tables, means and standard deviations. In essence, the questionnaires that was retrieved was serially numbered, coded and scored. The Statistical Product for Service Solutions (SPSS version 21.0) was used to facilitate data analaysation. Tables
were constructed to represent the four Likert type scaled response subgroups of “strongly agree”, “agree”, “disagree”, and “strongly disagree” for analysis and discussion.

ANALYSIS AND DISCUSSIONS

To gather evidence for the study, the selected 120 public kindergartens teachers in the Kumasi metropolis were made to rate their responses using Strongly Agree, Agree, Disagree and Strongly Disagrees. Using means, the scales were scored as (Strongly Agree = 4, Agree = 3, Disagree = 2 and Strongly Disagree = 1). The criterion score of 2.50 was established for the scales. To obtain the criterion score (CS=2.50), the scores were added together and divided by the number scales (that is......4+3+2+1= 10/4=2.50). To understand the mean scores, positive items/statements on assessment practices of public kindergartens teachers in the Kumasi metropolis that scored a mean of 0.00 to 2.49 were regarded as low practice. Those items/statements that scored a mean from 2.50 to 4.00 regarded as high assessment practices. These analyses were done with the use of means, standard deviations and Kurtosis. These analysis and interpretation were applicable to all the research questions.

Results

RQ1: What assessment tools do teachers employ in supporting the learning needs of children with intellectual disabilities in inclusive early childhood centres in the Kumasi metropolis?

To achieve the purpose of the study, evaluating assessment tools teachers employ in supporting the learning need of children with intellectual disabilities in inclusive public kindergarten classroom fit for the study. The collected results from the public kindergartens’ teachers in the Kumasi metropolis are presented in Table 1 (Reference Appendix A).

Table 1 gives evidence to results on the assessment tools teachers employ in supporting the learning needs of children with intellectual disabilities in inclusive schools. Assessing the Kurtosis values, the results show that the study variables follow a normal distribution. This is grounded on the reason that the calculated kurtosis values in Table 1 were within the acceptable limit for normal distribution of ±2. This, therefore, implies that the data was normal and as such the descriptive statistics were deemed exact for the analysis.

From the descriptive analysis (Ms. & SDS), the results show that essentially, most inclusive public kindergarten teachers in the Kumasi metropolis employ assessment tools in supporting the learning needs of children with intellectual disabilities in inclusive education. This was confirmed after most of the items scored a mean greater than than Criterion Score (>CS).

Narrowing the interpretation to the individual items, most of the Inclusive public kindergarten teachers in the Kumasi metropolis affirmed to use learning logs in assessing pupils with intellectual disabilities (M=3.64>CS (2.50), SD=.456, K=.451, n=120). The majority confirmed to use portfolios in assessing pupils with intellectual disabilities (M=3.43>CS (2.50), SD=.545, K=.455, n=120). Others confirmed they used paper and pencil test tool in assessing pupils with intellectual disabilities (M=3.34>CS (2.50), SD=.616, K=.545, n=120). Another tool that was used was projects in assessing pupils with intellectual disabilities (M=3.29>CS (2.50), SD=.824,
The use of graphic organizers in assessing pupils with intellectual disabilities was not left out ($M=3.27 > CS (2.50)$, $SD=.707$, $K=.223$, $n=120$). Finally, it was asserted that they use journals in assessing pupils with intellectual disabilities ($M=3.23 > CS (2.50)$, $SD=.356$, $K=.864$, $n=120$).

RQ2: What problems do kindergarten teachers face in administering assessment tools to children with intellectual disabilities in inclusive early childhood centres in the Kumasi metropolis?

Literature gives evidence to believe that pre-school teachers may face some problems in administering assessment tools on children with intellectual disabilities. This gave the researcher the urge to assess these challenges in the case of inclusive public early childhood centres in the Kumasi metropolis. The gathered results from the teachers are presented in Table 2 (Reference Appendix B).

Table 2 shows results on problems faced by kindergarten teachers in administering assessment tools on children with intellectual disabilities. Observing the Kurtosis values, the results show that the study variables follow a normal distribution. This is based on the reason that the kurtosis values were within the acceptable limit for normal distribution of ±2. This, therefore implies that the data was normal and as such the descriptive statistics were deemed right for the analysis. Inferring from the descriptive analysis (Ms & SDs), the results show that fundamentally, most inclusive public kindergartens teachers in the Kumasi metropolis are faced with many problems that hinder them in their quest to administer assessment tools on children with intellectual disabilities. This was evident after most of the items scored a mean greater than then Criterion Score (>CS).

Considering the individual items on the challenges, most of the inclusive public kindergarten teachers in the Kumasi metropolis averred that they are faced with limited materials/resources to conduct the assessment in schools ($M=3.87 > CS (2.50)$, $SD=.714$, $K=.432$, $n=120$). In another results, it was espoused that most of the inclusive public kindergarten teachers in the Kumasi metropolis do not have confidence enough to try out authentic assessments like portfolios, learning logs, journals, projects graphic organizers, concept mapping and rubrics due to inadequate professional guidance and pose a challenge and problem in their quest to administer assessment tools on children with intellectual disabilities ($M=3.86 > CS (2.50)$, $SD=.575$, $K=.620$, $n=120$).

In another result, it was found that most of the Inclusive public kindergarten teachers in the Kumasi metropolis are faced with limited time to create/develop authentic assessment tools like portfolios, learning, logs, journals, projects graphic organizers, concept mapping and rubrics and this probably pose a challenge in their pursuit to administer assessment tools on children with intellectual disabilities ($M=3.70 > CS (2.50)$, $SD=.832$, $K=.431$, $n=120$). Another challenge was that the assessments take more time to administer, score and report back the results ($M=3.62 > CS (2.50)$, $SD=.642$, $K=.505$, $n=120$).
logs, journals, projects graphic organizers, concept mapping and rubric delay the pupils in completing topics in their syllabuses \((M=3.54>CS (2.50), SD=.543, K=.612, n=120)\).

Evaluating the teacher’s responses, it was shown that most inclusive public kindergarten teachers in the Kumasi metropolis are restricted to try other assessment tools like journals, projects graphic organizers, concept mapping and rubrics due to examination policies in schools and this pose a challenge in their pursuit to administer assessment tools on children with intellectual disabilities \((M=3.37>CS (2.50), SD=.524, K=.643, n=120)\).

Finally, it was asserted by the teachers that some early childhood teachers have limited knowledge of different forms of assessment in the inclusive classroom and this serves a challenge in their pursuit to administer assessment tools on children with intellectual disabilities \((M=3.23>CS (2.50), SD=.635, K=.123, n=120)\).

**Discussions**

In objective one, it was found that most public kindergartens teachers in the Kumasi metropolis are faced with many problems that hinder them in their quest to administer assessment tools on children with intellectual disabilities in inclusive public schools. Some of which were the limited materials/resources to conduct the assessment in schools, the lack of confidence to try out authentic assessments like portfolios, learning logs, journals, projects graphic organizers, concept mapping and rubrics due to inadequate professional guidance and the limited time to create/develop authentic assessment tools like portfolios, learning, logs, journals, projects graphic organizers, concept mapping and rubrics.

The results from the present study lend support to the work of Eshun, Kankam, Bordoh, Bassaw and Korang (2014) who conducted a study to investigate the influence of authentic assessment on classroom practices of early childhood teachers and the challenges they encounter in the Social Studies classroom in Ghana. The results of Eshun et al. (2014) found out that the forms of authentic assessment some early childhood teachers used in their classrooms were limited due to examination policies, time, resources and assessment methods employed by their schools. Furthermore, they revealed that most early childhood teachers they observed were not using assessment techniques that involved learners in the teaching and learning process. Again, they indicated that some early childhood teachers revealed that using the authentic assessment would delay them in completing topics in their syllabuses given to them.

The results further agree with assertions of Segers, Dochy and Cascallar, (2003) who posited that assessment is challenged in terms of the knowledge required to learn and execute. As the role of learner assessment is changing today, it is largely because today’s children face a world that demands new knowledge and abilities, and the need to become life-long learners in a world that demand competences and skills not yet defined.

The results from this study confirms that of Reeves (2007), who indicated that assessment challenge, at both the district and school levels, is to develop the capacity of classroom early childhood teacher’s evaluation of learners work in shared and common ways, often using established rubrics or scoring criteria to evaluate products and performances. The results are often complex and nuanced. The learner’s work on such tasks is typically neither right nor
wrong, but rather, combines a variety of strengths and areas needing improvement. Such evaluations can inform summative judgments, but, most fruitfully, they provide formative instructional guidance, challenging early childhood teachers to use the results to help learners take the next steps towards excellence.

In summary, a holistic assessment takes time as it is not seen from only a facet, rather all facets. Hence, it demands time and patience. In spite of the evidence that teachers in inclusive public kindergartens in the Kumasi metropolis face problems in administering assessment tools on children with intellectual disabilities, their main bane has been the strictness of following the curriculum without any room for adjustment or flexibility. Curriculum developers must see to it that there is always the need for adjustment tailored towards a holistic assessment.

From the last objective, it was revealed that most inclusive public kindergarten teachers in the Kumasi metropolis employ assessment tools in supporting the learning need of children with intellectual disabilities in inclusive education. The results agree with the claims of Tamakloe, Amedahe and Atta (2005) who pointed out that assessment techniques include, but are not limited to paper and pencil tests and performance task. Other means of assessing learners are through the responses of learners in class, homework performance, and observation of learners, interviews/conferences with learners, learners’ presentations and portfolios. In summary, evidence from this study shows that the least assessment tools employ by most teachers in the inclusive public kindergartens in the Kumasi metropolis are the Concept mapping, rubrics, journals and graphic organizers. Possible factors may include; lack of adequate knowledge on the part of teachers to effectively employ these assessment tools in the inclusive public kindergartens in the Kumasi metropolis. Also, time constraints. As these assessment tools will involve much time and patience. Besides, it could be that the curriculum was strict that teachers could not employ any of the aforementioned assessment tools in order to go against the curriculum.

Conclusion
A variety of assessment methods (projects, diary, peer assessments, self-assessments, portfolios, concept maps, performance assessments, exhibitions, demonstrations etc.) are used as part of the classroom assessments introduced by the new tendencies and approaches. Teachers are expected to be aware of these new approaches, the aims of which include giving more feedback to learners, providing peer and group assessments, in addition to individual assessments, focusing on the learning process, implementing knowledge, and involving learners in all the processes of assessments, and teachers should reflect these practices in the teaching processes. However, they were hindered by many factors that retired their assessment practices such as limited materials/resources to conduct the assessment in schools and not being confident enough to try out authentic assessments like portfolios, learning logs, journals, projects graphic organizers, concept mapping and rubrics due to inadequate professional guidance.

Recommendations
With respect to the findings resulting from the study, the following recommendation is made:

- The Teacher Education Division of the Ministry of Education should make it a point to equip the teachers with skills and morale in administering authentic assessment practices to learners with intellectual disabilities. This is because assessment practices form an
integral part of the teaching profession since it is the most widely used as a channel for assessing learners in Ghana.

- Teachers should also be sensitized on regular basis on how critical their assessment practices could be with regard to learners with intellectual disabilities. Teachers should also know about the implication of their assessment practices and its effect on validity and reliability which will adversely affect how decisions are made on their learners. This could be achieved through effective supervision from the office of the education directorate.

- More workshops and in-service training should be organized to inclusive public kindergarten teachers in the Kumasi metropolis with respect to how to follow recommended authentic assessment practices, choose and develop methods appropriate for assessment practices suitable for pupils with intellectual disabilities in the inclusive classrooms. This could be achieved through the collaboration of the ministry of education, the institute of education and other stakeholders of education.

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Appendix A

Table 1: Descriptive Results on Assessment Tools Teachers Employ in Supporting the Learning Need of Children with Intellectual Disabilities in Inclusive Schools

| Statements                                                                 | MS    | SD    | Kurtosis | MR   |
|----------------------------------------------------------------------------|-------|-------|----------|------|
| I use learning logs in assessing pupils with intellectual disabilities     | 3.64* | .456  | .451     | 1st  |
| I use portfolios in assessing pupils with intellectual disabilities        | 3.43* | .545  | .455     | 2nd  |
| I use paper and pencil test tool in assessing pupils with intellectual disabilities | 3.34* | .616  | .545     | 3rd  |
| I use projects in assessing pupils with intellectual disabilities          | 3.29* | .824  | .126     | 4th  |
| I use graphic organizers in assessing pupils with intellectual disabilities | 3.27* | .707  | .223     | 5th  |
| I use journals in assessing pupils with intellectual disabilities          | 3.23* | .356  | .864     | 6th  |
| I use rubrics in assessing pupils with intellectual disabilities           | 3.02* | .746  | .521     | 7th  |
| I use concept mapping in assessing pupils with intellectual disabilities   | 2.92* | .345  | .534     | 8th  |
| Mean of means/Std.D                                                        | 3.59* | .637  | .481     |      |

Source: Field Data (2019) (RS=120)

Key: M= Mean, SD=Standard Deviation, MR=Means Ranking, RS=Retrieved Sample
### Appendix B

Table 2: Descriptive Results on Problems faced by Kindergarten Teachers in Administering Assessment Tools on Children with Intellectual Disabilities

| Statements                                                                 | MS   | SD   | Kurtosis | MR   |
|---------------------------------------------------------------------------|------|------|----------|------|
| I am faced with limited materials/resources to conduct the assessment in schools | 3.87* | .714 | .432     | 1st  |
| I am not confident enough to try out authentic assessments like portfolios, learning logs, journals, projects graphic organizers, concept mapping and rubrics due to inadequate professional guidance | 3.84* | .575 | .620     | 2nd  |
| I am faced with limited time to create/develop authentic assessment tools like portfolios, learning, logs, journals, projects graphic organizers, concept mapping and rubrics | 3.70* | .832 | .431     | 3rd  |
| Assessments take more time to administer, score and report back the results. | 3.62* | .642 | .505     | 4th  |
| Portfolios, learning logs, journals, projects graphic organizers, concept mapping and rubric delay the pupils in completing topics in their syllabuses | 3.54* | .543 | .612     | 5th  |
| I am restricted to try other assessment tools like journals, projects, graphic organizers, concept mapping and rubrics due to examination policies in schools | 3.37* | .524 | .643     | 6th  |
| Some early childhood teachers have limited knowledge of different forms of assessment in the inclusive classroom | 3.23* | .635 | .123     | 7th  |
| Mean of means/Std.D                                                       | 3.59* | .637 | .481     |      |

Source: Field Data (2020) (RS=120)

**Key:** M= Mean, SD=Standard Deviation, MR=Means Ranking, RS=Retrieved Sample