

Assessment tools in Early Childhood Education, Implications for Sustainable Development in Nigeria

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Abstract

This paper examined assessment tools in early childhood education, implication for sustainable development in Nigeria. Assessment is a process of arranging or fashioning data into an interpretable form which focuses on a number of variables judged to be important and utilize a number of techniques to gather data from multiple sources. Early childhood education is not about teaching but it is about exploration and learning. It is segmented into ages 0-4 years, situated in daycare or crèches, fully in the hands of the private sectors and social development whilst ages 5-6 (pre-primary) are within the formal sector. In early childhood education sector, the care-giver is very important and they cannot work in isolation without the child and the school. In this early childhood assessment is a tool used to gather and provide educators, parents and families with critical information about a child development and growth. It looked at the importance of assessment and this paper examined also the types of child assessment and implementation of assessment into program. This paper discussed principles of assessment and functions of child assessment. In conclusion assessment tools should be used to improve the instruction, identify disabilities, and determine program eligibility to improve learning and to further accountability.

Keywords: Daycare, preschool, kindergarten, educators.

Introduction

Its most basic level, early childhood education (ECE) encompasses all forms of education, both formal and informal. Early childhood education ages cover birth through age eight. This education is fundamental to the development of a child. It can significantly shape the later years of an individual's life. Digging deeper, there are several different facets that all combine to contribute to a child's early education. In terms of informal education, the primary source of input when it comes to a child's development is, of course, its relationship with its parents or primary caregivers. In essence, parents can be considered to be a child's first teacher. This relationship is especially critical between 0-2 years of age as the child begins to develop its sense of self and establishes an attachment with its parents. The quality of the attachment formed at this stage of life can have a significant impact on a child's future education. The other part of the equation when it comes to early childhood education is the formal education that it receives at a young age. This stage of education typically spans years 2 to 8 of a child's life. There can be a variety of formats in which a child receives formal education at a young age, which can vary from state to state and program to program. Educational programs may be designed specifically for children at each individual age. They can be provided in settings including:

1. Childcare
2. Daycare
3. Nursery school
4. Preschool
5. Kindergarten

Some of these programs are privately run. Others are operated by a local school system or under a federally funded program.

Early childhood education describes the period of learning that takes place from birth to 8 years old. There are several types of early education programs, including those that are federal, state or privately funded. The curricula and approach often vary at the preschool level, but there are generally agreed-upon standards for the types of learning addressed in early childhood education settings. Ojalo (1978) writes that early childhood education as a science studies the process of education before the school age. Ojala (1989) maintained that early childhood education is also a practice, it is a form the concept of early childhood education is best of all known. A period described by Osanyin (2002) as extremely crucial to an individual's intellectual, emotional, social and physical development. It is embraced by many parents because of its role in the educational and social development of the child. According to the National Association for the Education of young Children (1985) opened that early childhood education (ECE) is the period of learning that takes place from birth to eight-years-old.

Early childhood education is focused on the critical developmental milestones, skills, and concepts that children attain during this period of their lives, from social-emotional skills to the beginnings of numeracy, literacy, and critical thinking. In addition to preparing children for future academic success, the development of high-quality early childhood care and education is considered by the OECD to be a key economic indicator when assessing the health and future positioning of a nation. Educational assessment or educational evaluation is the systematic process of documenting and using empirical data on the knowledge, skill, attitudes, aptitude and beliefs to refine programs and improve children learning. Assessment data can be obtained from directly examining student work to assess the achievement of learning outcomes or can be based on data from which one can make inferences about learning. Assessment is often used interchangeably with test, but not limited to tests. Assessment can focus on the individual learner, the learning community (class, workshop, or other organized group of learners), a course, an academic program, the institution, or the educational system as a whole (also known as granularity).

The misconception of the meaning and relationship that exist among the concepts involve in making value decision on the pupil's performance or academic progress has been one of the sources of confusion, when literate members of the society who are non-assessment experts are involved in discussions, they use the following terms measurement, assessment and evaluation loosely as being synonymous. Measurement is a process that assigns by rule a numerical description to observation of some attributes of an object, person or event. Assessment is a process of arranging or fashioning data into an interpretable form. Assessment focuses on a number of variables judged to be important and

utilize a number of techniques to gather data from multiple sources. Evaluation is the continuous inspection of all available information concerning a pupil, caregiver, educational programme, teaching and learning process to ascertain the degree of change in pupils and form valid judgment about the pupil and the effectiveness of the programme. Measurement is the assignment of a number to a characteristic of an object or event, which can be compared with objects or event. The scope and application of a measurement is dependent on the content and discipline. It is a cornerstone of trade, science, technology, and quantitative research in many disciplines. Assessment is the process of gathering, recording and using information about a learner response (performance/achievement) to a task because it is intended to cover a wide range of different circumstances. It does identify what are usually regarded as the key elements of assessment in education. Evaluation is a systematic determination of a subject's merit, worth and significance, using criteria governed by a set of standards. It helps in decision making or to ascertain the degree of achievement or value in regard to the aim and objectives and results of any such action that has been completed. The relationship between these terms that is one leads to another. If a test is conducted, the steps is to mark and assign numbers to each items, then mark right or wrong, then later judge whether passed or failed which is evaluation (Adeleke,2009, Santrock, 2014).

Concept of Early Childhood Educator

Early childhood education is essential to child development, and early childhood teachers are, too. Being an early childhood educator means being adaptive, creative, and compassionate. It means guiding little ones as they explore themselves and the world around them. It means being a protector, a facilitator, a guide and an advocate for each child. Early childhood educators have one of the most impactful professions today. As an early childhood educator, you will be expected to create stimulating activities and identify new experiences that support a child's development. You will monitor children's progress and ensure each child is making headway (sometimes in their own way) in the classroom. You will help children discover their own learning and playing styles, and guide them in doing so safely. You will nurture children in all aspects of development, ensuring their social, emotional, cognitive, and physical growth. You will also help them transition from home life to a more collaborative, interactive, social day-to-day activities.

Early childhood educators play a very important role in the lives of children, and therefore must meet several requirements before pursuing a career in this highly-rewarding field. Above all else, early childhood educators should be:

- a. Patient and supportive of all children and learning styles
- b. Creative and resourceful
- c. Flexible and adaptable
- d. Great communicators
- e. Compassionate and nurturing
- f. Good listeners and observers
- g. Passionate about working with children

There are also specific infant, toddler, and pre-school teacher requirements you must achieve before acquiring an ECE career. Education and certification requirements, however, vary depending on the job. Most preschool teachers, for example, are expected to have at least an Associate Degree in Early Childhood Education. This is also expected for teachers of all early school. In public schools, early childhood educators are required to obtain a Bachelor's Degree in ECE, Child Study, or a related field. Early childhood education is not about teaching, it's about exploration and learning. Maduewesi (1999) sees the early childhood care education as the education offered to children who have not yet reached the statutory age of beginning primary school. He further maintained that it is a semi-formal education arrangement, usually outside home whereby young children from about the age of 3 years are exposed through play like activities in a group setting through mental, social and physical learning suited to their developmental stages, until the mandatory age of government approved formal schooling.

Childhood Assessment

Assessment helps educators learn about children and identifies ways to support their learning and development. It helps educators become aware of children's strengths and areas of their learning and development in which they may require further support and nurturing. As a relatively new field of study, early childhood teachers and researchers have had to consider whether the methods of assessment that have been used in the compulsory education sector are relevant or appropriate to assessment of children prior to school entry. As a result of reflection on the issues and challenges associated with assessing young children from birth to eight years of age, there has been a movement away from more standardized approaches to assessing children to understanding children's learning, development and growth within the educational contexts in which they participate. This approach is in part because globalized communities are characterized by variations in socioeconomic and cultural diversity. It can be problematic to use assessments that might only be appropriate for measuring the learning and development of children who have cultural experiences that match what is measured on the test. Contemporary approaches to assessment, primarily drawing on ecological and sociocultural theorizing, are particularly focused on understanding the child-in-context. These approaches have been informed by new theoretical ideas about how children learn and grow, including the importance of participation in social and cultural contexts on learning. This article will examine some of the key issues associated with assessment of children, which include the purpose of assessment; what should be assessed; definitions of assessment of, for and as learning; formative and summative assessment; authenticity; validity and reliability; collaboration in assessment; and the relationship between assessment and curriculum evaluation.

Concept of Assessment and Evaluation

Assessment according to Helm (2003) deals with a tool or process for answering specific questions about various aspects of children's knowledge, skills, behaviour, or personality. Assessment is an integral component of teaching and learning in early childhood education. Early childhood assessment is defined as the process of gathering information about children from several forms of evidence, then organising and interpreting that information (McAfee, Leong and Bodrova, 2004; McLean, Wolery and Bailey, 2004). Bredekamp and Rosegrant (1992) defined early childhood

assessment as ‘the process of observing, recording, and otherwise documenting the work children do and how they do it, as a basis for variety of educational decisions that affect the child

According to Brown, (1990) assessment refers to a related series of measures used to determine a complex attribute of an individual or group of individuals. This involves gathering and interpreting information about student level of attainment of learning goals.

Assessments also are used to identify individual student weaknesses and strengths so that educators can provide specialized academic support educational programming, or social services. In addition, assessments are developed by a wide array of groups and individuals, including teachers, district administrators, 2 universities, private companies, state departments of education, and groups that include a combination of these individuals and institutions.

Data

Assessment data is a tool that provides a lens for you to look at your school and classroom's performance. It can be used in a variety of ways to offer evidence about student learning in the curriculum, provide information about areas that need improvement, and support decision-making.

Teachers and school leaders who truly understand the key principles of assessment can make decisions that are based on evidence rather than purely by judgment. Fundamentally, the outcomes of using data from a variety of reliable sources can lead to better planned, better taught, and better assessed lessons. Barkley, E. & Major, C. 2016 Assessment data provide a means to look at student performance to offer evidence about student learning in the curriculum, provide information about program strengths and weaknesses, and guide decision-making. Analyzing the data in context gives meaning to the information collected and is essential to appropriately utilize and communicate the assessment results.

Types of Assessment Data Analysis

Generally, data collected for program-level assessment fall into two categories: quantitative and qualitative.

- a. **Quantitative Data** analysis relies on numerical scores or ratings and is helpful in evaluation because it can provide quantifiable results that are easy to calculate and display.
- b. **Qualitative Data** consists primarily of words and observations, rather than numbers. Qualitative data can come from a variety of sources including open-ended survey questions, focus group notes, essay responses, and student portfolios, for example. Qualitative data can be useful for answering “why” and “how” questions about student performance, approach, motivation, or experience.

Sustainable Development Goal

The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, peace and justice. The 17 Goals are all interconnected,

and in order to leave no one behind, it is important that we achieve them all by 2030. Sustainable development goals are as follows:

1. No poverty
2. Zero Hunger
3. Good health and well-being
4. Quality education
5. Gender Equality
6. Clean water and sanitation
7. Affordable and clean energy
8. Decent work and economic growth
9. Industry, Innovation and Infrastructure
10. Reduced inequalities
11. Sustainable cities and communities
12. Responsible production and consumption
13. Climate action
14. Life below water
15. Life on land
16. Peace, Justice Strong institution
17. Partnerships

Types of Assessment

1. **Placement Assessment:** This is the type of assessment done at the beginning of instruction. It helps to guide the teacher on what to teach, it helps to assess the skills and knowledge that children bring to school. Teacher can decide on the area to devote more time.
2. **Diagnostic Assessment:** Include assessments that are used by psychologists or therapists (such as speech and language therapists) or content specialists (such as reading teachers) to determine if there is a delay in speech and language development or disability. This helps the teacher to tailor learning activities to match the individual strength and weaknesses of their learners.
3. **Developmental Screening Assessment:** are used to identify specific children who should receive further attention. It can be used to determine the number of children that will benefit from a program, or which might be at risk of having difficulties in school, or which would benefit from a more extensive evaluation of their knowledge, skills, and behaviour.
4. **Readiness assessments:** This assessment provides information on the specific knowledge or skills that a child needs to learn something new. For example, we might assess a child's ability to use a computer mouse and follow verbal directions to determine whether the child is ready to use a specific computer reading program.
6. **Achievement assessments:** This type of assessment helps to know what a child has learned and accomplished. It enables the teacher to compare performance with widely held expectations and to plan appropriate next steps for children.

Principle of Assessment

- a. Assessment should be used to support learning because it is meant to serve as baseline to determine specific area of strength and weakness
- b. Assessment tools and procedure should be aligning with the cultural and linguistic characteristics of the child. A good assessment tool must be culturally relevant. It should be structured in line with available materials in the immediate environment
- c. The purpose of assessment should be to improve instruction. The feedback should point the teacher to area to lay more emphasis on
- d. It should be used to identify disabilities, determine program eligibility, to improve learning and to further accountability
- e. Those administering assessment should have cultural and linguistic competence. They must be able to pronounce words appropriately in order to avoid misinterpretation of words
- f. Family should play critical role in the assessment process. Parents can collaborate with classroom teachers to get more detailed description of area to be assessed

Functions of Assessment

1. Identify current knowledge and skills of students
2. Address and plan for the strengths and needs of students
3. Evaluate student growth over time
4. Promote student motivation and objectivity
5. Evaluate program effectiveness
6. Enlighten parents of student progress
7. Promote parent advocates

Components of Assessment

Early Childhood Assessment is composed of three essential, interrelated components:

1. Documentation (data collection)
2. Evaluation (comparison to a standard)
3. Communication with family (sharing both progress and performance)

Purposes of Assessment in Early Childhood

Assessment can be defined as the gathering of information in order to make informed instructional decisions (Snow and van Hemel 2008), and this is its key purpose in early childhood education. Assessment has several important purposes, including informing how teachers plan learning experiences, identifying areas of learning and development where children may need support or extension, to make valued learning visible, and integrating learning with curriculum and program provision (National Association for the Education of Young Children 2003; Brassard and Boehm 2007). More broadly assessment can also be connected with evaluating the effectiveness of an early childhood program or school. Assessment can be seen to be in the best interests of the child when involves families and leads to decisions that support children's learning and social contributions and recognizes children's strengths, needs, interests and preferences (Bagnato 2007, Nagle 2007). Assessment is also used to collaborate with families and other stakeholders with information about children's learning and development and help overcome issues related to disadvantage (Drummond

20L2; Featherstone 2011; Siraj-Blatchford 2004). The following are useful sources for examining the purpose of assessment in early childhood.

Implementation of Assessment Programme in ECCE

The process of choosing the right assessment tools varies for each early childhood program. Below are some general guidelines for implementing assessment into your program.

1. **Assessment aligns with instructional goals and approaches** different types of assessments have different purposes. It is important to first determine what should be measured; then find the assessment program that best assesses those goals
2. **Assessor knows the child** the adult conducting the assessment should have a pre-existing relationship with the child. ideally the assessor is the educator
3. **Assessment is "authentic"** assessment should take place in a child's normal setting. The assessment should reflect everyday relationships and experiences. It should be conducted in familiar contexts and settings (such as the classroom)
4. **Observations are ongoing and diverse** for a comprehensive assessment, observations should be made at a variety of children's activities and be ongoing in order to fully see the progress of a child.
5. **Assessment is a cycle** although specific methods for assessment tools vary, the process is cyclical. The cycle allows educators to make changes to their curriculum to better serve children in their program.

Importance of Assessment in ECCE

Assessment is an integral part of instruction, as it determines whether or not the goals of education are being met. Assessment affects decisions about grades, placement, advancement, instructional needs, curriculum, and, in some cases, funding. Assessment inspires us to ask these hard questions: "Are we teaching what we think we are teaching?" "Are children learning what they are supposed to be learning?" "Is there a way to teach the subject better, thereby promoting better learning?" Today's children need to know not only the basic reading and arithmetic skills, but also skills that will allow them to face a world that is continually changing. They must be able to think critically, to analyze, and to make inferences. Changes in the skills base and knowledge our children need enquire new learning goals; these new learning goals change the relationship between assessment and instruction. Teachers need to take an active role in making decisions about the purpose of assessment and the content that is being assessed.

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