

**Teachers' views Towards Academic Assessment for  
Learners with Autism: A Case Study of City Primary  
School in Nairobi County, Kenya.**

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**ABSTRACT**

*Research has demonstrated that academic assessment is crucial for all, although there is limited information on academic assessment for learners with autism. The purpose of this study was to establish the views of teachers towards academic assessment for learners with autism at City Primary School in Nairobi County. The study adopted a qualitative paradigm with a case study approach where social constructivists' epistemology was applied. Respondents were twenty, comprising of; one head teacher, one deputy head teacher, six teachers for special needs education and twelve teachers from the regular program but teaching in the inclusive class rooms. Non-probability sampling technique specifically using; unique case, snowball and convenient sampling techniques were used to select participants in the study. Data were collected through interview guides and focus group discussion guide. The data collected were transcribed and analysed qualitatively through open, axial and selective coding. Data were also categorized in relation to research questions of the study. The analysis involved developing a coding system based on samples of collected data and classifying major*

*issues or themes that emerged. All the coded information was put together for summarization of the report. From the findings, two types of academic assessments were identified namely; authentic and standardized academic assessments. The findings also showed that teachers faced challenges when assessing learners with autism. Some of these challenges included; large amount of content in examinations, lack of policy guidelines for examining learners with autism and high parental expectation. The solutions to these challenges were that, teachers, government and parents had a role to play to enhance assessment of learners with autism.*

**Key words:** academic assessment, authentic, standardized, autism

## **INTRODUCTION**

Autism is a diverse and complex developmental disorder in all racial, ethnic and social groups (Perko & McLaughlin, 2002). It is a developmental disorder which is characterized by challenges in communication and social behavior, the presence of restricted and repetitive behaviors as well as interests (Mash and Wolfe, 2002). According to Hart and Whalon (2011), individuals with autism have a problem comprehending verbal and nonverbal communication which is social conversation, interpreting the emotional states of others, forming and maintaining friendships with peers. They are therefore extremely unresponsive to other people. They show poor skills in communication, have few skills in imaginative play and often show self-stimulatory or self-

injurious behaviors. In contrast to their normal peers, students with autism are apt to display signs of uneven development of skills that are usually the precursors to reading (Lanter & Watson, 2008). These children are therefore different from other children and thus teaching and assessing these children is a hard task for teachers (Perko & McLaughlin, 2002).

Educational inclusion of learners with autism and other disabilities has been uphill task. Recently however, there has been an increased trend to include students with autism and other various disabilities in general education classrooms for them to learn along with their normally developing peers (Segall & Campbell, 2012). This trend has developed from arguments related to social development and civil rights movement (Harrower, 1999). However, for inclusive placements to be successful, educators must have knowledge of access to empirically validated strategies that will assist them in this process.

In Kenya, autism is a disorder that is not well understood. It has been seen as a psychiatric disorder, a curse or a consequence of witchcraft. Most children with autism have stayed hidden away in homes, locked behind doors, or even chained (Matasio, 2011). The Kenyan National Special Needs Education Policy in March 2010 however made a prime move towards the attainment of the Education for All goals. The policy advocated for provision of education for children

with special needs through regular schools as opposed to the prevailing practice of using special schools and special units (Ministry of Education, 2009).

This saw a number of children with autism being placed in regular schools through inclusion, City primary being one of them. A question however remains on how these students have been progressing in these schools academically and how the teachers view academic assessment for these learners. Assessment is a key aspect of learning as it helps the teachers to obtain information about the knowledge, attitudes, or skills the learner has obtained in the learning process. It is therefore important that all students participate in the assessment process designed and implemented by the teachers. There is however limited information on teachers' views on the academic assessment of learners with autism as experienced in schools and hence the need for this study.

### **Statement of the Problem**

Autism is a disorder that knows no boundaries in terms of racial, ethnic, economic, educational or social background. It can affect any family and any child (Autism Society of America, 2009). Currently most of the children with autism have been enrolled in inclusive classes and as more and more students with special needs are being mainstreamed into general education classrooms, teachers are faced with the difficult task of meeting their specialized needs while still

providing a challenging experience for all students in the class. Because of this, effective instruction and assessment to these learners is uniquely challenging (Maurice, 2004). Assessment in particular is a very important aspect of learning as it evaluates how much has been achieved in a learning process. It is for this reason that the researcher carried out this study to establish the views of teachers towards academic assessment for learners with autism at City Primary school to improve learning.

### **Research Questions**

The study sought answers to the following questions:

1. What are the types of academic assessments for learners with autism used by teachers in City Primary School?
2. What are the teachers' views on academic assessments for learners with autism?
3. What are the challenges experienced by teachers while assessing learners with autism?
4. What are the solutions to the challenges identified by the teachers?

### **Theoretical Framework**

This study was guided by Social cultural theory by Vygotsky. This theory explains that the actual level of what a child has achieved or developed can be defined by the functions that are matured (Mwakalinga, 2012). These functions that are already matured can only be determined through assessment.

If a child does something without help that means that the function of that activity is matured and the zone of proximal development (ZPD) is determined through problems that the child cannot solve independently (Vygotsky, 1978).

The zone of proximal development concept of Vygotsky discusses two levels of development which are the actual developmental level and the development which is reached when a child is helped by more capable people. The difference between these two levels or the distance between these two levels is what is called zone of proximal development. Put differently, this is the difference between what a learner can do without help and what he or she can do with help. Central to this theory is that interaction with others more experienced adults such as teachers and peers helps to reduce the ZPD. The aim of adults is therefore gradually to remove the support they provide and pass over the responsibility for the task to the child (Greig, Taylor and Mackay, 2008). This theory thus proposes that the social interaction influence cognitive development of an individual (Vygotsky, 1978).

This theory is applicable in this study because learners with autism learn from their interactions with their teachers and the teacher assistants. When the teachers assess the learners with autism they try to determine what the learners have achieved from their interactions and obtain a zone of proximal development where improvement is required. To work on this

zone of proximal development the teachers' views on academic for learners with autism are a necessity.

## **REVIEW OF RELATED LITERATURE**

### **Definition of Assessment**

Assessment is the systematic collection, review and use of information about educational programs undertaken for the purpose of improving learning and development (Palomba & Bantu, 1999). According to Linn and Miller (2005), assessment refers to a variety of procedures used to obtain information about a student's performance. It may include the use of traditional paper and pencil tests as well as extended responses for example essays, performances of tasks, teacher observations and students self reports.

Assessments answer the question "How well does an individual perform?" This is supported by Higher Learning Commission (2006) which defines assessment as a participative process that gives data or information on students' progress in learning. Assessment engages the teacher and others in analyzing and using the data or information to confirm and improve teaching and learning.

Assessment of student achievement in any subject is therefore an integral part of the total learning process and to ensure that the integration of assessment in the learning process is successful, Brown (2004) proposes that it should be learner

centered and should reflect learner-centered curriculum. From these definitions of assessment, it is important to note that assessment for learners with autism may not comprise of paper and pencil assessment but may also involve performance of certain tasks and thus may take any of the approaches described below.

### **Approaches to Assessment**

It is worth noting that a thorough and comprehensive assessment, including both formal and informal assessment procedures, is crucial to understanding and appropriately assisting individuals with Autism. Formal assessments are generally used to compare a student's performance in some domain with that of his or her peers on skills related to language, academics, intellectual ability, and memory. These are also referred to as norm referenced tests and they have specific standards that outline the basis of comparison and administration guidelines. This helps all students including those with disabilities not only to access the general education curriculum but also helps those students to achieve the academic standards specified in that curriculum (Lanter & Watson, 2008).

Informal assessment approaches on the other hand are centered on content and individual performance rather than on comparisons to other students. As such, these approaches do not necessarily require a defined reference group, but

rather compare the child's performance to the expected skills and abilities as set forth by developmental standards and/or the curriculum. Some of the informal assessment procedures include authentic assessment, assessment of the affective domain and psychomotor domain and portfolio assessment which are commonly used to assess learners with autism.

### **Portfolio Assessment**

Portfolio assessment is an ideal choice for students with autism spectrum disorders (Gelfer & Perkins, 1998). This is because it is difficult to use traditional assessment procedures which provide a snapshot of performance on a given date. A student portfolio is a meaningful collection of student work that exemplifies the student's interests, attitudes, ranges of skills, and development over a period of time and should reflect the student's growth and change. This portfolio may contain items such as photos, drawings, audiotapes, collages, self-expression projects, videotapes, and student self-reports. Examples of portfolios are where the learners with autism can be photographed as they practice skills such as doing laundry, dining, cooking, making a bed, or setting a table.

According to Carothers and Taylor (2003), a portfolio can also be taken to demonstrate a student's abilities to write, take messages, and communicate effectively with others. For students with gross motor impairments requiring physical therapy, a log of physical therapy goals, activities, and

accomplishments could be kept, along with a description of how these activities can be used at home.

### **Authentic Assessment**

Authentic assessments puts emphasis on ‘real world’ tasks relevant outside the classroom and performance assessment stresses the actual doing of a task rather than merely recognizing the answer (Linn & Miller, 2005). They further add that, this approach moves beyond learning by rote and memorization of traditional methods and allows learners to construct responses. Learners with autism can be assessed in real world tasks such as rabbit keeping, ornaments making, bed making and even cooking.

### **Psychomotor Domain**

The psychomotor domain is a collection of educational outcomes and learning targets that focus on motor skills and perceptual process (Linn & Miller, 2005; Nitko & Brookhart, 2007). This domain focuses on manual and physical skills that are concerned with doing an activity and require the manipulation of objects and physical activities (Salim, Puteh & Daud, 2012). Some of those activities include muscular or motor behaviours for example running, speaking or writing (Sax, 1996). This assessment can be very helpful for learners with autism as some of the learners have challenges in their motor skills.

### **Assessment of Affective domain**

Education objectives play a crucial role in assessment. Objectives are conveniently categorized as cognitive, affective or psychomotor (Sax, 1996). According to Sax (1996), the cognitive domain emphasizes the attainment, retention and development of knowledge and intellect. The cognitive domain focuses on knowledge outcomes and intellectual abilities and skills (Linn& Miller, 2005). Thus acquisition of subject matter- whether it is very simple or complex in nature is primarily a cognitive function. The affective domain encompasses those behaviors characterized by feelings, emotions or values. Affect may be positive (directed toward some goal object) or negative (directed against a goal object). The affective domain is concerned with the development of or changes of values, attitudes, interests, appreciations and modes of adjustment (Linn & Miller, 2005).

### **Challenges Experienced by Teachers while Assessing Learners with Autism**

Teachers and administrators have an active role in supporting learners with autism to achieve classroom literacy instruction, achieve curriculum standards, prepare for standardized tests and ultimately help the learners to achieve higher levels of success in academics, employment, and other life skills (Catts, Adolf & Weismer, 2006). They are however faced by a number of challenges in their endeavor to make this a success as explained in the section that follows.

Students with Autism are a cohort of students with diverse learning needs that require the attention of both the teachers and the teaching assistants (TAs) (Levy, Mandell, & Schultz, 2009). However, research indicates that not all teachers and TAs are sufficiently trained to provide these learners with the required level of support whether during instruction or during assessment. This makes them to have a feeling of inadequacy with regard to their training to meet the needs of the learners (Lohrmann & Bambara, 2006). Consequently, this affects their methods of instruction and even effective assessment because, these people are left to explore trial and error methods where they make decisions which are based on their own experience rather than knowledge from external sources such as training and professional development courses.

Lack of Practice guidelines for children with autism at different classes is also a challenge to teachers. This leaves them with little support for guiding them on which strategies to choose from while assessing learners with autism. The lack of relevant and accessible policy information inevitably impacts on the teacher's ability to make appropriate classroom and assessment accommodation for pupils on the autism spectrum (Wilkinson & Twist, 2010). Watkin (2007) advises that in countries that have clearly defined national curricula, national guidelines for assessment may state what is to be assessed but developing and implementing assessment should

be the responsibility of schools and class teachers.

Further, because individuals with autism differ in terms of learning style and profile, no single intervention is appropriate for all (Jordan, 2006; Jones et al., 2009; Parsons et al., 2009). In the same way, assessment strategies should not be the same for all but varied according to specific individual needs of the learners. This has been supported by Humphrey (2008) who suggests that it is impractical to try to reduce inclusive practice to a simple series of strategies and then expect that they will work with every student especially the ones diagnosed with autism. This therefore poses a challenge to the teachers who are supposed to set a similar test for all learners.

Parents also play a vital role in the education and assessment of their children. As partners in the process, parents provide perspectives and information that will broaden educators' understanding of the student. Their participation enhances program planning and assist in the determination of educational goals, methods of instruction and even methods of assessment. It is therefore necessary that a consultative partnership between home and school is developed through regular, frequent opportunities for discussions about the student's unique learning needs, evidence of progress, and any adjustments to the educational program that may need to be considered (Perry & Condillac, 2003). Although this has been a long program feature of many comprehensive intervention

models, researchers are documenting that some of the parents do not cooperate to give teachers information to help in the instruction and assessment of the learners as required.

### **Strategies to Solve Challenges Experienced by Teachers while Assessing Learners with Autism**

The parents of learners who have been diagnosed with autism require to get trained. According to Ingersoll and Dvortcsak, (2006), few public school programs include parent training as part of special education curriculum despite its well-established benefits. These benefits of parent training include increased skills, renewed confidence and reduced stress for parents and children. This has been identified from the fact that, group training in new skills for parents has been demonstrated to facilitate mutual support between parents and educators (McConachie & Diggle, 2007). Earlier studies have indicated that although parents attend their child's Individualized Education Program (IEP) meetings, they often have no involvement in developing objectives, interventions, or methods of evaluation (Goldstein, Strocland, Turnbull & Curry, 1980).

The curricula, teaching methods and materials, assessment and examination systems, all need to be accessible and flexible to support differences in learning patterns. Assessment procedures should promote learning for all students. The assessment procedures should complement each other

and thus alternative forms of assessments are needed to accommodate learners who have special needs such as learners who have autism.

For decisions regarding summative assessment to accommodate pupils with autism, it is recommended that appropriate, up-to-date guidance should be published by the relevant authorities and be made easily accessible to all schools. Published teacher guidance is necessary in order to provide pupils with the opportunity to succeed in school in a fair and equitable way and this would ensure that learners with autism are not disadvantaged while being assessed.

### **Research Design**

The study used a case study approach using social constructivist epistemology from qualitative paradigm. This research paradigm strives for in-depth understanding of a phenomenon in its natural setting. This research design was chosen to allow the researchers to get teachers' views on academic assessments of learners with autism from their natural settings (their classrooms) in City primary School, Nairobi County. A case study approach also enabled the researchers to bring out all the details of study situation in totality. The study used interview guides and focussed group discussions to give descriptive accounts. Social constructivist's epistemology was applied to allow the researchers to understand how individuals (teachers) seek to understand the world in which they work.

This epistemology allowed the researchers to understand the views of teachers towards academic assessment of learners with autism at City Primary School.

### **Location of the Study**

The study was carried out at City Primary School in Ngara West Ward, Juja Road Zone, Starehe Sub-county in Nairobi County. City Primary is a Public primary School and has a high enrolment of one hundred and thirty five learners with autism, and it is also practising inclusive education.

### **Sampling Techniques**

City Primary school was purposively sampled specifically using unique case sampling because it was the first school to practice inclusive education for learners with autism in Kenya when autism was identified and classified as a separate category of disability by the Ministry of Education in 2003. The teachers in inclusive classes were purposively sampled through snowball sampling technique while the teachers in special needs education units were purposively sampled through convenient sampling.

### **Sample Size**

The study sample was made up of twenty respondents who comprised of one head-teacher, one deputy head teacher, six teachers in special needs education, and twelve regular class teachers in inclusive classes.

## **Research Instruments**

The data collection instruments included semi-structured interview guides which were developed for the headteacher and regular teachers in inclusive classes, while the focus group discussion guide (FGD) was developed for teachers in special needs education.

## **Data Collection Technique**

The interviews for the head teacher and the regular teachers in inclusive classes were conducted individually. The teachers were requested for their consent to participate in the study and those who were willing to participate, were given consent forms to fill before the interviews started. The interviewer and note taker also counter signed all the consent forms. The interviews lasted one hour each. The focus group discussion was conducted with the help of six teachers who consented to participate in the study by signing the consent forms. The focus group discussion also lasted for one hour.

## **Data Analysis**

Data analysis was ongoing throughout data collection process, Miles and Huberman (1994) recommends early and continuous data analysis arguing that it helps cycle back and forth between thinking about existing data. This was done by coding the data immediately after its collection to ease categorization and ensure necessary clarifications were made where necessary.

### **Ethical Considerations**

The researchers sought clearance from the Head teacher of the school in which the study was conducted. The researchers explained to the respondents the purpose of the study and requested for their willingness to participate in the study. They also assured them of confidentiality for the information that they would provide.

### **Trustworthiness of the Data**

The researchers ensured trustworthiness through prolonged engagement with the data during analysis through reading and rereading. They also used member checking, triangulation of data from the interviews with that from the focus group discussion and gave full rich descriptions of the findings.

## **DATA PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS**

### **Demographic Information**

Demographic information from the regular teachers in inclusive classes was sought through an interview guide. Most of the teachers had over twenty four years experience in teaching and the teacher with least experience had four years with two years in teaching learners with autism. Teachers in the inclusive classes also had a lot of teaching experience though they did not have any specialised training in special needs education. They had attended several seminars on

teaching learners with autism which equipped them with skills to handle learners with autism though not sufficiently.

### **Types of Academic Assessments for Learners with Autism**

The study findings revealed two types of assessments for learners with autism namely; standardized exams and authentic assessment. Using the standardized examinations which are objective oriented; the learners were assessed for the purpose of grading, ranking and progression. Authentic assessment on the other hand involved learners being taught, toileting, fine motor skills, communication skills, eye contact, gross motor skills and application of number work among others. These findings were in line with Linn and Miller (2005) who says that, authentic assessment emphasizes the practical application of the task in the “real world” outside the classroom. Authentic assessment in City primary School also involved application of number work in measuring food and water in poultry and rabbit keeping, beadwork, tailoring and cookery where this assessment was used to determine learners’ ability in the performance of a task.

The teachers also assessed independence levels of the learners. This involved assessing learner’s ability to do things on their own. Communication skills were also assessed which involved receptive, expressive and non expressive language, speech and body language. Perceptual training was also assessed, and this involved eye to hand and body coordination through the use

of Velcro boards, pegging, fine motor skills and cross motor skills. Authentic assessment at City Primary School was therefore found to be holistic as it moved beyond learning by rote and memorization.

### **Teachers' Views and Challenges Faced in Academic Assessment for Learners with Autism**

The following were identified as the challenges from the findings of the study; curriculum related challenges, parents related challenges, and lack of policy guidelines. The curriculum related challenges included, examinations content, ranking for learners, teaching personnel, diversity among learners, retrogression of the learners, and certification. The parent related challenges included high expectation and choice of educational intervention for their children. Lack of guidelines and textbooks were also identified as major challenges facing the teachers while assessing learners with autism.

Examination content for learners with autism was relatively much as one participant indicated "An autistic child to do ninety questions exam in social studies paper is not fair for them" (Participant two interview, October 29th 2014) while another participant concluded "I believe there should be a certain curriculum for children with autism, the regular curriculum is too hard for them" (Participant three interview, October 29th 2014).

The curriculum challenges also involved lack of assessment

guidelines, this was a challenge, because in the regular classes, the examinations were standardized and objective oriented. However, the time for sitting the examinations varied as some teachers added the learners with autism an extra hour, others relied on the teachers in the special needs education to give directions because they considered them as specialists while they (teachers in special needs education) used their discretion on how to assess.

From the findings of the study it was also noted that since 2003 when the unit admitted learners with autism, the learners have not sat for any summative examination and no certificates have been awarded to facilitate exit from the school. This has resulted into the school having learners up to thirty five years of age. Another challenge was the teacher: pupil ratio (1:8) which was considered high in the units for learners with autism. This ratio reflected on the problem of personnel in the school and was clearly articulated by the participants who explained that “another challenge is personnel; teachers need assistant teachers because sometimes you cannot work alone especially during exams” (Focused group discussion, October 29th, 2014).

The parents also posed a challenge to the teachers as they had very high expectations on the teachers and their children. The study found out that some of the parents were not cooperating with the teachers as one participant posed “ Some parents are

not cooperative and do not want to understand when you have assessed and given feedback, mzazi anataka asikie mototo anajua kufanya hesabu but this may not be possible for some” (Focused group discussion, October 29th, 2014).

### **Suggested Strategies to Solve the Challenges Faced by Teachers at City Primary School**

From this study, teachers, government and the parents had a role to play in enhancing assessment for learners with autism. The government needed to train more teachers in the area of autism so that the teachers could be effective in instruction and assessment for learners with autism. It was also necessary for the government to provide relevant guidelines on assessment of learners who had special needs. This needed to be done in consultation with Kenya Institute of Curriculum Development and Kenya National Examinations Council.

The school should also have trained the parents on their supportive role during assessment of their children for improved learning. Teachers could also encourage parents and talk to them about their children and the challenges they experience. The Kenya Institute of Curriculum Development and Kenya National Examinations Council should also have looked into the content of the exams which seemed to be a big challenge for the learners with autism. They should have considered coming up with varied assessment strategies because individual learners have specific learning problems.

### **Summary of the Findings**

This case study was carried out at City Primary School. The focus of the study was to establish the teachers' views on academic assessment for learners with autism and suggest strategies to solve the solutions to those challenges. The following is a summary of what was established from the findings:-

### **Types of Academic Assessments for Learners with Autism**

Academic assessments used in City Primary School for learners with autism were mainly two; standardized exams and authentic assessment.

### **Teachers Views and Challenges Faced by Teachers in Academic Assessment of Learners with Autism**

The study found out that issues such as exam content, ranking of learners using assessments, similar assessment for learners with diverse needs were posing great challenges to teachers. Lack of enough personnel and guidelines on assessment of learners with autism also challenged the teachers. The parents were also found to be unaware of their role in supporting learning and assessment of their children.

### **Suggested Strategies to Solve the Challenges Faced by Teachers in Academic Assessments for Learners with Autism**

The Government through the ministry needed to consider

exam content, ranking and certification of learners with autism due to their diverse learning needs. The guidelines for assessing these learners needed to be made available for teachers for better assessment practice. Training of parents on their supportive role during learning and assessment of their children was also found to be important.

### **Suggested Areas for Further Research**

From the study findings, gaps still existed in areas of assessing learners with autism and there was need for further research in the following:-

- i) The transition of learners with autism from primary schools to secondary schools
- ii) Parental views on academic assessment for learners with autism
- iii) Parental views on authentic assessment of learners with autism in the special units and vocational classes.

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