ASSESSMENT OF TEACHERS’ KNOWLEDGE AND APPLICATION OF DIFFERENTIAL ASSESSMENT TECHNIQUES IN ALL INCLUSIVE CLASSROOM IN UNIVERSITIES IN SOUTH-SOUTH ZONE, NIGERIA

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ABSTRACT

In the 21st century, there is tremendous need for change in the way special needs learners are assessed. The system of higher education in Nigeria does not give room for special considerations in the assessment strategies that go with the needs of special students. Incidentally, both specialists and non-specialists teachers carry out assessment of exceptional and regular students alike, a strategy that hardly permits full maximization of desirable outcomes of the learners’ behavior. Assessment is meant to systematically determine the extent to which students meet instructional objectives. The role the teachers play in using differential techniques in the assessment of students with special needs is critical in achieving the objectives of assessment for (formative) and assessment of (summative) learning among these students. This study investigated teachers’ knowledge and application of differential assessment techniques in all inclusive classrooms in universities in south-south geo-political zone, Nigeria. The design adopted for the study was descriptive survey. The population for the study comprised (40) special teachers and sixty (60) non specialists. The sample constituted 20(50%) of specialist teachers and 30 (50%) of the non-specialists. Two research questions guided the study and the instrument adopted for data collection was the Focused Structured Group Interview (FSGI). The FSGI was validated by three experts, in measurement, special education and research/statistics. The reliability of the instrument was deduced through the use of Cronbach alpha with a coefficient of .81. The analysis of the qualitative data was carried out using descriptive statistics. The findings of the study among others, showed that the non-specialist teachers neither have the knowledge nor the application of assessment techniques in all-inclusive classrooms, while the specialist teachers exhibited adequate knowledge of assessment techniques. However, little application of differential assessment techniques was displayed. It was recommended among others, that the non-specialists should be exposed to adequate orientations through training on the knowledge and techniques of assessment for and of inclusive learning. It was also recommended that special teachers be provided with adequate facilities and equipment for assessments in all-inclusive classrooms.

KEYWORDS: Assessment, Teachers’ knowledge and application, Differential assessment techniques, All-inclusive classroom, and Universities.

INTRODUCTION

There is need for education for all. Federal Republic of Nigeria (FRN,2013) stated that education maximizes the creative potentials and skills of the individual for self fulfillment and general development of the society. FRN added that education is compulsory and the right of every Nigerian irrespective of gender, social status, religion, ethnic background and any peculiar individual challenges. This is a pointer to...
the fact that education is for both individuals with special need and those without special needs. The result of teaching exercise come through assessment; Assessment subsumes testing, measurement and evaluation of the cognitive, psychomotor and affective skills (Joshua, 2005; 2013). It is seen as the global and systematic process of collection and synthesizing information about individuals or object/events so as to describe, understand and perhaps help them.

Learners with special needs require peculiar assessment mode. This is because special education is perceived as customized educational programme designed to meet the unique needs of persons with special needs that general educational programme cannot cater for. FRN (2004) identified persons with special needs to include visually impaired, hearing impaired, mentally retarded, speech impaired, multiple handicapped, the disadvantaged children, the gifted and talented. These types of individuals are found among students in inclusive setting. According to Eke(2000) inclusive setting is forum where there are both persons with special needs and those without special needs, where effort is made for the system to take care of those with special needs.

Most of the foregoing persons with special needs have impairment, disability and handicaps which pose problem to their education. It is pointed out (FRN, 2013) that persons with special needs shall be provided with inclusive education services in schools which normal persons attend, in-age appropriate general education classes directly supervised by the general teacher. The general teachers are mostly regular teachers without special training on teaching and assessment of learners with special needs. This may result to wrong placement. When these individuals are inadequately placed, they carry with them the negative baggage of labels and categories. They are considered as special population that as well opt for successful education.

The success of education of all is determined by teacher effectiveness. It is popularly said when a learner did not learn the teacher did not teach which in the end defeats the purpose of education. Inclusive education is now becoming in vogue in Nigeria especially in Universities where special education is offered by students. There are students who are with special needs. They are usually assessed along with persons without special needs. Assessment is an important ingredient in the whole process of inclusive education.

Assessment in Nigeria has a different goal. Often, assessment are utilized for placement and detection of what the child knows or does not know and in most cases, they are curriculum based on assessment which is frequent, systematic, and measured learned tasks (Eskay, 2009). Instructional programs are consistently designed to respond to categorical placement options of exceptional learners. Nigeria has no federal mandates to ensure placements of exceptional learners in least restrictive environments. Because of lack of the federal mandates, the concern still remains that many students with disabilities are inappropriately placed. This, in turn, affects the instructional programming by the school administrators in school activities.

These administrators include the teachers that are found in all inclusive classroom even in the universities. The school administrators that teachers are considered as stakeholders should have planned and provide quality instruction to many diverse learners with disabilities. Most lecturers teach in inclusive settings where those with and those without special needs are in the same classroom. The above is true of what happens in tertiary institutions in Nigeria especially in universities in south-south zone.

Eke (Personal communication, 2015) asserted that ordinarily, it is practically impossible to enter a classroom without any person with special needs there. It is noteworthy to note that during assessment, attention should be paid on differing the modalities. There are persons with special needs that require special treatment due to type of disability while assessing them. It is pointed out by Asim, Ukpov, Eni and Promise (2015) that the albinos and blind candidates are given thirty minutes extra time across all subjects in the senior school certificate examinations. The authors added that within the university system there are no stipulated rule about special considerations in the assessment of this category of student’s. This is indeed appalling. From the fact of the revelation of the authors, it is pertinent to note that there should be different ways of assessing to assess this special population.

There are assessment for learning and assessment of learning. According to Harlen (2007), assessment for learning aims at
improving learning while assessment of learning aims at ensuring accountability of schools and teachers. The former paves way for the later. Eke(2000) in line with inclusive assessment, recommended that to maximize success with learners in inclusive setting, the PASS variables should be used. The PASS is an acronym which stand for Prioritize objectives (the most appropriate ones), Adapt instructions, materials and environment(accommodate more children with disabilities), Systematic instructions usage during instruction(use effective presentation variables)and Systematic implementation of evaluation measures (pre quality measuring learners’ progress) Ekpo as cited in Joshua(2013) opined that an incredible impairment tool to help in teaching in an inclusive classroom is differentiation. According to the author, differentiation involves providing range of activities and using variety of strategies for children with different abilities.

The flexibility in assessment that the legislative Code of Practice refers to might be interpreted in two divergent ways, concerning both the temporal nature of the response and the scale of the approach. Flexibility might be regarded as: the reactive provision of a different mode of assessment in a circumstance where the existing assessment mode is not suitable for a candidate; a proactive provision of assessment choice, offering different ways to all candidates to demonstrate their acquisition of the learning outcomes.

An approach to assessment in mainstream settings where policy and practice are designed to promote the learning of all pupils as far as possible is considered germane. There is clarion call for inclusive assessment. The overall goal of inclusive assessment is that all assessment policies and procedures should support and enhance the successful inclusion and participation of all pupil vulnerable to exclusion, including those with special education needs, SEN. Inclusive assessment involves ... A range of methods and strategies that all aim to gather clear evidence about pupils' learning in non-academic as well as academic subjects; procedures that may fulfill other purposes in addition to informing teaching and learning (for example, initial identification of SEN, or monitoring of educational standards), but that are based upon shared concepts and values for assessment and inclusion as well as the principles of participation and collaboration

Inclusive assessment is considered to be an important aim for all educational policy makers and practitioners. Inclusive assessment explicitly aims to prevent segregation by avoiding (as far as possible) forms of labelling and by focusing on learning and teaching practice that promotes inclusion in a mainstream setting. Inclusive assessment can only be realised within an appropriate policy framework and with the appropriate organisation of schools and support to teachers who themselves have a positive attitude towards inclusion. Attitude is a popular trait for teachers billed to function in an inclusive setting.

In the differentiated classroom, the teacher with positive attitude will intentionally construct his or her lessons based on cubing concept originated by Gregory and Chapman (2002). Cubing is a technique that will assist students to consider a concept from six points of view, by giving students suggestions on how to conceptualize a particular concept. While envisioning the six sides of a cube, the student is told that each side represents a different way of looking at the idea. In many ways, this is founded on the concept of differentiated instruction and places a priority on the content modifications, instructional differentiation, and setting variations that allow the teacher to meet the needs of students with learning disabilities as well as the other diverse learners in today's classrooms.

There are also different tools for assessment. They include observation, screening, referral, evaluation, identification, and individualized education plans, among others (Harlen, 2007). The use of the foregoing poses great challenge and difficulty to non-specialized teachers that teach in inclusive setting due to their lack of exposure to the knowledge of special needs. Ekpo as cited in Joshua (2013) opined that an incredible impairment tool to help in teaching in an inclusive classroom is differentiation. According to the author, differentiation involves providing range of activities and using variety of strategies for children with different abilities.

These administrators include the teachers that are found in all inclusive classroom even in the universities. The school administrators that teachers are considered as stake holders should have planned and provided quality instruction to many diverse learners with disabilities. The above is true of what happens in
tertiary institutions in Nigeria especially in universities in south-south zone, Nigeria.

The above suggest that it is certain to find learners with special needs in regular classes let alone inclusive setting where their presence is established. The progress of this special population should be monitored through assessment. The importance of assessment cannot be over emphasized. In an inclusive setting, it is imperative to introduce differential assessment mode. Teachers should play significant roles in using differential methods for this special population for both formative and summative assessments.

There is dire need to assess teachers’ knowledge and application of these aforesaid differential assessment mode in the universities in south zone Nigeria, more so now that inclusion is gradually gaining ground in Nigeria. There are courses in Universalities that are common to both learners with special needs and learners without special needs. Specifically courses such as GSS courses and few other common causes are done by aforementioned groups of students in an all inclusive classroom. In such setting, teachers that teach there are specially trained teachers referred to as in this study as specialists and lecturers not so disposed to special training otherwise in this study identified as non-specialists. Each group of the teachers assesses the students especially those with special needs. It is imperative to assess teachers’ knowledge of techniques/ strategies and how to apply them in assessing persons with special needs.

The above gave concern to the researchers and agitated their minds to probe into assessment of teachers’ knowledge and application of differential assessment techniques in all inclusive classroom in universities in south-south, Nigeria.

**Statement of problem**

Learners with special needs should be assessed differently in view of their peculiar needs. Teachers (lecturers) should devise means of applying differential assessment techniques in all inclusive classroom settings. This exposes abilities in disabled persons. The foregoing is not true of what happens in universities in south-south zone of Nigeria regrading the assessment by lecturers. These teachers seem not to have had adequate orientation on differential assessment techniques that can be used for this special population. Therefore, this special population cannot enjoy assessment that is objective and effective, hence the extent to which these learners meet the instructional objective becomes questionable. This has a far-reaching effect on the output of learners with special needs.

The literature available to the researchers has not captured specifically the present study therefore, the researchers became curious to carry out this study. This is considered germane in fairness to persons with special needs. It goes a long way to checkmate poor assessment of this special population which in the end makes them to worsen their status as they become frustrated.

**Purpose of the study**

This study was to investigate assessment of teachers’ knowledge and application of differential assessment techniques in all inclusive classroom in universities in south-south zone, Nigeria. Specifically, the study addressed the following:

(i) Identification of different assessment strategies for learners with special needs in inclusive settings.
(ii) Find out different assessment tools usable for learners with special needs in inclusive setting.

**Research questions.**

These research questions guided the study.

1. What are the different assessment strategies for learners with special needs in inclusive settings?
2. What are tools used for assessing learners with special needs in inclusive settings?

**Methodology**

This study used descriptive survey design. This description bothered on the views of lecturers that teach learners with special needs in inclusive classrooms in two universities in the south-south zone of Nigeria. They are University of Calabar and University of Uyo where there are learners with special needs amidst learners without special needs. In these institutions, special education are offered as courses, hence, the schools were purposively drawn
All the lecturers involved in teaching GSS and other common courses, 60 non specialists, and 40 specialists to persons with special needs that have upwards of five years lecturing experiences formed the population. Census was adopted hence, the number in the population was considered as the sample.

Two research questions guided the study. The instrument for data collection were a set of questionnaire that has 15-items which both specialists and non specialists responded to ascertain the percentage of their use of assessment strategies and tools of assessment. The instrument is named Assessment Strategies and Assessment tools inventory for persons with special needs in inclusive setting (ASATIPWSNIS). There was also Focused Group Discussion(FGD). There were 5 focused questions discussed in a group which captured both knowledge and application. The ASATIPWSNIS and FGD were validated by the three experts in measurement, special education research/statistics. The reliability of the instrument were deduced through the use of Cronbach alpha with coefficient of .81 and .83 respectively. Copies of the questionnaire were first administered to the respondents which after considerable interval, the discussion session commenced. The questionnaire addressed percentage analyses while the FGD was analyzed based on the responses and consensus of the group members.

There were five sessions of group discussion. In University of Calabar, there were three sessions composed of twenty three (10 specialists and 13 non specialist lecturers), twenty three (10 specialists and 13 non specialists) and twenty four (10 specialists and 14 non specialists). In university of Uyo, there were two sessions of discussion schedule. Each was composed of fifteen 5 specialists and 10 non specialists. The reactions of lecturers that are specialists and those that are not were given attention especially areas of convergence and divergence of views were noted. There were research assistants that served as secretaries in the sessions. Tape recorders were also used to capture each session and which helped in making deduction upon the use of the write up of the research assistants that served as the secretaries.

**RESULTS**

**Research question one.**

What are the different assessment strategies for learners with special needs in all inclusive settings?

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>Specialists</th>
<th>Non specialists</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>1</td>
<td>Cube technique</td>
<td>N=10</td>
<td>N=30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%15</td>
<td>%75</td>
</tr>
<tr>
<td>2</td>
<td>Inclusive assessment(PASS)</td>
<td>N=36</td>
<td>N=4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%90</td>
<td>%10</td>
</tr>
<tr>
<td>3</td>
<td>Assessment for learning</td>
<td>N=38</td>
<td>N=2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%95</td>
<td>%5</td>
</tr>
<tr>
<td>4</td>
<td>Assessment of learning</td>
<td>N=38</td>
<td>N=2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%95</td>
<td>%5</td>
</tr>
<tr>
<td>5</td>
<td>Flexible Assessment/ differentiated</td>
<td>N=40</td>
<td>N=0</td>
</tr>
<tr>
<td></td>
<td>assessment</td>
<td>%100</td>
<td>%0</td>
</tr>
</tbody>
</table>

In Table one, percentage responses of the specialists and non-specialists among the lecturers were ascertained. In case of Cube technique, 15% of the specialists accepted they used, other specialists and non-specialists did not accept. The results appear so most likely because of the newness of the technique. In case of Inclusive assessment, 90% of the specialist answered in affirmative, 10% of the specialist and 100% of the non-specialists do use it.
Assessment for learning and Assessment of learning has each 95% of specialists that use as against only 5% of the non specialists that do not use it. 100% of the specialists use flexible assessment where as 100% of the non- specialists do not use it during the assessment of persons with special needs in inclusive setting.

Research question two;
What are tools used for assessing learners with special needs in inclusive settings?

### Table 2: Percentage analyses of teachers’ assessment tools in inclusive settings

<table>
<thead>
<tr>
<th>SN</th>
<th>Items</th>
<th>YES Specialists</th>
<th>NO</th>
<th>YES Non</th>
<th>NO Specialists</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tests</td>
<td>N=40 %100</td>
<td>N=0%0</td>
<td>N=60 %100</td>
<td>N=0%0</td>
</tr>
<tr>
<td>2</td>
<td>Grading</td>
<td>N=40 %100</td>
<td>N=0%0</td>
<td>N=60 %100</td>
<td>N=0%0</td>
</tr>
<tr>
<td>3</td>
<td>Observation</td>
<td>N=100 %100</td>
<td>N=0%0</td>
<td>N=15 %15</td>
<td>N=45%85</td>
</tr>
<tr>
<td>4</td>
<td>Checklist</td>
<td>N=34 %85</td>
<td>N=6%15</td>
<td>N=0%0</td>
<td>N=60%100</td>
</tr>
<tr>
<td>5</td>
<td>Referrals</td>
<td>N=36 %90</td>
<td>N=4%10</td>
<td>N=0%0</td>
<td>N=60%100</td>
</tr>
<tr>
<td>7</td>
<td>Rating scale</td>
<td>N=26 %65</td>
<td>N=14%35</td>
<td>N=0%0</td>
<td>N=60%100</td>
</tr>
<tr>
<td>8</td>
<td>Interview</td>
<td>N=30 %75</td>
<td>N=10%25</td>
<td>N=4%20</td>
<td>N=58%80</td>
</tr>
<tr>
<td>9</td>
<td>Dialogue</td>
<td>N=28 %70</td>
<td>N=12%30</td>
<td>N=0%0</td>
<td>N=60%100</td>
</tr>
<tr>
<td>10</td>
<td>Screening</td>
<td>N=30 %75</td>
<td>N=10%25</td>
<td>N=0%0</td>
<td>N=60%100</td>
</tr>
</tbody>
</table>

In table two, it was established that both specialists and non-specialists use tests and grading to assess the persons with special needs, hence each recorded 100%. For Observation, 100% and 15% of the specialists and non specialists use it respectively. That means that 85% of the non-specialists do not use observation. 85% of the specialists use checklist in assessing persons with special needs where as 15% of the specialists and 100% of the non specialists do not use it for assessment. This is understandable, hence, the difference abound between specialists and non specialists. The percentage of specialists that use referrals is 90 though 10% do not use it; still 100% of the non specialists do not use it. 65% of the specialists use rating scale but 35% of them do not use it. The percentage of the non specialists that do not use rating scale stood at 100%. Dialogue is used by 70% of the specialists while 30% of them; and 100% of non-specialists do not use dialogue. 75% of the specialists use screening as a tool while 25% of them and 100% of the non-specialists do not use it.

Apart from the copies of instrument administered to the respondents, focused group interview was used to affirm that the above respondents have idea of what assessment is all about, hence they linked it with evaluation when they were asked how they perceive assessment. The result on whether the assessment of the persons with special needs and those without special needs revealed that for the non specialist, they do not differentiate thence special arrangement for the special population. Notwithstanding, the result uncovered that the specialists vary their assessment strategies and tools in the inclusive setting. They indicated variation which demonstrates what persons with special needs suffer in the hands of non-specialists.
specialists that teach them. The result in the focused interview has given value to that of instrument as there are areas of agreement in the two instruments.

DISCUSSION OF FINDINGS

The discussion was based on responses from different sessions from different universities. Assessment was perceived by greater majority of the interviewees as evaluation and ways to ascertain outcome of instruction. This idea is corroborated by Joshua (2005; 2013) that saw assessment as subsuming test, measurement and evaluation of skills in the three domains cognitive, psychomotor and affective. There is agreement in the findings of the study and that of the perception of the above authority on assessment. Hence, both relate to outcome of instruction. It is interesting to note that the respondents have idea of the concept of assessment as comprising methods of obtaining information about individuals in order to take decisions that promote their interest.

In the interview which addressed strategies used in the assessment of learners with special needs and learners without special needs; the non-specialists admitted they do, the specialists did not accept that. Their percentage response of 90 and above except of cubbing among the strategies is indicative of aforesaid fact. It is still regrettable especially as greater majority of persons that teach in the inclusive setting are mainly non-specialists. Nonetheless, the result shows that the specialists are very much aware of the implication as they utilized the strategies supported by initiators. Hence, they use differential techniques which include PASS variables, Cubing technique. Inclusive assessment, Assessment for learning, Assessment of learning, Differentiated and Flexible assessment. The findings of the study tallies with idea of Eke (2000) among other authors that endorsed PASS variables. Harlen (2007) proposed Assessment of learning and Assessment for learning which the specialists found very valuable and indispensable. Gregory and Chapman, (2002) originated Cubing technique corroborated in the study though used by a few specialists hence (only 15%).

The non-specialists are product of general education which according to FRN (2013) cannot cater for persons with special needs. The result of this study is therefore, thinkable. The specialists use differential strategies in their assessment of persons with special needs. That demonstrates the fact that specialists are products of special education equipped with customized education for special needs persons.

In another development, they were asked the tools they used in assessing persons with special needs. The non specialists could not identify many tools for assessment of persons with special needs. The evidence of that showcased in 100% use of Tests and Grading. These are the conventional tools which the non specialists use only in assessing the persons with special needs. On the other hand, the specialists enumerated the following tools for use in assessment: Tests, Drilling, Grading, Marking, Discussion, Debate, Comment, Dialogue, Feedback, Self-assessment, Questioning, Observation, Screening, Referral, Evaluation, Identification, and Developmental checklists and Rating scale as well as Individualized educational plans. The interview result was supported by analyzed percentage hence, in all the tools showed not less than 70% use by the specialists. The above finding in the study is supported be the tools enumerated by Harlen (2007) where he listed observation, screening, referral, evaluation, identification, and individualized education plans among others. This finding was reinforced by Ekpo as cited in Joshua (2013) in opining that an incredible assessment tool to help in teaching in an inclusive classroom is differentiation. According to the author, differentiation involves providing range of activities and using variety of strategies for children with different abilities. In another development, the non specialists neither know nor are able to apply most of the strategies and the tools that are apt for assessing the persons with special needs.

They were also asked if they were aware of different facilities/equipment used in assessing learners with special needs. The non specialists indicated that they do not have idea of them. While they were asked how to assess learners with special needs amidst other learners in inclusive settings, the non-specialists were ignorance of techniques of assessment for people with special needs. On the hand, the specialists highlighted how the learners could be assessed for effective outcome.
CONCLUSION

Based on the findings of the study, conclusion can be drawn that different techniques for assessing learners with special needs in all inclusive classroom include PASS variables, Cubbing technique, Inclusive assessment, Assessment for learning, Assessment of learning, Differentiated and Flexible assessment. Different facilities and equipment tools for the assessment of learners in inclusive setting include Tests, Drilling, Grading, Marking, Discussion, Debate, Comment, Dialogue, Feedback, Self assessment, Questioning, Observation, Screening, Referral, Identification, an Checklists, Rating scale and Individualized educational plans. The specialists know and can apply most of them in assessing persons with special needs in inclusive setting while the none specialists neither know nor are able to apply them in assessing the special population in all inclusive classroom.

RECOMMENDATIONS

In view of findings of the study and conclusion drawn, the following recommendations are made-

1. There should be a forum or for a by the ministry of education to train and retrain teachers on ways to assess learners with special needs in inclusive setting.
2. There should be a standing rule in every university on peculiar ways to assess the learners with special needs.
3. The University should organize workshop for the non specialist teachers billed to teach in all inclusive classroom and make them know/ identify and be able to apply the strategies and tools for assessing the learners with special needs.
4. The specialists and the non specialists should be avid readers to equip themselves in the latest strategies and tools for assessing learners with special needs in inclusive setting.

REFERENCES


