



Assessment Practices among Inclusive School Teachers: A Case from Basic Schools in the Volta Region of Ghana

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Case Study

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ABSTRACT

Assessment techniques in special education provide information on how teachers can evaluate learners with special educational needs to ease educational placement and instructional decisions. This paper aimed at investigating assessment techniques used by teachers in assessing learners with special educational needs in inclusive schools in the Volta Region of Ghana. The descriptive survey design was employed for the study. The study involved 80 teachers in all selected pilot inclusive schools in the region, which was the study's target population. A questionnaire with closed-ended items was developed for data collection. Percentages and frequencies were used as statistical tools to analyse the research data generated from the questionnaire. The findings revealed that most teachers have insufficient knowledge and did not use appropriate assessment techniques in assessing learners with special educational needs in the schools. Based on the results, some recommendations were made for the Ghana Education Service through the Ministry of Education to organise in-service training and seminars for trained and untrained teachers on assessment techniques in special education.

Keywords: Assessment techniques; inclusive basic schools; teachers; volta region; special education.

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1. INTRODUCTION

Special and general education teachers are expected to provide services in general education classrooms historically offered in two different educational settings. This system is now conceived as inclusive education. Inclusion is a generic term that refers to “the practice of educating students with moderate to severe disabilities alongside their chronological age peers without disabilities in general classrooms within their home neighborhood schools” [1,2] views inclusion as a process of reform that allows all learners to have access to the whole range of educational and social opportunities offered by the school. This includes the curriculum, the assessment, recording, and reporting of pupils’ achievement, the decisions taken on the grouping of learners within school or classroom, pedagogy, sport, and leisure. Such reform aims for the school to provide equal opportunities to all pupils to avoid segregation, isolation, or discrimination.

Similarly, Booth [3] defines inclusion as a process of increasing the participation of learners in regular schools, reducing their exclusion from the curriculum, cultures, and communities of neighbourhood mainstream centers. For this to succeed, teachers, schools, and systems need to change to accommodate better the diversity of needs that pupils have. It also means that barriers within and around the school that hinder the learning and participation of all students should be identified and removed. Hence, inclusive education enables all students, including previously excluded groups, to learn and participate effectively within the mainstream school system. According to Angelides et al. [4], inclusive education is related to participation and learning, acceptance of difference to the school as a whole, to democracy, and society in general. They further pointed out that inclusive education is about all children having the right to attend the school in their neighbourhood. This implies this practice does not simply refer to the placement of children with special educational needs and disabilities into mainstream schools. Still, it is also concerned with the conditions under which all children can be educated effectively. Thus inclusive ideology means adapting the school curriculum to respond to the uniqueness of individuals, increasing their presence, access, participation, and achievement in learning society [3,5].

Education aims to equip learners with special educational needs and disabilities with competencies to function effectively in their societies. This includes assessment practices that teachers use to identify the strengths and weaknesses of learners needed for instructional purposes. It has been said that without assessment, there will be no special education. Hence, special needs education begins with assessment and ends with assessment. Without assessment, professionals will find it challenging to identify the learners’ needs and provide specific services. For inclusion to be a reality, it requires novelty in assessment practices to foster the participation of all learners. Assessment in special education is more than administering tests designed to yield scores. Assessment can be said to be a process of collecting and interpreting data to determine students’ strengths and weaknesses to assist in decision making in a mainstream setting. Gyimah et al. [6], citing McLoughlin and Lewis (1990) sees assessment as a systematic gathering of educationally relevant information to make legal and instructional decisions about special education services.

In Ghana, criticisms have been leveled against most basic school teachers' capacity to provide needed support for learners with special educational needs. For example, Gyimah and Amoako [6] observed that regular class teachers use assessment practices that alienate learners with special educational needs. As a result of these practices in general education, some of the learners with special educational needs feel uncomfortable and thus, turn to be truant and, finally, drop out of school. It is unclear whether inclusive school teachers in the Volta Region provide the individual support that learners with special educational needs require to access the general school curriculum.

2. STATEMENT OF THE PROBLEM

In Ghana, information gathered from other authors (Aboakye, 2020;) [6]; Gyimah & Amoako, [6] Hodofe, [7] including the researchers who are experienced special educationists, indicated that teachers fail to provide the individual supports that learners with special educational needs require to access the regular school curriculum. It is unclear whether inclusive basic school teachers in the Volta Region use assessment techniques in special education. In the Volta Region, parents complained that most learners

with special educational needs are progressing through schools without proper assessment [8].

Learners who miss assessment cannot access the specific educational programmes, including modified classroom instruction, tests, and examinations [9]. To them, teachers have difficulty assessing learners for information that will help them to identify logistics and materials required to teach. And that they are also unable to maintain a social and learning environment, order, discipline as well as cooperation in the classroom. The situation may have a negative impact on the academic achievement and quality of life of the learners.

3. LITERATURE REVIEW

3.1 Assessment Techniques in Special Education

The concept of assessment has become an integral part of both regular and special education. Assessment is carried out in educational settings for a variety of purposes. In general, their goal is to provide children, parents, teachers, and other professionals with information to assist them in making decisions that will enhance students' educational development. "In special education, we teach, assess, and teach. In doing so, we rely very much on informal assessment" [10]. The use of informal assessments provides essential information that standardised tests by themselves may not. It samples specific areas of the curriculum instead of the general ones. This helps teachers to know the strength and weaknesses a child has. It thus enables assessors to identify the specific difficulties a child experiences [10]. According to Landsberg et al. [11], the professional should not be engaged in the assessment of the learner, but the focus of the professional should, at all times, be on assessment for learning. This means that it is essential to break away from the performance-oriented perception of assessment when dealing with a learner experiencing a learning difficulty of some kind. It is this researcher's observation that without an inclusive curriculum in place, teachers in the country find themselves using assessment methods that do not take into account the needs of learners with special needs in their classrooms. Traditionally, an assessment was used to determine eligibility for special education and related services. Thus emphasis was usually on formal types of assessment with the use of standardised tests. As a result, states and

educators are called upon to adopt flexible assessment options for students with special educational needs through modification and alternative assessment strategies such as performance-based and portfolio assessments [12].

3.2 Performance-Based Assessment

Performance assessment is a form of testing that requires learners to perform a task rather than select an answer from a ready-made test. The goal of performance assessment is to determine whether learners have learnt the mastery of information taught and reveal whether they have mastery of the content with understanding. Gyimah et al. [10] stated that performance assessment gathers evidence by observing and rating learners' performance or product. Performance-based assessments vary in style and content and are limited only by purpose and teacher creativity. Some examples of performance assessments may include observation, oral examinations, checklists, and behaviour rating scales. When using performance assessment to evaluate the learning outcomes of learners, be mindful that there are some limitations. Time is probably the big issue. Some of these assessments can take up hours for the learner to do. Scoring performance task response is also on the part of the learner is time-consuming.

3.3 Ecological Assessment

This refers to a detailed process of gathering information about a child's interactions with the environment. The technique is employed when the teacher's interest is concerned with the relationships between the environment and the child. That is the influence of teachers, peers, parents, and other family members and the mass media on children's behaviour [10]. Sources of ecological assessment may include; Learners' records, teacher-made tests, direct and daily observations.

3.4 Rating Scales and Checklist

These tools can evaluate various deficits such as academic, emotional, motor skills, visual and auditory conditions. They are simple statements to be rated or checked for information on the presence of a problem [10]. Whatever is checked provides information on the extent to which that condition manifests. Wallace and Larsen [13] as cited in Heron and Heward [14] suggested that

checklists and rating scales are used to summarise observational data. In using a rating scale, numerals such as 1, 2, 3, etc., can be rated, and the teacher has to define what each numeral represents clearly.

3.5 Portfolio Assessment

A portfolio is a systematic collection of work demonstrating what the learner has done over some time. Examples of portfolio assessments may include tests, essays, and poems. A portfolio assessment must be upgraded as the learners' achievement, and skills grow [15]. Numerous types of portfolios can be used to assess a learners' progress based on a varied collection of the learners' work (United Nations Education, Scientific and Cultural Organisation [16]. The items in the portfolio include work samples, teacher-made test results, home works, and final products. Others may consist of teachers' observation [16]. When a learner completes an assessment activity, it is placed in the portfolios, and these pieces of work contribute to an overall assessment of learners' work [7]. Items included in a portfolio are carefully selected, so the collection as a whole accomplishes its purpose. It is argued that a well-designed portfolio system can motivate learners. Despite its usefulness, portfolios are challenging to evaluate, especially when the work samples are different from one student to another. It can also be time-consuming and challenging to assess higher-level skills [6].

3.6 Work Sample Analysis

Work sample analysis is concerned primarily with studying error patterns in a sample of work. In using this technique, it is unnecessary for the learner's presence. What is essential is having a sample of the child's permanent product (e.g., exercise book, essay, artwork, etc.). It is the sample of work that is checked to find errors the child consistently makes while performing a task. This enables the teacher to obtain information about the child's strengths and weaknesses [6].

3.7 Observation

This is the most commonly used informal procedure. It is generally said that most assessment, whether formal or informal, begins with observation. Observation refers to collecting information about a child that employs vision as a means of information collection. Formal assessment techniques may not capture most

classroom behaviours or skills critical to school success. For example, out-of-seat behaviours and emotional development deficits. To record these behaviours without the use of audio and video. Teachers ought to rely on observation technique that samples the behaviour of particular time intervals [14]. Observation can be direct or indirect. In direct observation, the teacher, i.e., the observer, is present with the person being observed. In indirect observation, others could be engaged to do the observation on behalf of the teacher.

3.8 Teacher-Made Tests

These include the various tests, quizzes, and class assignments teachers give to learners. Two significant types of tests exist. Thus, norm-referenced and criterion-referenced teacher-made tests. Teachers can use both categories to assess behaviours [14]. Teacher-made tests can also take the form of multiple-choice and essay tests items. This technique is used when the teacher's interest measures knowledge after exposing learners to formal learning experiences.

3.9 Task Analysis

This refers to the procedure whereby a major task is broken into smaller tasks. The teacher assesses the learner based on each task to determine what a person can or cannot do. This information pinpoints precisely where to begin instruction. The technique can evaluate circular tasks and is used in teaching [6]. The research objective that guided the study was to find out the extent to which inclusive basic schools use assessment techniques in evaluating learners in the Volta Region.

4. METHODOLOGY

The study adopted the descriptive survey design. The use of the design is appropriate because the researchers sought to describe and to interpret what in such studies look at individuals, groups, institutions, methods, and materials to describe, compare, contrast, classify, analyse and interpret the entities and the events that constitute their various fields of enquiry [17]. Furthermore, for a detailed study, eight (8) selected pilot inclusive basic schools were purposefully selected. These schools were chosen because they were the regular schools that had special education resource teachers in the region at the time of the study.

Table 1 gives the breakdown of the accessible population selected to represent the region for the study.

Proportional sampling technique was used to select the total number of respondents from each school, and simple random sampling (table of random numbers) was used for choosing the 80 respondents out of 200 for the study. A Likert scale questionnaire was developed to collect data for the study. The questionnaire was in two main sections. The first dealt with respondents' demographic information, while the second section mainly contained items that measured assessment techniques used in special education. Teachers were asked to tick which technique (s) they use in assessing learners with special educational needs.

The instrument was pilot tested using twenty-five (25) non-participating teachers' responses from St. Joseph practice inclusive basic school in the Ahafo Region to fine-tune the instrument and test the main data collection exercise [18]. Cronbach's coefficient alpha, a measure of internal consistency, was used in determining the reliability of the instrument. Since the items on the questionnaire were multiple-scored, especially on the Likert -scale, Cronbach's coefficient alpha was deemed appropriate. The Cronbach's coefficient alpha for the questionnaire was 0.76. The instrument was again given to experts (lecturers) in Special Education and other seasoned researchers for their perusal. After the refinement of the document, the administration of the instrument was done in about four weeks. The exercise was carried out by two of the researchers themselves

together with three trained research assistants. Respondents were given assurance of confidentiality and anonymity and the right to opt-out if they deemed wished. The data to answer the research question were analysed using descriptive statistics. The statistical software used for analysing data from this study was the Statistical Package for the Social Sciences (SPSS) now, Statistical Product for Service Solutions version 22.0.

5. RESULTS AND DISCUSSION

Overall, (13%) of respondents strongly agree, and (22.5%) agree with the statement. However, (45.1%) disagree and (19.3%) strongly disagree. This implies that most respondents (64.4%) disagree with using ecological assessment techniques in inclusive schools.

From Table 2, the data suggests that teachers are not familiar with the use of ecological assessment techniques. This implies that assessments in schools are ineffective. However, assessment should focus on the learner's educational needs to enable them reach their potential. These may include the individual's emotional, physical, communication, and social difficulties that adversely affect their academic achievements. It is important to note that ecological assessment could elicit information on the emotional state, social competencies, and the physical fitness of the learner [6]. The Ministry of Education must make funds available for trainers at all district levels to help train teachers all over.

Table 1. Distribution of population sample

Schools	Number of respondents	Sample	
		Number	Percentage
Hohoe School for the Deaf	30	12	15
Hohoe E P Basic	25	10	12.5
Hohoe Demonstration	25	10	12.5
Gbi Kledzo	20	8	10
Avakpe Dome Basic	30	12	15
Three Kings Bator	25	10	12.5
Akatsi Demonstration	30	12	15
Denu-Chicago	15	6	7.5
Total	200	80	100

Source: field data, 2020

Table 2. Assessment techniques used in assessing learners in inclusive schools

Statement	Strongly Disagree%	Disagree%	Agree%	Strongly Agree%	Total
1. Ecological assessment	19.3	45.1	22.5	13.0	100
2. Task analysis	34.2	10.2	50.7	5.0	100
3. Behaviour rating scale	5.0	60.3	25.0	9.66	100
4. Checklist	19.8	25.8	39.0	15.4	100
5. Performance assessment	11.3	54.8	14.7	19.2	100
6. Teacher made test	14.2	4.0	63.5	18.0	100
7. Work sample analysis	10.0	14.8	44.8	30.4	100
8. Portfolio assessment	10.8	27.8	40.8	20.6	100
9. Observation	8.3	17.7	50.5	23.5	100

Source: field data, 2020

A total of (55.7%) agree with the use of task analysis, while (44.3%) disagree with the statement. This suggests that most respondents use the task analysis technique to assess information in the schools. This implies that task analysis could be the surest means for children with learning disabilities and other disabilities because the task is usually broken into pieces. Each part is learned within a given period [19]. The use of task analysis will be continuous because the tool is used for both teaching and assessment for the learner where needs such as communication and intellectual need can be assessed [8].

From Table 2, the use of the behaviour rating scale in assessing learners is not a popular tool used in assessing learners in inclusive schools. A total of (34.66%) of respondents agree while (65.4%) disagree. This may be due to teachers' lack of knowledge in developing the behaviour rating scale [8]. To correct the lack of expertise in using and constructing behaviour rating scales by teachers, there is a need to train personnel to write and administer rating scales. If not then, a behaviour rating scale to evaluate performance, skills, and product outcomes and its flexibility and adaptability as assessment instruments are denied the learners.

Again, Table 2 shows that (54.4%) of the respondents agree while (45.6%) disagree. This implies that most teachers use a checklist in assessing the learners in the schools. This might be as a result of the fact that a checklist does not only provide inter-individual comparisons, easy to use and updated but also requires little training to administer and is adaptable to subject matter areas.

Additionally, from the findings shown in Table 2 (33.9%) of respondents agree whilst (66.1%)

disagree. This implies that two-thirds of the respondents do not use the performance assessment technique. This suggests that performance assessment is not given the impetus in Colleges of Education in Ghana [6]. This might be the reason for low account usage in inclusive schools. This will make it difficult for teachers to collect data on learners by observing and rating learners.

Moreover, It was found that, as shown in Table 2, (81.8%) respondents agree to use teacher-made tests while (19.2%) of the respondents disagree. This suggests that most of the teachers in the schools are familiar with using a teacher-made test more than any of the assessment techniques. However, the findings contradict a study conducted in the Central Region of the country that reported that teachers lack adequate test construction skills [18,19].

From Table 2, the findings revealed that (75.2%) agreed to the use of work sample analysis while (24.8%) disagree. This means that most teachers in the schools are using work sample analysis to assess the learners in the schools. This implies that teachers can determine the error pattern of the learners. When this error pattern is determined, it tells the teacher that the learner is missing a vital skill or misconceptions about the content learned. This can serve as feedback to the teacher that the learner is missing essential skills. These are error analysis and response analysis [6].

Also, the findings from the table show that (61.4%) of the respondents agree while (38.6%) disagree with the use of portfolios. This implies that children's work collected overtime should be appropriately documented for safekeeping. Reasons for keeping certain information must be clearly stated on children's files for easy reference. For example, in an inclusive school, a

child may engage in different activities, and not all information may be kept. The findings confirm a study conducted early on by Hodofe, (2014), who investigated the capacities of teachers in regular teachers in educating children with disability in Nzema East Municipality of Ghana.

Finally, from Table 2, the findings that (74%) of respondents agree to the use of observation techniques to assess learners but (26%) disagrees. In observation, the teacher could employ participant or non-participant observation. It is direct or indirect observation [6]. Teachers need to note the frequency, incident, and duration of the event or the behaviour. Teachers should rate how far the behaviour or the event deviates from the normal groups. The behaviour observed could be recorded systematically through event recording, duration recording, interval recording, and latency recording [20]. The use of observational technique can help schools to develop interventions to reduce behavioural deficits and help learners to succeed [21]. It appropriate in managing learners with moderate to severe disabilities and their non-disabled peers [22].

6. CONCLUSION AND RECOMMENDATION

The researchers finally conclude that teachers are not comfortable and do not use most assessment techniques in inclusive schools but only use teacher-made tests that are not suitable for learners with special educational needs. For assessment to be effective, it requires improving the quality of teachers' training and equipment and instructional materials to facilitate the assessment in inclusive schools.

The researchers, therefore, recommend that there is a need for the Ministry of Education to organise workshops, in-service training for both trained and untrained teachers on the use of assessment techniques in special education There must also be trained on how to do consultation and work together since the work of educating learners with special educational needs is not an easy one that one teacher can carry out effectively [23,24].

CONSENT

As per international standard or university standard, Participants' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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