IMPEDIMENTS TO EFFECTIVE ASSESSMENT AND EVALUATION:
IMPLICATIONS FOR PROFESSIONAL TEACHERS’ DEVELOPMENT

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Abstract

The study investigated the impediments to effective assessment and evaluation. The researcher analysed data from a sample of 68 professional and 32 non-professional teachers in an empirical test to identify factors related to teachers’ attitude, incompetency and class size that impede effective assessment and evaluation. The study was guided by three research questions and three null hypotheses. The instrument used was Impediments to Effective Assessment and Evaluation Scale (IEAES) and its reliability coefficient of 0.68 was obtained by Cronbach Alpha method. Data were analysed using mean and independent t-test. It was established that some factors related to teachers’ attitude, incompetency and class size impede effective assessment and evaluation. And that no significant mean difference existed between professional and non-professional teachers’ responses on the factors related to teachers’ attitude and class size except on that of teachers’ incompetency that impede Effective Assessment and Evaluation. The findings point to the importance of pedagogical knowledge, in service training, regular seminars, workshop, conferences, recruitment of professional teachers and moderate class size to the effective Assessment and Evaluation.

Introduction

The Primary professional responsibility of the teacher involves effecting desirable behavior changes in the learner through planned intervention. The execution of this task presupposes the establishment of instructional objectives in terms of the expected behavioral changes in the learner. Once these objectives have been established, it becomes necessary to determine on a periodic basis how far they are being achieved. The only process in education that makes this possible is assessment and evaluation. In essence, assessment and evaluation are not only indispensable in any instructional setting but occupy a prominent position contextually. It is in this respect that Elliot,

Kratochwill Cook and Travers (2000) stated that assessing students’ knowledge and skill is a central issue in schools. Effective teaching and learning cannot be said to have taken place without appropriate assessment and evaluation. This is because teachers are effective when they make good decisions that lead to actions and contributions to the society. The professional teacher is a person who holds a valued teaching certificate and is responsible for instruction, assessment and evaluation of students learning, and/or communication of assessment and evaluation results to students, their parents/ guardians and others with a legitimate need to know (Alberta Education 2006,)

Elliot et al (2000) stated that educators can defend the success of teaching, the value of curriculum or the amount of learning only by some demonstrable evidence. In education, such evidence is obtained through assessment and evaluation via testing and measurement. To this end, it seems that teaching, learning, testing, measurement, assessment and evaluation are inseparable components. To support this, Willits, Elliot, Daly, Gresham & Kramer (1998) opined that effective teaching boils down to good instruction, good assessment and using each to do the other better. Assessment is the process of gathering pertinent information to help make decision about students (Elliot et al, 2000). To Alberta Education (2006), Assessment is the process of collecting information about a student to aid in making an evaluation about the progress and development of the student. That means that assessment includes all the processes of ascertaining the amount of knowledge acquired by students in the course of instructional programs over a period of time. While evaluation is the summative interpretation of data obtained from tests or other assessment instruments
(Elliot et al,2000). It is the process of making value judgment or taking decisions about events, objects or their characteristics. Such judgments or decisions are based on empirical data or information made available through measurement and assessment. Hopkins and Antes (1978,) regards evaluation as the continuous inspection of all available information concerning the student, teacher, educational program and the teaching-learning process to ascertain the degree of change in students and form valid judgmentabout the students and the effectiveness of the program. Assessment and evaluation as basic conditions for effective teaching and learning play some significant roles in the field of education and more specifically in the teaching-learning situation. They provide the necessary feedback which decision makers need about inputs, outputs, operations and placement of students in programs. Specifically assessment and evaluation of students’ classroom performances help the teacher to ascertain the extent to which instructional objectives have been achieved and provide feedback on the efficacy of the teaching methods and material. On the part of the students, they increase their motivation to learn, development of good study habits and help to determine ones area of strength and weaknesses. Thus, Elliot et al (2000,423) stated that teachers have three main purposes for assessing students.

- To form specific decisions about a student or group of students.
- To guide their own instructional planning and subsequent activities with students.
- To control students'behavior. For all these to be achieved, teaching, assessment and evaluation must be effective. Onunkwo (2002) and Owolabi (2004) stated that effective assessment must cover all the three domains of educational objectives (cognitive, affective and psychomotor) using different methods and tools which include observation Relevant, interview, anecdotal records, paper and pencil test, oral test, checklist and rating scales.

Finally, it is worthy to note that in the Nigerian Universities, during the graduation ceremony, it is often pronounced that the graduating students have been found worthy of the degrees awarded them in both learning and character. Most often, this pronouncement is adjudged to be standing just on one leg because little or no attentionis actually paid to the character of these graduates right from their secondary education days. This is evidenced by the use of only paper and pencil test to assess the intellectual abilities of the students neglecting other aspects of the students. Therefore, for completeeducation at the secondary school levels, assessment of the students in all the domains of educational objectives must be effective. And since teachers are the designers of assessment and evaluation, the study was based on identifying the factors related to teachers’ attitude, incompetency and class size that impede effective assessmentandal evaluation statement of problems.

Relevant Literature Theoretical Framework Every individual is born with several talents to make him able and capable of doing several things. These talents are influenced by a lot of teacher factors which include their mode of assessment and evaluation. Hence this study will be based on the modern instructional theory. Modern instructional theory is one, which geared towards developing the total person who is mentally healthy (Sund and Trownbridge, 1973 in Gbamanja 1991). The modern instructional theorists suggested that multi-talent approach to teaching must beadopted in order to stimulate various categories of talents in the learner such as cognitive, affective and psychomotor talents. Gbamanja (1991) pointed out that holistic teaching and assessment achievebetter result than fractionated teaching and assessment. Therefore one must teach and assess for the total person and not just to develop and assess portions of the individual. The Federal Government of Nigeria, in recognition of the worth of holistic approach to assessment welcome the adoption of Continuous Assessment in Nigerian schools and categorically stated that educational assessment and evaluation of students’ outcomes should be liberalized by basing them, in whole or in part, on continuous assessment (Federal Republic of Nigeria, 2004).

Teachers and Effective Assessment and Evaluation Achievement of effective assessment and evaluation is by the professional teacher who is skilful and competent to apply a variety of assessment tools and techniques which will yield valid and meaningful information that is not open to misinterpretation (Alberta Education, 2006). In that same vein, Cone and Foster 1991 pointed that good measurement resulting in accurate data is the foundation of sound decision making. Hence, the American Federation of Teachers (1990:1) believed that assessment competencies are an essential part ofteaching and that good teaching cannot exist without good student assessment. Based on their beliefs,
educators representing the American Federation of teachers, the National Council on Measurement in Education and the National Education Association wrote a set of seven standards for teacher competence in students’ assessment. These standards as stated in American Federation of Teachers (1990,1) are as follows:

**Teachers should be skilled in:**

- Choosing assessment methods appropriate for instructional decisions.
- Developing assessment methods appropriate for instructional decisions.
- Administering, scoring and interpreting the results of both externally produced and teacher-produced assessment methods.
- Using assessment results when making decisions about individual students, planning teaching, developing curriculum and improving schools.
- Developing valid pupil grading procedures that use pupil assessment.
- Communicating assessment results to students’ parents, other lay audiences and other educators.
- Recognizing, unethical, illegal and otherwise inappropriate assessment methods and uses of assessment methods and uses of assessment information.

Elliot et al (2000) stated that the enactment of these standards requires a range of activities by the teachers prior to, during and after instruction. In contrast Alberta Education (2006) opined that a lot of what is done when assessing and evaluating students depends on the application of informed professional judgment. And that teachers’ professional judgment is based on a foundation of knowledge, skill and attributes. Gbamanja (1991: 80) regards effective teaching as a “fusion between sound academic knowledge and profound knowledge of pedagogical principles which are complex and many”. Incidentally this is absent in many contemporary teachers who do not adopt holistic approach to teaching and assessing students using diverse techniques and methods.

Furthermore, secondary education is an embodiment of knowledge and skills needed for entry-level into employment and or advancement into tertiary institutions. Despite that, it was observed that assessment in the primary and secondary schools are not effective (Onunkwo, 2002). This is because experience show that most teachers do not use questioning as part of their teaching strategies apart from “do you understand?” and “do you have any questions?” And some of the teachers that use questions, their questions are not relevant to the concept at hand. In contrast, Lewis (2002) stated that effective assessment and evaluation is via good and artful questioning. The act of asking questions is one of the basic skills of good teaching (Erickson, 2007).

**Statement of the Problem**

Assessment and evaluation in our school system are ineffective. These are evident in the existence of poor study habit, high rate of failure, production of incompetent students and graduates, truancy, examination malpractice and reduce job efficiency etc. All these compel one to conclude that assessment and evaluation are not effective and that classroom progresses have been hampered. Evidences of the above assertions create avenue for the present study. Thus the Problem of this study is, what are the factors that impede Effective Assessment and Evaluation in secondary schools in Port Harcourt City Local Government Area of Rivers State of Nigeria.

Rational for the study: It is hoped that if the factors related to teachers’ attitude, incompetency and class size impeding effective assessment and evaluation are identified, it will go a long way to evolve new, effective and more practical ways of teaching, assessing and evaluating students learning via holistic approach that will provide the students full opportunities to demonstrate the knowledge, skills and attitude they have learned. It will also help to promote good motivations among the students and accurate decisions making among the teachers, parents and policy makers.

Effective assessment helps to promote good study habit thereby reducing the rate of failure and the production of incompetent students and graduates hence increased job efficiency may result. In addition the findings of the study may help to reduce the number of adolescents with maladaptive behaviors into the tertiary institutions. It will also help
for the recruitment of professional teachers and also increased the quality, skills, attitude and knowledge of the serving teachers.

**Purpose of the Study**

The purpose of the study was to find out the factors related to:

1. Teachers’ attitudes that impede effective assessment and evaluation
2. Teachers’ incompetency that impede effective assessment and evaluation
3. Class size that impede effective assessment and evaluation

**Research Questions**

To guide the conduct of study the following research questions were formulated.

1. What are the factors related to teachers attitude that impede effective assessment and evaluation as determined by mean scores of professional and non-professional teachers?
2. What are the factors related to teachers’ incompetency that impede effective assessment and evaluation as determined by mean scores of professional and non-professional teachers?
3. What are the factors related to class size that impede effective assessment and evaluation as determined by mean scores of professional and non-professional teachers?

**Hypotheses**

1. The following hypotheses were formulated and tested at 0.05 Alpha level.
2. There is no significant mean difference in the responses of professional and non-professional teachers on the factors related to teachers’ attitude impeding effective assessment and evaluation.
3. There is no significant mean difference in the responses of the professional and non-professional teachers on the factors related to teachers’ incompetency that impede effective assessment and evaluation.
4. There is no significant mean difference in the responses of the professional and non-professional teachers on the factors related to class-size impeding effective assessment and evaluation.

**Methodology**

The study took the descriptive survey research design. A sample of 100 secondary school teachers (68 professional and 32 non-professional teachers) was drawn out of 245 teachers through non-proportionate stratified random sampling from Port Harcourt City Local Government Area in Rivers State, Nigeria. Data collection was done using a 19-itemed questionnaire responded on a five-point Likert type scale. The instrument was tagged Impediment to Effective Assessment and Evaluation Scale (IEAES) and was a researcher-structured questionnaire. It was made up of four sections; section A elicited information on personal data, section B, C and D elicited information on the factors related to teachers’ attitude, incompetency and class size respectively as they affected effective assessment and evaluation. It was face-validated by three experts in Measurement and Evaluation. A reliability co-efficient of 0.68 was obtained using Cronbach Alpha method. The instrument was administered directly to the respondents by the researcher. In order to answer the research questions 1, 2 and 3, the mean for each item statement was computed. Based on the criterion mean (3.00), items related to teachers’ attitude, incompetency and class size that impede effective assessment and evaluation were identified. Then to test the null hypotheses, independent t-test was computed and the significance was considered at 0.05 Alpha level.

**Results and Data presentation**

Results got after analyzing the data generated by research questions 1, 2 and 3 were presented in table 1, 2 and 3 respectively while tables 4, 5 and 6 are for hypotheses 1, 2 and 3 respectively. Table 1: Mean scores of professional
(PT) and non-professional (NPT) teachers on the factors related to teachers’ attitude impeding effective Assessment and Evaluation. s/no Items statement PT N=68 NPT N=32 General N=100

1. I only attached much importance to assessing the students’ intellectual ability. 3.11 3.00 3.06
2. The work of assessing students’ psychomotor activities is that of the sports master alone. 2.96 3.24 3.10
3. To facilitate the coverage of the scheme, I consider assessing students during the instruction a waste of time. 2.84 3.32 3.08
4. Affective assessment of the students is an extra burden to the teacher. 3.04 3.40 3.22
5. I award marks to students based on their previous performance in order to avoid assessing them again. 3.12 3.03 3.08
6. I feel the task of questioning and answering during instruction is that of the students. 2.10 3.06 2.58
7. I feel evaluation towards the end of each lesson is a waste of time. 2.63 2.54 2.59

The table shows that the professional teachers rated items 1, 4 and 5 above criterion mean of 3.00 thus those item statement are factors related to teachers’ attitudes that impede effective assessment and evaluation while items 2, 3, 6 and 7 were rated below the criterion mean hence they are not regarded as factors related to teachers’ attitude that impede effective assessment and evaluation. To the non-professional teachers, they rated items 1, 2, 3, 4, 5 and 6 above the criterion mean of 3.00, hence those item statements are factors related to teachers’ attitudes that impede effective assessment and evaluation, while item 7 is not because its mean score is below the criterion mean.

Table 2: mean scores on the factors related to teachers’ incompetency impeding effective Assessment and Evaluation.

S/No Item statement PT N=68 NPT N=32 General N=100
8. Construction of question to assess the students’ non-cognitive abilities is a barrier to its usage. 2.74 3.03 2.89
9. Lack of the skills to score non-cognitive activities is a problem to their assessment. 3.06 3.22 3.14
10. I access only the intellectual abilities of the students, base on my ability. 3.10 3.25 3.18
11. Ability to create connections between cognitive talents and affective domain is a problem to assessment processes. 2.66 3.00 2.83
12. The skills involve in judging the extent the students attained the instructional outcome during the instruction is a barrier to good assessment process. 2.23 3.13 2.68
13. Extra ability required to carry out assessment of all the domains is a problem to assessment process. 2.99 3.20 3.10

The table shows that the professional teachers rated items 9 and 10, above the criterion mean of 3.00 indicating that those items are the factors related to teachers’ incompetency that impede effective assessment and evaluation, while items 8, 11, 12 and 13 are not because their mean scores are below the criterion mean. In the rating of the non-professional teachers, items 8, 9, 10, 11, 12 and 13 were above the criterion mean score of 3.00. These indicated that such items statements are factors related to teachers’incompetency that impede effective assessment and evaluation.

Table 3:Mean scores of professional teachers on the factors related to class size impeding effective Assessment and Evaluation.

PT=Professional teachers, NPT=Non-Professional teachers.

S/No Item statement PT N=68 NPT N=32 General N=100
14. Regular giving of take-home assignment is not possible due to the number of students in the class. 4.15 3.91 4.03
15. Judicious scoring of the students, assigned work is a problem due to the class size. 3.82 3.89 3.86
16. Reporting students’ results to their parents is difficult task due to the students’ population in the class. 3.88 3.82 3.85
17. Adequate monitoring and supervision of the students’ class work is very tedious due to their number in the class. 4.32 4.30 4.31
18. The class size does not create room for easy identification of the gains and difficulties of each student. 3.68 3.72 3.70
19. When I consider the class size, I based the scoring of the assigned work on the students’ penmanship. 2.90 2.93 2.92

The table shows that both the professional and non-professional teachers rated items 14, 15, 16, 17 and 18 above the criterion mean. Hence the two groups of teachers regarded those item statement as factors related to class size that impede effective assessment and evaluation, while both groups did not regard item 19 as a factor of class size that impedes effective assessment because its mean score was below the criterion mean of 3.00. Table 4: t-test Analysis on the responses of professional (PT) and non-professional (NPT) teachers on factors related to teachers’ attitude impeding effective assessment and evaluation.

Group N x SD df t-calc. t-critical Alpha level

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The table revealed that the t-calculated 1.91 is less than the t-critical of 1.984 at df of 98 and 0.05 Alpha level. Therefore, we accept the null hypotheses of no significant difference between the mean scores of PT and NPT on the factors related to teachers’ attitude that impede effective assessment and evaluation. Table 5: t-test analysis on the responses of professional (PT) and non-professional (NPT) teachers on the factors related to teachers’ incompetency impeding effective assessment and evaluation.

Group N x SD df t-calc. t-critical Alpha level

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In the table above, the t-calculated value 2.99 is greater than the critical t-value of 1.984 at df of 98 and 0.05 alpha level. Therefore, we reject the null hypothesis of no significant difference and state that there is a significant difference between the mean scores of PT and NPT on the factors related to teachers’ incompetency impeding effective assessment and evaluation.

Table 6: t-test analysis on the responses of professional (PT) and non-professional (NPT) teachers on the factors related to class size that impedes effective assessment and evaluation.
The table shows that the t-calculated value 0.26 is less than the t-critical value of 1.984 at df of 98 and 0.05 Alpha level. Hence there is no significant difference in the mean scores of the professional and non-professional teachers that impede effective assessment and evaluation.

**Discussion of the findings**

The results of the research question 1 revealed that factors related to teachers’ attitude that impede effective assessment and evaluation are assessment of only cognitive abilities, failure to assess students’ learning outcomes during the instructional period and awarding marks to students based on their previous performance (halo-effect). These indicated that teachers are the designers of assessment; hence they determine the success and effectiveness of any assessment and evaluation. Further analysis proved that there was no significant difference between the mean scores of the professional and non-professional teachers on the factors related to teachers’ attitude that impede effective assessment and evaluation. This is an indication that both categories of teachers show equal laxity to some extent in carrying out some of their assessment-related activities. This finding may be attributed to the active participation of the non-professional teachers with their colleagues, the professional teachers, which may have enhanced their attitudes; hence they begin to act like the professional teachers.

The result of research question two revealed that factors related to teachers’ incompetency that impede effective assessment and evaluation are lack of skills to construct and score non-cognitive instruments, inability to connect the cognitive talents to the affective and psychomotor domains during instruction and inability to appropriately judge the extent of students’ attainment of the instructional outcomes during instruction.

In testing the statistical difference, the finding further indicated that the perception of the professional and non-professional teachers differed on the factors related to teachers’ incompetency that impede effective assessment and evaluation. This is an indication that it takes competency, skills and attributes in a teacher to effectively teach, assess and evaluate the teaching-learning outcomes. This finding supports the enactment of the standard for teachers’ competence in student assessment (American Federation of Teachers, 1990). It also supports the report of Gbamanja (1991) and Alberta Education (2001), that effective teaching, assessment and evaluation depend on professional skills or judgment. Finally, the result of research question three revealed that factors related to class size that impede effective assessment and evaluation are irregular administration of take home assignment, non-judicious scoring of the work assigned to the students, non-reporting of the students’ results to their parents, inadequate monitoring and supervision of the students’ class work etc. These are indications that the high student-teacher ratio results into inefficiency and ineffectiveness of the teacher.

On further analysis of this result, it proved that no significant difference existed between scores of the professional and non-professional teachers on the factors related to class size that impede effective assessment and Evaluation. This result is quite expected because crowded classroom is not always easy to control and manage by one teacher. In most of the secondary schools the classes are so filled up to the point that the teacher will hardly secure a position to stand and teach. In such situation, the teacher will consider how long it will take to mark their assigned work; hence, it will be given to the students on rare occasions.

**Implications:**

The findings of this study have some cogent implications for the policy makers and educational planners.
One interesting finding of the study indicated that there was a significant difference between the mean scores of the professional and non-professional teachers on the factors related to teachers' incompetency impeding effective assessment and evaluation. This implies that pedagogical knowledge, in-service training, regular seminar and workshop are key factors for teachers’ efficiency and they are antidote to ineffective assessment and evaluation.

Another finding of the study indicated that there was no significant difference in the mean scores of the professional and non-professional teachers on the factors related to teachers’ attitude and class size.

This implies that the challenges emanating from large class size are faced equally by both categories of teachers and that both categories of teachers show laiz-faire attitude towards assessment and evaluation.

Conclusion

Based on the findings of the study it is concluded that teachers’ attitude, their incompetency and large class size are identified as factors that impede effective assessment and evaluation.

And that professional and non-professional teachers do not differ significantly in their perception on how their attitudes and large class size impede effective assessment and evaluation, but they differ in feeling on how teachers incompetency impede effective assessment and evaluation.

Recommendations

Based on the findings of this study, the following recommendations are made;

1. There should be more emphasis on the organization of in-service training, workshops, seminars and conference for all the primary and secondary school teachers. This will help to familiarize them with the necessary skills, knowledge and attitudes needed for effective assessment and evaluation.

2. Government should ensure adequate recruitment of professional teachers to address the issue of large class size and incompetency among teachers.

3. Teachers should be supervised and monitored regularly in relation to their teaching and assessment practices. This should be done by setting a monitoring team with power to sanction. This will help to reduce the level of laxity among teachers.

Reference

Alberta Education, (2006): Effective Student Assessment and Evaluation: knowledge and skills and attributes. Edmonton, AB:


