Requirements for the Implementation of School-Based Assessment in Public Secondary Schools in Rivers State

1Obilor, Esezi Isaac (Ph.D); 2Ozim Ngozi Peace & 3Ezeala Sophia Ifunanya

Department of Educational Foundations
Faculty of Education, Rivers State University
Port Harcourt, Nigeria
Email : 1esezirukanimgboh@gmail.com; 2ngoziog@gmail.com; 3sophiazeala@gmail.com

ABSTRACT
This study determined the requirements for the implementation of school-based assessment in public secondary schools in Rivers State. A descriptive survey method was adopted in this study. Total population of 7691 teachers of public senior secondary schools in Rivers State was utilized in the study. The sample size for the study was 380 teachers while multi-stage sampling techniques was used. Two (2) research questions and two (2) hypotheses were put forward to guide the study. A self-designed 20-item questionnaire titled “Requirements for the Implementation of School-based Assessment Scale” (RISBAS) was used for data collection. The research instrument was validated by the researcher’s supervisor and two other experts in the department of measurement and evaluation. The test-retest method of reliability was employed to determine 0.81 reliability coefficient. Statistical mean and standard deviation were used to answer the research questions while the hypotheses were tested with One-way analysis of variance (ANOVA) at 0.5 level of significant. It was revealed that knowledge of feedback and reinforcement were needed for carrying out school-based assessment in the research area and therefore recommended that: Workshops and seminars should be provided in schools for teachers on how to administer feedback and reinforcement. This will enhance their capacity in classroom delivery. Teachers should also be encouraged to enroll for in-service training programmes.

Keywords: implementation of school-based assessment, feedback and reinforcement.

INTRODUCTION
Assessment is an integral part of instruction, as it determines whether or not the goals of education are being met. Assessment affects decisions about grades, placement, advancement, instructional needs, curriculum, and in some cases, funding (Asuru, 2015). Asuru further stated that assessment inspires us to ask these hard questions: How well did the students perform this year? How did the students in private schools perform in relation to those in public schools? How well did the students perform in English Language compared with Mathematics? Are we teaching what we think we are teaching?

It is noteworthy that at the beginning of formal education in Nigeria, summative assessment was used. Alongside the government taking over of schools in 1970, national and States set school examinations like the First School Leaving Certificate and Common Entrance Examinations were centralized and used as basis for issuing out certificate at the end of primary six and for admission into secondary education respectively. It was observed that the use of one final examination administered at the end of the term, to determine student’s performance, was said to be unfair, and cannot give the true nature of individual child’s ability because the reliability and validity in the assessment of each student’s response to some of the workloads were not completely objective but rested upon the standards and personal opinion of the scorers (Elui, 2013).
Furthermore, Anyanwu, Afuruobi, Izuagba, and Obiefuna (2008) highlighted the negative effects of the one-shot examination on both students and teachers, such as unidirectional assessment only in the cognitive domain, centering education on passing examination other than acquiring knowledge. In pursuance to find a sustainable solution to the above issues in Nigerian education assessment, a new system of education, the 6-3-3-4 was introduced in 1982 with a new form of assessing learning outcomes in all levels of Nigeria education known as Continuous Assessment (CA) as an innovation in the Nigerian assessment system. This new method of assessment was believed to take care of all aspects of learning as a better alternative to the traditional method of assessment because it will meaningfully involves the teacher and the learner during classroom interactions (Elui, 2013).

Nkwocha (2009) defined continuous assessment, as the use of diverse instruments and sources to elicit and record information about learners at predetermined regular intervals throughout a course of study, in order to monitor their rate of progress in all the school subjects in the cognitive, affective, and psycho-motor domains of learning. The students were supposed to be assessed in the cognitive and non-cognitive domains in the continuous assessment system, many times and at certain intervals using different kinds of assessment methods such as tests, projects, assignments, observations, portfolios, checklists, sociometrics, et cetera.

Unfortunately, continuous assessment has been experiencing an extreme deal of abuse and misinterpretation by teachers because most of them seem not to understand the purpose for continuous assessment in the school system. They have interpreted the policy to mean administration of monthly and bi-weekly tests in only the cognitive domain. This made continuous assessment to suffer from many problems like lack of consistency and validity (Elui, 2013).

In view of some of the identified short comings of continuous assessment, some educators, Azlin, Ong, Mohamad, and Rose (2013) and Bassey, Akpama, Ayang, and Iferi-Obeten (2013) have advocated for its revision and introduction of School-Based Assessment (SBA). Asuru (2015) opined that school-based assessment is an assessment practice that broadens and expands the form, mode means, and scope of assessment in the school, in order to effectively assess the cognitive and non-cognitive domains of learning behaviours. It is a system for collecting periodic information on pupils’ learning status for the purpose of planning improvement programmes in the performance of pupils, as well as including the hidden curriculum as part of school actual curriculum. To ensure that learning takes place, the assessment base is broadened so that teachers and other significant persons that impact on the child’s readiness, capacity and interest to learn are involved in the learning process.

According to Asuru (2015), the objectives of school-based assessment include to:

1. To include the concept of the hidden curriculum as part of school core curriculum.
2. Assess and develop students’ non-cognitive characteristics.
3. Provide an opportunity for the child to assess himself.
4. Incorporate some components of mastery learning like peer tutoring and peer assessment.
5. Aim at making the child to develop interest in learning.

Some of the factors/skills required for effective and efficient implementation of school-based assessment include the following:

**Teachers’ adequate knowledge of feedback and reinforcement**

- According to Hattie and Timperley (2007) feedback is information made available by an agent, teacher, peer, book, parent, and self-experience, regarding aspects of one’s performance or understanding. Feedback can be provided by a parent or a teacher for corrective and remedial purposes, a peer can provide an alternative strategy, a book can provide information to clarify ideas, a parent can provide encouragement, and a learner can look up the answer to evaluate the correctness of a response. Feedback thus is a “consequence” of performance. The model stated that an effective feedback must answer three major questions: Where am I going? (What are the goals?), how am I going? (What progress is being made toward the goal?), and Where to next? (What activities need to be undertaken to make better progress?) These questions correspond to the notions of feed-up, feedback, and feed-forward aspects of teaching and learning process. How effectively answers to
these questions serve to reduce the gap is partly dependent on the level at which the feedback operates.

- Reinforcement is one of the most important skills required to achieve effective teaching and learning. Afuruobi, Anyanwu, Izuagba, and Obiefuna (2008) defined reinforcement as the effect of an action that brings change in behaviour. It is also perceived as stimuli, setting an antecedent that can strengthen the behaviour of an organism and enhance its frequency of expression to be improved. It is the process of raising the probability of behaviour like a reply given shortly after performing the behaviour. When it comes to the classroom setting, reinforcement is a vital instrument that cannot be left out because. It works in consonant with the feedback of the teaching and learning outcome. It enhances the retention of learnt ideas. It motivates and encourages learners to work hard. It also strengthens behaviour.

**Statement of the Problem**

Poor level of implementation of continuous assessment in schools has been identified among other factors, as a cause of poor performance in the teaching and learning processes. More so, lack of compatibility of standards in assessment, continuous testing, mass failure in examination and high level of examination malpractice have also been observed as some of the problems faced by the Nigerian educational system, as a result of inconsistent method of implementing continuous assessment. This study is therefore designed to determine the extent teachers’ knowledge of feedback and reinforcement is required for the implementation of school-based assessment in public secondary schools in Rivers State.

**Research Questions**

The following research questions were drawn up to guide the study:

1. To what extent is teachers’ knowledge of feedback required for carrying out school-based assessment as perceived by teachers from public secondary schools in Rivers East, Rivers South East and Rivers West senatorial districts of Rivers State?
2. To what extent is teachers’ knowledge of reinforcement required for carrying out school-based assessment as perceived by teachers from public secondary schools in Rivers East, Rivers South East and Rivers West senatorial districts of Rivers State?

**Hypotheses**

The following null hypotheses were tested in the study at 0.5 level of significance:

1. There is no significant difference in the mean response of teachers from public secondary schools in Rivers East, Rivers South East and Rivers West senatorial districts of Rivers State regarding the extent teachers’ knowledge of feedback is required for carrying out school-based assessment.
2. There is no significant difference in the mean response of teachers from public secondary schools in Rivers East, Rivers South East and Rivers West senatorial districts of Rivers State regarding the extent teachers’ knowledge of reinforcement is required for carrying out school-based assessment.

**METHOD**

Descriptive survey design was employed in this study. The study was carried out across the three (3) Senatorial Districts in Rivers State covering nine (9) schools. The populations of the study consist of 7619 teachers of public senior secondary schools in Rivers State, with a sample size 380 teachers. Multi-stage sampling techniques were adopted in this study. The major instrument for data collection in this study saw 20-item self-designed questionnaire titled “Requirements for the Implementation of School-Based Assessment Scale”. The instrument was in a 4-point likert scale format. Requirements for the Implementation of School-based Assessment Scale was subjected to face and content validation by the researcher’s supervisor and two other test experts in the field of measurement and evaluation. A test-retest method of reliability was adopted in this study and a reliability coefficient of 0.81 was obtained. The copies of the questionnaire were personally administered to the respondents by the researcher and two other research assistants. A total of 380 copies of the instrument were distributed and retrieved from the respondents. Out of this number, a total of 350 were used for analysis. This is 92% return rate of the instrument which is acceptable for the analysis. 30 copies were discarded because they were improperly
filled. Mean and standard deviation were used to answer the research questions, while the one-way analysis of variance was used to test the hypotheses at 0.05 level of significance.

**Research Question 1:** To what extent is teachers’ knowledge of feedback required for carrying out school-based assessment as perceived by teachers from public secondary schools in Rivers East, Rivers South East and Rivers West senatorial districts of Rivers State?

<table>
<thead>
<tr>
<th>S/No</th>
<th>Items</th>
<th>RSE (N=84)</th>
<th>RE (N=24)</th>
<th>RW (N=242)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>S.D</td>
<td>RMK</td>
</tr>
<tr>
<td>1</td>
<td>Feedback is necessary for carrying out school-based assessment.</td>
<td>3.26</td>
<td>0.93</td>
<td>HE</td>
</tr>
<tr>
<td>2</td>
<td>Adequate skills of feedback are needed for carrying out school-based assessment.</td>
<td>2.98</td>
<td>0.88</td>
<td>HE</td>
</tr>
<tr>
<td>3</td>
<td>Feedback enhances peer tutoring and peer assessment among students.</td>
<td>3.08</td>
<td>1.00</td>
<td>HE</td>
</tr>
<tr>
<td>4</td>
<td>Feedback enhances learners’ general improvement</td>
<td>3.11</td>
<td>0.93</td>
<td>HE</td>
</tr>
<tr>
<td>5</td>
<td>Feedback enhances mastery learning.</td>
<td>3.11</td>
<td>0.85</td>
<td>HE</td>
</tr>
<tr>
<td></td>
<td>Grand Mean</td>
<td>3.11</td>
<td></td>
<td>HE</td>
</tr>
</tbody>
</table>

**Source:** Field survey

Table 1 shows the mean response on the extent teachers’ knowledge of feedback is required for carrying out school-based assessment in secondary schools in Rivers State. As shown in the table, teachers’ knowledge of feedback is necessary for carrying out school-based assessment to a high extent (mean response of greater than 2.50 for Rivers South East (RSE), Rivers East (RE) and Rivers West (RW)); adequate skills of feedback are needed carrying out school-based assessment to a high extent (mean response of greater than 2.50 for Rivers South East (RE), Rivers East (RE) and Rivers West (RW)); feedback enhances peer tutoring and peer assessment among students to a high extent (mean response of greater than 2.50 for Rivers South East (RE), Rivers East (RE) and Rivers West (RW)); feedback enhances learners’ general improvement to a high extent (mean response of greater than 2.50 for Rivers South East (RE), Rivers East (RE) and Rivers West (RW)); feedback enhances mastery learning to a high extent (mean response of greater than 2.50 for Rivers South East (RSE), Rivers East (RE) and Rivers West (RW)). With grand mean responses of 3.11, 3.18 and 3.14 for RSE, RE and RW respectively, it means that teachers’ knowledge of feedback is required for carrying out school-based assessment to a high extent as perceived by the teachers.
Research Question 2: To what extent is teachers’ knowledge of reinforcement required for carrying out school-based assessment as perceived by teachers from public secondary schools in Rivers East, Rivers South East and Rivers West senatorial districts of Rivers State?

Table 2: Mean response on teachers’ knowledge of reinforcement and school assessment

<table>
<thead>
<tr>
<th>S/No</th>
<th>Items</th>
<th>RSE (N=84)</th>
<th></th>
<th></th>
<th>RE (N=24)</th>
<th></th>
<th></th>
<th>RW (N=242)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>S.D</td>
<td>RMK</td>
<td>M</td>
<td>S.D</td>
<td>RMK</td>
<td>M</td>
<td>S.D</td>
<td>RMK</td>
</tr>
<tr>
<td>6</td>
<td>Reinforcement is needed for school-based assessment.</td>
<td>3.43</td>
<td>0.72</td>
<td>HE</td>
<td>3.24</td>
<td>0.93</td>
<td>HE</td>
<td>3.36</td>
<td>0.83</td>
<td>HE</td>
</tr>
<tr>
<td>7</td>
<td>Reinforcement stimulates learners to learn effectively.</td>
<td>3.33</td>
<td>0.73</td>
<td>HE</td>
<td>3.30</td>
<td>0.72</td>
<td>HE</td>
<td>3.27</td>
<td>0.81</td>
<td>HE</td>
</tr>
<tr>
<td>8</td>
<td>Reinforcement enhances students’ retention.</td>
<td>2.87</td>
<td>1.13</td>
<td>HE</td>
<td>3.02</td>
<td>0.88</td>
<td>HE</td>
<td>3.00</td>
<td>0.98</td>
<td>HE</td>
</tr>
<tr>
<td></td>
<td>Reinforcement encourages the continuation of good learning habit.</td>
<td>3.17</td>
<td>0.69</td>
<td>HE</td>
<td>3.13</td>
<td>0.87</td>
<td>HE</td>
<td>3.10</td>
<td>0.79</td>
<td>HE</td>
</tr>
<tr>
<td>10</td>
<td>Reinforcement discourages bad learning attitude.</td>
<td>3.23</td>
<td>0.75</td>
<td>HE</td>
<td>3.28</td>
<td>0.68</td>
<td>HE</td>
<td>3.22</td>
<td>0.78</td>
<td>HE</td>
</tr>
<tr>
<td></td>
<td>Grand Mean</td>
<td>3.20</td>
<td>HE</td>
<td>3.19</td>
<td>HE</td>
<td>3.19</td>
<td>HE</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field survey

Table 2 shows the mean response on the extent teachers’ knowledge of reinforcement is required for carrying out school-based assessment in secondary schools in Rivers State. As shown in the table, teachers’ knowledge of reinforcement is needed for school-based assessment to a high extent (mean response of greater than 2.50 for Rivers South East (RSE), Rivers East (RE) and Rivers West (RW)); reinforcement stimulates learners to learn effectively to a high extent (mean response of greater than 2.50 for Rivers South East (RSE), Rivers East (RE) and Rivers West (RW)); reinforcement enhances students’ retention to a high extent (mean response of greater than 2.50 for Rivers South East (RSE), Rivers East (RE) and Rivers West (RW)); reinforcement encourages the continuation of good learning habit to a high extent (mean response of greater than 2.50 for Rivers East (RSE), Rivers East (RE) and Rivers West (RW)); reinforcement discourages bad learning attitude to a high extent (mean response of greater than 2.50 for Rivers East (RSE), Rivers East (RE) and Rivers West (RW)). With grand mean responses of 3.20, 3.19 and 3.19 for RSE, RE and RW respectively, it means that teachers’ knowledge of reinforcement is required for carrying out school-based assessment to a high extent as perceived by the teachers.

Hypothesis 1: There is no significant difference in the mean response of teachers from public secondary schools in Rivers East, Rivers South East and Rivers West senatorial districts of Rivers State regarding the extent teachers’ knowledge of feedback is required for carrying out school-based assessment.
Table 3: Hypothesis for teachers’ knowledge of feedback and school assessment

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Fcal</th>
<th>P-value</th>
<th>Fcrit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>0.18192</td>
<td>2</td>
<td>0.09096</td>
<td>0.21048</td>
<td>0.81029</td>
<td>3.01966</td>
<td>Accepted</td>
</tr>
<tr>
<td>Within Groups</td>
<td>162.927</td>
<td>377</td>
<td>0.43217</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>163.109</td>
<td>379</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey Data

Table 3 shows the result for one way analysis of variance for test of significance of teachers’ mean response regarding the extent teachers’ knowledge of feedback is required for carrying out school-based assessment in secondary schools in the RSE, RE and RW of Rivers State. The table shows calculated F-value (2, 377) of 0.21 against critical F-value (2, 377) of 3.02. Since calculated value is less than critical value, the hypothesis is accepted. This means that there is no significant difference in the mean responses of teachers from public secondary schools in Rivers East, Rivers South East and Rivers West senatorial districts of Rivers State regarding the extent their knowledge of feedback is required for carrying out school-based assessment.

**Hypothesis 2**: There is no significant difference in the mean response of teachers from public secondary schools in Rivers East, Rivers South East and Rivers West senatorial districts of Rivers State regarding the extent teachers’ knowledge of reinforcement is required for carrying out school-based assessment.

Table 4: Hypothesis for teachers’ knowledge of reinforcement and school assessment

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Fcal</th>
<th>P-value</th>
<th>Fcrit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>0.01351</td>
<td>2</td>
<td>0.00676</td>
<td>0.02919</td>
<td>0.97123</td>
<td>3.01966</td>
<td>Accepted</td>
</tr>
<tr>
<td>Within Groups</td>
<td>87.2513</td>
<td>377</td>
<td>0.23144</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>87.2648</td>
<td>379</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey Data

Table 4 shows the result for one way analysis of variance for test of significance of teachers’ mean response regarding the extent teachers’ knowledge of reinforcement is required for carrying out school-based assessment in secondary schools in the RSE, RE and RW of Rivers State. The table shows calculated F-value (2, 377) of 0.03 against critical F-value (2, 377) of 3.02. Since calculated value is less than critical value, the hypothesis is accepted. This means that there is no significant difference in the mean responses of teachers from public secondary schools in Rivers East, Rivers South East and Rivers West senatorial districts of Rivers State regarding the extent their knowledge of reinforcement is required for carrying out school-based assessment.

**Summary of Findings**

Teachers from public secondary schools in Rivers State perceived that teachers’ knowledge of feedback and reinforcement are required for the implementation of school-based assessment to a high extent.

**DISCUSSION OF RESULTS**

Research question one sought to determine teachers’ perception on the extent their knowledge of feedback was required for carrying out school-based assessment. The result revealed that teachers perceived that their knowledge of feedback is necessary for carrying out school-based assessment to a high extent; adequate skills of feedback are needed for carrying out school-based assessment to a high extent; feedback enhances peer tutoring and peer assessment among students to a high extent; feedback enhances learners’ general improvement to a high extent; feedback enhances mastery learning to a high extent. It means that teachers’ knowledge of feedback is required for carrying out school-based assessment to a high extent as perceived by the teachers. The result of test of hypothesis one showed that there is no significant difference in the mean responses of teachers from Rivers South East, Rivers East and Rivers West senatorial districts regarding their perception on the extent teachers’ knowledge of
feedback was required for carrying out school-based assessment. This finding is similar to the finding of
Hattie and Timperley (2013) who carried out a study on the power of feedback and found out that
feedback is one of the most powerful influences on learning and achievement. Furthermore, the finding
corroborates the finding of Burnet, (2006) who investigated students’ perceptions of the frequency of
teachers’ feedback and praise as reinforcement strategies in New South Wales and discovered that,
effective feedback impacted directly on students’ relationships with their teachers. When teacher student
relationship is enhanced, effective learning takes place.

Research question two sought to determine teachers’ perception on the extent their knowledge of
reinforcement was required for carrying out school-based assessment. The result revealed that teachers
perceived that their knowledge of reinforcement is needed for school-based assessment to a high extent;
reinforcement stimulates learners to learn effectively to a high; reinforcement enhances students’
retention to a high extent; reinforcement encourages the continuation of good learning habit to a high
extent; reinforcement discourages bad learning attitude to a high extent. It means that teachers’
knowledge of reinforcement is required for carrying out school-based assessment to a high extent as
perceived by the teachers. The result of test of hypothesis two showed that there is no significant
difference in the mean responses of teachers from Rivers South East, Rivers East and Rivers South West
senatorial districts regarding their perception on the extent teachers’ knowledge of reinforcement was
required for carrying out school-based assessment. This finding is in line with result obtained by Maini
(2011), who in an investigation in Ontario Canada on the pro-active approach to behavior in class with
students as respondents. Findings indicated that after teachers used reinforcement in the form of rewards
and antecedent strategies, the majority of students benefited in academic achievement.

CONCLUSION
Based on the findings, it was therefore concluded that knowledge of feedback and reinforcement are
highly needed for the implementation of school-based assessment in the study area.

RECOMMENDATIONS
Seminars and workshops should be organized in schools for teachers on how to administer feedback and
reinforcement. This will enhance their capacity in classroom delivery. Teachers should be encouraged to
enroll for in-service training programmes. This will enhance their professional capacity.

REFERENCES
Publishers International Ltd.
assessment practices on the basic education teachers characteristics: A case study of the cross river central
Australia: University of New Wales.
Thesis, University of Toronto, Canada.
Excellence Ventures.