AVAILABILITY OF INSTRUCTIONAL MATERIALS FOR TEACHING AND LEARNING IN SECONDARY SCHOOLS IN NSUKKA EDUCATION ZONE, ENUGU STATE.

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Abstract
This study was conducted to find out the availability of instructional materials as a tool to enhance teaching and learning in secondary schools in Nsukka Education Zone, Enugu State, Nigeria. The instructional materials considered were teaching resources, infrastructure and the influence on student’s achievement. Two research questions guided the study in line with the specific purpose of the study. Survey research design was adopted for the study involving secondary school teachers and students in Enugu State. The population of the study consisted of 100 teachers and 110 students from 4 public secondary schools in Nsukka Education zone. Questionnaire was used to obtain data for the study. The instrument was subjected to face validation by three experts. A reliability coefficient of 0.86 was obtained using Cronbach-alpha method. Mean and standard deviation were used to answer the research questions. A total of 210 copies of questionnaire were used to obtain information and data from students and teachers. The result of the findings revealed that instructional materials like laboratories, equipped library, staff offices, chalk boards, computers are not evident in most secondary schools in Enugu State. The provisions of adequate instructional materials have positive effects on the learning environment of students and therefore can affect their academic achievement in Senior Secondary School Certificate Examination (SSCE). It is recommended that the government should show more commitment in providing the necessary educational resources in the schools and encourage regular re-training of teachers for effective teaching and learning to take place in the classroom for academic achievement especially in their final SSCE examinations like WAEC and NECO. The community, Charity Organizations and parents should assist government by providing some of the resources to make the environment conducive for teaching and learning in schools.

Key words: Availability, Instructional Materials, Academic Achievement, Secondary Schools, Enugu State.
Introduction

In every society, instructional materials contribute in no small measure to teaching and learning process. Propooler (2011) asserts that for learning to take place, learners must have access to necessary information materials and resources. They have to interact with tangible and intangible resources according to Propooler to ensure some levels of performance.

Series of studies have suggested the importance of school as a social environment for learning. Character formation and academic achievement by students of all segments of their society are at their peak at secondary school level. Therefore, the importance of school social environment cannot be overemphasized if we should produce men and women of formidable character to the type, quality and the educational resources with regard to the size and population of a school. Instructional materials according to Bassey (2002) are the available facilities that can be used to achieve educational goals and objectives. The quantity and quality of the instructional materials determine the students’ academic performance (Anunobi, 2010). According to Offorma (2006) resources of high quality attract the learner because they enhance the meaning of what is presented which promotes academic achievement. Anaele and Alade (2009) classify educational resources thus:

- **Financial resources**: Cash, Gift, donations, budget, allocation, grants, contributions.
- **Material resources**: Textbooks, chalks, chalkboards, diaries, computers, registers, lesson notes, time tables, furniture.
- **Human resources**: School principals, administrative staff, teachers, guidance counselor, students.
- **Physical resources**: Classrooms, laboratories, libraries, hostels, demographic equipment and other physical plants such as machines, vehicles, computers, duplicating and photocopiers machines.
- **Symbolic resources**: Policies, ideas and information, packages, knowledge system (principles, theories and skills). Hale (2002) states that the availability and adequacy of educational resources contribute to academic achievement because it assists students in remembering what they see or involved in learning. National development depends on their quality of education which deals with the educational input established for teaching and learning. Mgbodile (2004) supports that language teaching is indispensable for developing education in any nation. In order to achieve this aim in the 21st century, the teaching and learning in Nigeria public schools has been a concern for the government and the society at large. This was established considering that Education is the bedrock of National development. The desire in quality of education has motivated the researchers to study the availability of instructional material. Ahmed (2003) opined that instructional materials are various forms of instructional resources teachers and learners use to meet the set standards with the aim of achieving educational goals and objectives. Eze (2016) asserts that the success of Igbo curriculum depends to a large extent on the availability of instructional materials; and that of the technologically and culturally trained teachers.

An indispensable aspect in the delivery of teaching is the methods and instructional materials for efficiency and appropriateness of teaching and learning in the classroom (Ibe 2007). A careful planning and integration of instructional resources enable the teacher to put his idea into practice. Hale (2002) asserts that learning is more effective and maximized if the environment has adequate resources. Uninteresting environment offers little or no motivation for learning. Teachers need a lot of information for imparting knowledge to the students. Teaching materials according to Olowu (2004) refers to the resources required by students for studies which include recommended textbooks, journals, and monographs. Accessibility of information is very important according to Moses (2011). Aguolu and Aguolu (2002) point that resources may be available in the library but may not be accessible to the user for reasons. This shows that the quality of teaching and learning in secondary school depends on instructional resources available and accessible. The teachers should ensure effective use of instructional materials in their schools to improve their teaching effectiveness. Learning without instructional resources may certainly result to poor performance in the subject.

However, a close look at some secondary schools in Nsukka education zone shows that they perform poorly in both internal and external examinations. Evidence from the WAEC chief examiner report (2016) proves that students’ performance in this area has not been encouraging. An attempt to improve on the teaching and the learning in secondary schools has led to the conception of this study. The focus of the
study is therefore to examine the availability and accessibility of those instructional resources that must be used to achieve educational goals. This will lead to improved performance of students in various subjects. Ayoro (2004) opined that students in poorly maintained school environment tend to become passive and not attentive to instructions, resort to memorization and rote learning. The learning condition has implication on poor academic achievement of students. Much concern has been expressed by teachers over the maintenance of educational resources to enable them perform their roles in classroom effectively, for example, teachers have consistently shifted blame of increasing rate of students’ failure in examination in the Senior Secondary School Certificate Examination (SSCE) like the West African Examination Council (WAEC) and National Examination Council (NECO) to poor teaching and inadequate provision of learning facilities in schools (Buckley, 2004). In a similar vein, Onuselogu (2007) reported that less than 30% equipment supplied to public secondary schools in Enugu State was only effectively utilized for teaching. Onuselogu, further stated that most equipment were not utilized because they were in various states of disrepair, vandalized or stolen due to poor security system. This circumstance affects the quality of teaching and learning in schools especially inNsukka Education zone. Ahmed (2003) observed that educational resources are of vital importance to the teaching of any subject in the school curriculum because it would make discovered facts glue firmly to the memory of the students. Kalu (2009) described academic achievement as the performance outcome that indicates the extent to which a person that accomplished specific goals that were the focus of activities of instruction specifically in schools, colleges and universities. It means the extent of education, the extent to which a student, teacher or institution has achieved their educational goals (Eze, 2009). Bassey(2002) concede that academic achievement is measured by the academic performance index. Assessment tests determine whether one can take part in higher education. Besides, the relevance for an individual academic achievement is of utmost importance for the wealth of a nation and its prosperity (Bassey, 2002). The strong association between a society level of academic achievement and positive socio-economic development is one reason for conducting internal studies on academic achievement. Individual difference in academic achievement has been linked to difference in intelligence and personality. Propolla (2011) observed that students with high mental ability as demonstrated by Intelligence Quotient (IQ) tend to achieve high in academic settings. A recent meta-analysis suggests that mental curiosity has an important influence on academic achievement. Eze (2009) opined that parents’ academic socialization influences students’ academic achievement by shaping students’ skills, behaviors and attitudes towards school.

Statement of the problem:

It is observed in public secondary schools that the school management and authorities are not providing adequate instructional resources for their schools. Even in some places where these resources are available, they are not appropriately made use of. In the light of this, the study would examine the availability of instructional materials for the teaching and learning in Nsukka Education Zone.

Purpose of the study

The purpose of the study was to determine the availability of instructional materials which enhance the academic achievement of students in secondary schools in Nsukka Education Zone, Enugu State, Nigeria. Specifically, the study determined;

1. The level of availability of instructional materials in schools.
2. The influence of instructional materials in teaching and learning in schools.

Research Questions

1. What is the level of availability of instructional materials in teaching and learning?
2. What are the influence of instructional materials in teaching and learning?
Method

A descriptive survey design was used for the study. The population of the study comprised of four secondary schools in Nsukka Education Zone of Enugu State. The rationale for the choice of Nsukka Education Zone is as a result of students’ poor performance in classrooms in this area. The data collected were analyzed using mean and standard deviation to answer the research question while the hypotheses were tested at 0.05 level of significance using independent sample t-test. The criterion mean value was 2.5. Items with mean value of 2.5 and above indicated agreement while those with mean values less than 2.5 indicated disagreement.

Some of these schools have no library and enough instructional resources. The aim of the study is to collect data on the availability of educational resources as it affects the teaching effectiveness in secondary schools. This enables the researchers to measure the effort of the schools towards the achievement of expected goal it set to achieve in education. The data used for collection of instrument are questionnaires which were developed by the researchers. Two types of questionnaire were developed, one for the teachers to access on their response on availability of educational resources and the other for students of senior secondary school under study.

Sample and sampling technique

Simple random sampling technique was used to select 110 Senior Secondary (SS) students and 100 teachers making a total of 210 respondents drawn from four community secondary schools in Nsukka Local Government Area for data collection used for the study.

Research instrument

A validated instrument used for the study was a questionnaire titled level of availability of instructional materials in secondary schools for teaching (LAIMISSFT). It is a 20-item questionnaire for students on the influence of the use of educational resources to learning.

The questionnaire has two parts. The first part sought to tap information from teachers about the level of availability of instructional materials in schools while the second part contains items for students on influence of availability of instructional materials in schools for improving educational standard. The questionnaire was developed by the researchers and using Cronbach Alpha Technique, it yielded a reliability index of 0.86. The questionnaire was administered to secondary school teachers and students with the help of 2 research assistants.

Data analysis and interpretation

Two sets of questionnaires were used for the data collection. The first set of questionnaire was directed to the selected secondary school in Nsukka Education Zone. Questions structured were related to availability and use of educational resources in the selected secondary schools. One hundred & thirty (130) copies of this questionnaire was administered to teaching staff while one hundred copies were retrieved. The second set of questionnaire was however meant for students on the influence of educational resources. One hundred and thirty (130) copies of this questionnaire were administered to students while hundred and ten (110) were retrieved.

Method of data collection

Two hundred and ten (210) copies of 20-item instrument on teachers’ response on the availability of educational resources and students’ response on the influence of educational resources were administered to the respondents through the help of two research assistants. The data collected from the study were analyzed using percentage, mean and standard deviation to determine the association between educational resources and influence on students’ academic achievement.

Results

Research Question 1:
Response on the level of availability of instructional materials used in secondary schools for teaching students in Nsukka Education zone in Enugu State
Table 1: Mean and standard deviation of responses of teachers on the level of availability of instructional materials in secondary schools for teaching students in Nsukka Education Zone in Enugu State

<table>
<thead>
<tr>
<th>S/N</th>
<th>RESOURCES</th>
<th>MEAN X</th>
<th>STANDARD DEVIATION SD</th>
<th>REMARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Financial Resources</td>
<td>2.39</td>
<td>1.04</td>
<td>Disagree</td>
</tr>
<tr>
<td>2</td>
<td>Pupils. Textbooks</td>
<td>2.82</td>
<td>.89</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>Audio-Visual</td>
<td>2.29</td>
<td>.94</td>
<td>Disagree</td>
</tr>
<tr>
<td>4</td>
<td>Newspaper</td>
<td>2.42</td>
<td>1.04</td>
<td>Disagree</td>
</tr>
<tr>
<td>5</td>
<td>Pictures</td>
<td>2.26</td>
<td>.86</td>
<td>Disagree</td>
</tr>
<tr>
<td>6</td>
<td>Teacher Made notes</td>
<td>2.85</td>
<td>.91</td>
<td>Agree</td>
</tr>
<tr>
<td>7</td>
<td>School Radio</td>
<td>2.38</td>
<td>1.02</td>
<td>Disagree</td>
</tr>
<tr>
<td>8</td>
<td>Technical Equipment</td>
<td>2.23</td>
<td>.93</td>
<td>Disagree</td>
</tr>
<tr>
<td>9</td>
<td>Films and film projectors</td>
<td>2.06</td>
<td>.95</td>
<td>Disagree</td>
</tr>
<tr>
<td>10</td>
<td>Chalks</td>
<td>2.89</td>
<td>.98</td>
<td>Agree</td>
</tr>
<tr>
<td>11</td>
<td>Chalkboards</td>
<td>2.98</td>
<td>.86</td>
<td>Agree</td>
</tr>
<tr>
<td>12</td>
<td>Computers</td>
<td>2.26</td>
<td>.88</td>
<td>Disagree</td>
</tr>
<tr>
<td>13</td>
<td>Staff Offices</td>
<td>2.35</td>
<td>.94</td>
<td>Disagree</td>
</tr>
<tr>
<td>14</td>
<td>Electricity</td>
<td>2.39</td>
<td>1.03</td>
<td>Disagree</td>
</tr>
<tr>
<td>15</td>
<td>Photocopying machine</td>
<td>2.26</td>
<td>.88</td>
<td>Disagree</td>
</tr>
<tr>
<td>16</td>
<td>crafts</td>
<td>2.35</td>
<td>.94</td>
<td>Disagree</td>
</tr>
<tr>
<td>17</td>
<td>Physical Resources</td>
<td>2.36</td>
<td>.94</td>
<td>Disagree</td>
</tr>
<tr>
<td>18</td>
<td>Classrooms</td>
<td>2.48</td>
<td>1.00</td>
<td>Disagree</td>
</tr>
<tr>
<td>19</td>
<td>Laboratories</td>
<td>2.05</td>
<td>.95</td>
<td>Disagree</td>
</tr>
<tr>
<td>20</td>
<td>Libraries</td>
<td>2.52</td>
<td>.47</td>
<td>Agree</td>
</tr>
</tbody>
</table>

**Keys:** X= Mean, SD= Standard Deviation.
Table 1 Presents the teacher’s responses on the availability of instructional materials in teaching secondary schools. All the teachers with the Mean score of 2.89, 2.89, 2.58. 2.52 agree that pupil’s textbook, Teacher made notes, Chalkboard and Libraries were available. The respondents show that inadequate availability of Crafts may have hindered effective teaching of language which are part of everyday living. For the Financial resources (2.39) Audio-Visual (2.29), School Radio (3.38). Computers (2.26) Language Laboratories (2.05) disagreed that they were available. The absence of these resources could be attributed to lack of electricity in most rural schools. This may have made the learners miss out on the development of the listening skills. This agrees with the findings of Bassey (2000) who asserts that language Laboratories bring reality into the classroom which add interest to the lesson. Students should be exposed to computer usage, audio-visual school radio since they provide a clear picture of what is being taught. The responses show that schools are generally ill equipped with instructional materials.

Research Question 2: What are the mean responses on influence of availability of instructional materials used in teaching and learning in secondary schools?

Table 2:

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEM STATEMENT</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Instructional Materials are vital in reading and writing</td>
<td>2.79</td>
<td>.81</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>2</td>
<td>Instructional materials enhance ability to read and write</td>
<td>2.85</td>
<td>.0.85</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>3</td>
<td>Instructional materials influence students “active participation in the class”</td>
<td>2.64</td>
<td>.87</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>4</td>
<td>Instructional materials help to attain teaching and learning objectives</td>
<td>2.63</td>
<td>.94</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>5</td>
<td>Instructional materials help to enhance cognitive skills of students</td>
<td>2.57</td>
<td>.98</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>6</td>
<td>Students taught with instructional material have excellent achievement scores</td>
<td>2.53</td>
<td>.93</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>7</td>
<td>Students fail to develop intellectual abilities when taught with instructional materials.</td>
<td>2.07</td>
<td>.91</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>8</td>
<td>Instructional materials provide sounds, visual or both during teaching</td>
<td>3.41</td>
<td>.81</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>9</td>
<td>Films and film projectors appeal to the sense of sight only</td>
<td>3.66</td>
<td>.48</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>10</td>
<td>Instructional materials help to motivate students interest in learning situation</td>
<td>2.85</td>
<td>.85</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

Table 1 Presents the teacher’s responses on the availability of instructional materials in teaching secondary schools. All the teachers with the Mean score of 2.89, 2.89, 2.58. 2.52 agree that pupil’s textbook, Teacher made notes, Chalkboard and Libraries were available. The respondents show that inadequate availability of Crafts may have hindered effective teaching of language which are part of everyday living. For the Financial resources (2.39) Audio-Visual (2.29), School Radio (3.38). Computers (2.26) Language Laboratories (2.05) disagreed that they were available. The absence of these resources could be attributed to lack of electricity in most rural schools. This may have made the learners miss out on the development of the listening skills. This agrees with the findings of Bassey (2000) who asserts that language Laboratories bring reality into the classroom which add interest to the lesson. Students should be exposed to computer usage, audio-visual school radio since they provide a clear picture of what is being taught. The responses show that schools are generally ill equipped with instructional materials.
Summary of findings

The findings on Table 1 revealed that the respondents agreed that most of the instructional materials were not available for teaching and learning in secondary schools. Rather, educational resources available were mainly chalks and chalkboards, registers and diaries. Financial and material resources were available and not accessible. This indicates that lack of these resources has contributed to poor academic achievement of students in the school especially in Senior Secondary School Certificate Examination (SSCE) and National Examination Council (NECO).

The findings on the influence of instructional materials on students’ achievement indicate that instructional materials bring about improvement in the performance of the students. Students’ responses on the influence of the use of educational resources show a situation where teaching is encouraged with demonstration. The result of data shows that instructional materials enhance teaching methods more positively. The table has equally shown that instructional materials influence teachers’ method of teaching to a high extent.

The results of the data presented revealed that teachers in the school which have educational resources are influenced positively to draft their lesson plan effectively. They are encouraged to make use of needed relevant and functional materials to deliver their lessons.

Conclusion

Based on the findings of the study, the following conclusions were drawn:
1. The government should ensure good supply of instructional materials to schools as a vital tool for teaching and learning and teachers’ training on how to use the instructional media effectively.
2. Teachers and heads of secondary schools in Enugu state should ensure strict adherence to the use of instructional materials in the classroom for the promotion of students’ academic achievements.

Recommendations

Based on the findings, the following recommendations are made:
1. Teachers should be encouraged to gain more knowledge on the use of instructional media through further studies, workshop and conferences or orientation courses in order to acquaint them with the current development in the field of education. This will help them in classroom management.
2. Well-equipped laboratories and electricity should be established in all schools to achieve effective classroom management. Government should therefore try to provide and carry out periodic inspection on the use of those resources with a view of upgrading them to meet the standards.
3. There should be introduction of computer assisted instructional packages for quick demonstration in the classroom.
4. The host community, Charity Organizations and parents should assist the government by providing instructional materials to make the environment conductive for teaching and learning in the schools.

References


Anunobi (2010). Curriculum materials and the implementation of school curriculum in Nigeria. Journal of Educational Studies and Research.6(2) 136-139


