An Evaluation of the Attitude of Secondary School Teachers toward Improvisation and Utilisation of Instructional Material in North Eastern Nigeria

¹Dahiru Lamara Bello, ²Alhamdu Ishaya & ³Nehemiah Daniel

¹Department of Psychology
²Department of Educational Foundations
School of Education
3Department of Christian Religious Studies
School of Secondary Education (Arts and Social Sciences)
Aminu Saleh College of Education,
Azare Bauchi State
asidris4gud@gmail.com

DOI: 10.56201/ijee.v9.no3.2023.pg149.156

Abstract

This study is set to examine the attitude of secondary school teachers toward the improvisation and utilization of instructional material in northeast Nigeria. The population of the study consists of all teachers in the selected nine secondary schools in the Northeast. The sample of the study was drawn from three states out of the six states that constitute the northeast. They include Bauchi, Borno, and Adamawa states. The data was collected using a structured questionnaire administered to teachers. The data was analyzed using descriptive statistical techniques and correlation analysis. Some of the major findings are; there is limited availability of instructional materials for teachers' use in the school and the ones that are available do not meet the curriculum specifications. The findings also reveal that, there is adequate workshop/equipment for the teaching of Vocational and Technical subjects in secondary schools but inadequate facilities in the laboratory. Some recommendations were made; government should work at setting aside funds for education especially for the procurement of instructional materials. The teachers should also strive at developing skills and abilities to use the instructional material to improve their teaching.

Introduction

Teaching is defined as the process of imparting knowledge, ideas, and skills to the learner theoretically by the individual. Teaching is a set of behavioural activities, which a teacher performs in order to induce learning. Teaching is effective when the learning is able to effect the desired change of behaviour in the learner. One of the various ways to attain this level of effectiveness is through proper improvisation and utilization of instructional material. Aku, Adeyemo, and Bulus (2018) opined that teachers are expected to change their activities from the

old method of teaching which is teacher-centered to students centered. The quest to compel teachers to use innovative teaching methods can be successful through the effective use of instructional material. Researchers such as Nwosu, Ibe, and Folorunso (2013) have linked ineffective teaching and learning to insufficiency and non-utilization of instructional materials for instruction.

Instructional materials are teaching aids that the teacher uses in order to make learning meaningful to the students. Johnson (2000) defined instructional materials as all the tools which can easily be used by teachers to illustrate the concept that learners cannot forget easily. The importance of instructional material for effective teaching and learning cannot be emphasized. Kola (2013) argued that the use of instructional materials in teaching provides a concrete basis for conceptual thinking, motivating students to learn and capture the imagination. Kola Buttresses his point further that instructional material doing lessons will analyses students' intents by giving them something practical to see and do. Despite the importance of instructional materials evidence in the literature shows that no matter how rich and governance educational authorities may be, they are not always in a position to provide the schools with all needed instructional materials. This call for improvisation instructional material for teaching in our secondary schools. Improvisation of instructional materials through self-construction stimulates creativity among students. It also promotes students' interest in the learning process. Ahmed (2006) asserts that improvisation scoring is a motivation of learners as much as they participate in the activities during the production of materials. Zubairu (2014) defined attitude as a proposition to respond in a favorable or unfavorable manner with respect to a given situation or object. Attitude is an aggregate measure of attractiveness or repulsiveness of the subject and the belief that the subject is relevant to irrelevant. Therefore, the attitude of teachers may be a major factor that determines whether or not he/she do something important.

Several Studies have shown that the learner's ability to understand recalled and retained experiences is enhanced by learning environments. It is convenient for the teacher to cover the learner's environment by selectively responding to materials that stimulate and motivate their own interest. This implied that students tend to see learning as more concrete when teachers use instructional material during teaching. For example, any business of teaching and learning is bound to encounter one form of terminology or the other in the teaching of abstract to concrete knowledge in classrooms or laboratories as the case may be. The passage of factorial knowledge or information is usually by more experienced learned individual teachers who can effectively improvise and utilize instructional materials during teaching. The teacher can improve suitable instructional materials for his use with available local materials. It is against this background that the researcher intends to evaluate teachers' attitudes toward improvisation and utilization of instructional material in secondary schools.

Statement of the Problems

Teaching and learning are supposed to take place in a conducive environment that is equipped with modern facilities for teaching. Teaching is a process that involves method which is step by step presentation of information in a logical sequence, and also a process of communication between the teacher and the learners. Instructional materials are basically information carries which are the potential to capture and retain learners' attention for clarity of ideas which gives opportunities for putting the skills into practice and improving teacher effectiveness in the

classroom. This will enable the teacher to achieve their lesson objectives. These instructional materials include charts, diagrams, photographs, slides, chalkboards, flamed boards, etc. The use of instructional materials quietly helps the teachers in teaching by facilitating the communication process thereby, making teaching simple and the learning process more real and effective. However, despite appreciating the fact that instructional material promotes qualitative learning, the effect of its utilization depends on the effective use by the teacher. The inability of teachers to utilize and improvise instructional material during teaching and learning makes lessons uninterested and students find it difficult to comprehend what the teacher is teaching thereby making the attainment of lesson objectives not achievable.

It is based on the problem stated, the researcher intends to investigate the attitude of teachers toward the improvisation and utilization of instructional materials in secondary schools.

Objective of the study

The overall objective of this study is to investigate the attitude of teachers toward the improvisation and utilization of instructional materials in secondary schools. Specifically, the research set out:

- 1. To find out the availability of instructional materials in our secondary schools.
- 2. To find out if teachers are having the skills of selection and utilization of instructional materials.

Research Ouestions

The research work is designed to profound solutions to the following questions:

- 1. Are the instructional materials available in our secondary schools to be used by teachers?
- 2. Do teachers receive enough training in educational technology with respect to the selection and utilization of instructional materials during teaching?

Methodology

The research design used by the researcher is the descriptive survey method which is one of the best available research designs used for obtaining useful relevant information. The Survey design is considered most appropriate for this research because it seeks to find out the opinions of respondents (teachers) on their perception towards the improvisation and utilization of available instructional materials used in teaching secondary school students. The area of study is the Northeastern part of Nigeria which consists of (6) six States i.e., Bauchi, Yobe, Adamawa, and Population of this study consists mainly of teachers of government secondary Borno States. schools in the selected 9 secondary schools, 3 schools in each of the selected states. The entire population of teachers for the study is 625 teachers i.e., the entire teachers engaged in the nine (9) selected secondary schools. Simple random sampling technique was used to select 25 teachers from each government secondary school in the selected 9 schools in the three States of Borno, Bauchi, and Adamawa state. Making a total of 225 respondents. Instrument used for data collection is a structured questionnaire developed in consonance with the review of available literature under the study.

The instrument called Attitude of Secondary School Teachers towards the Improvisation and Utilization of Instructional Materials in Teaching will be used to elicit information from the respondents. Four Point Likert Scale was used for data collection through a questionnaire which

will be structured. The rating scale thus: Strongly Agree (SA) 4, Agreed (A) 3, Disagreed (D) 2, and Strongly Disagreed (SD) 1 respectively. To ensure validity of the research instrument, face, and content validity was established by giving an initial draft of the instrument to experts in Measurement and Evaluation at Aminu Saleh College of Education, Azare. These experts subjected the instrument to vigorous scrutiny considering the purpose of the study and research questions. The items in the questionnaire were checked and corrections were effected based on their recommendations and a final copy of the instrument was produced. The researcher ascertained the reliability of the instrument by using a test-retest method. As test-retest method elements, the questionnaire was administered to 2 teachers from each of the 9 selected schools in the Northeast summing up to 18 teachers in all. The mean score used in the analysis of the responses to the research questions is thus:

Strongly agree SA = 4 points Agree A = 3 points Disagree D = 2 points Strongly Disagree D = 1 point

Cut off mean=
$$4 + 3 + 2 + 1 = 10 = 2.5$$

Hence, the cut-off mean is 2.5 this implies that every mean score which is exactly or above 2.5 agrees with the decision thus accepted while any score below 2.5 disagrees with the decision and thus is not accepted.

Results and Discussion

As discussed above, the sampled population from this study is two hundred and twenty-five respondents selected from 9 schools in the three States of Borno, Bauchi, and Adamawa. Two hundred and twenty-five instruments were distributed across the study area, three (3) of the instruments returned with multiple selections and cancellations and were therefore considered invalid while two (2) instruments were not returned from the fieldwork. Hence, the data presented in the study is based on the one hundred and nineteen (119) instruments accurately filled and returned.

Table 1: Mean Responses of Participants on Availability of Instructional Materials in Secondary Schools.

| S/NO | ITEMS | SA 4 | A 3 | D 2 | SD 1 | N | \overline{X} | DECISION |
|------|---|---------|--------|--------|---------|-----|----------------|----------|
| 1. | There is an availability of modern instructional materials for teachers' use in secondary schools | 42 | 13 | 79 | 85 | 219 | 2.05 | Disagree |
| 2. | Available instructional materials meet the standard and specifications of the secondary school curriculum | 11 | 9 | 102 | 97 | 219 | 1.69 | Disagree |

| 3. | The instructional materials are too complex for the teachers to handle | 13 | 9 | 82 | 115 | 219 | 1.63 | Disagree |
|----|--|----|----|----|-----|-----|------|----------|
| 4. | There are adequate workshop/equipment for the teaching of Vocational and Technical subjects in secondary schools | 72 | 56 | 64 | 27 | 219 | 2.78 | Agree |
| 5. | Instructional materials are readily available in the laboratory for the teaching of science subjects | 18 | 17 | 98 | 86 | 219 | 1.84 | Disagree |

Research Objective 1: Mean response on the availability of instructional materials in secondary schools. The data for research objective 1 was analysed using mean scores. The result is presented in table 2. Five items were presented in the table, and four (4) of these items all disagreed with various assertions on the availability of instructional materials in secondary schools with a cut-off value which is less than 2.50 as follows: there is the availability of modern instructional materials for teachers' use in secondary schools (2.05), available instructional materials meet the standard and specification of the secondary school curriculum (1.69), instructional materials are too complex for the teachers to handle (1.63), and Instructional materials are readily available in the laboratory for the teaching of science subjects (1.84) while one (1) item was agreed with a value above the cut-off point of 2.50. There is adequate workshop/equipment for the teaching of Vocational and Technical subjects in secondary schools (2.78).

Table 2: Mean Responses of Participants on Teachers Training on the Utilization of Instructional Materials.

| S/NO | ITEMS | SA 4 | A 3 | D 2 | SD 1 | N | \overline{X} | DECISION |
|------|--|---------|------------|--------|---------|-----|----------------|----------|
| 6. | Teachers go for regular training and workshops in the area of selection and utilization of instructional materials | 14 | 11 | 99 | 95 | 219 | 1.74 | Disagree |
| 7. | Workshop equipment is often utilized by teachers for effective teaching and learning of secondary school students | 27 | 34 | 86 | 72 | 219 | 2.07 | Disagree |
| 8. | Instructional materials are readily available in the workshop for utilization during lessons | 12 | 7 | 81 | 119 | 219 | 1.59 | Disagree |

| 9. | The Instructional materials that are available are obsolete and can no longer be used by teachers | 74 | 82 | 32 | 31 | 219 | 2.90 | Agree |
|-----|--|----|----|----|----|-----|------|-------|
| 10. | Instructional materials and utilization are adequate in meeting the requirements for the number of students during lessons | 79 | 84 | 22 | 34 | 219 | 2.94 | Agree |

Research Objective 2: Mean response on teachers' training on the utilization of instructional materials. The data for research objective 2 were analysed using mean scores. The result is presented in table 3. Five items were presented on the table, and three (3) of these items all disagreed with various assertions on teachers' training on the utilization of instructional materials with a cut-off value which is less than 2.50 as follows: teachers go for regular training and workshops in the area of selection and utilization of instructional materials (1.74), workshop equipment is often utilized by teachers for effective teaching and learning of secondary school students (2.07), and instructional materials are readily available in the workshop for utilization during lessons (1.59), while two (2) items were agreed with a value above the cut-off point of 2.50. These were; instructional materials that are available are obsolete and can no longer be used by teachers (2.90) and instructional materials and utilization are adequate in meeting the requirements for the number of students during lessons.

Discussion

From the results discussed above, findings can be deduced from the analysis. Results from table one highlighted that the respondents indicated that there is limited availability of instructional materials for teachers' use in the school and the ones that are available do not meet the curriculum specifications. Table two findings show that there is adequate workshop/equipment for the teaching of Vocational and Technical subjects in secondary schools but inadequate facilities in the laboratory in conclusion, teaching aids are relevant in helping the classroom teacher achieve set objectives as it engages the students while stimulating their interests and thus improving learning.

Recommendations

After evaluating the attitude of secondary school teachers toward the improvisation and utilization of instructional materials in Northeast Nigeria the researcher puts forward the following recommendations;

- i. The government should work at setting aside funds for education specially designed for the procurement and of instructional materials. The funds should also be directed at improving and constructing libraries in schools to improve teaching and learning outcomes.
- ii. The relevance of these media in the classroom is immeasurable in the teaching and learning process. The teachers should therefore strive at developing skills and abilities to use this media for instructional purposes. Governments and school administrators should

- make efforts to ensure that educational media and multimedia is included in the school curriculum at the elementary and higher levels to increase teaching and learning outcome.
- iii. The government should organize workshops, seminars, and conferences for teachers to enable them to update their knowledge of new developments how to improvise and utilize instructional materials.

References:

- Abdu-Raheem, B. O. (2014). Improvisation of instructional materials for teaching and learning in secondary schools as a predictor of high academic standards. *Nigerian Journal of Social Studies*, 2(1), 131-143.
- Adoyin, J. A. (2020) instruction to educational technology, Johns Lod publisher ltd, Lagos
- Ahmed A.M (2008) Improvisation of Instructional Material for Teaching of Biology; an Important Innovation in Nigeria Educational System. Prison Journal, 6 (1),1-7.
- Aina, L. O. (2013). Information, knowledge, and the gatekeepers. The One Hundred and Thirty-Second Inaugural Lecture was delivered at the University of Ilorin, Nigeria.
- Ajayi, K. (2020) Job satisfaction among secondary schools' teachers in Nigeria; "African Journal of education research" vol. 3. No. ½ April
- Alayu, R.A Adeyamo A.A & Bulus, C.A (2016), Assessing Attitudes of Strengthening Mathematics Science Education (SMASE) Teachers Toward Teaching Mathematics and a Basic Science in Primary School in Jos Metropolis. Nigeria Journal of Education Research and Evaluation, 17(1) 10-18.
- Clark, L. M. (2020) Teaching tools teaching in the secondary school New York: Macmillan publishing co. Inc
- Fafunwa, B. E. (2011) History of education in Nigeria, London, George, Allen, and union ltd
- Federal Republic of Nigeria (2004). National Policy on Education (Revised): NERDC.
- Ibe (2011): "How Nigeria teacher select interactional materials" British Journal of educational technology vol. 19
- Johnson, S.I (2000) Improvisation and Law Cost Production for SCIENCE Education Concept and Information Paper Presented at Room 803 Curing School Science Seminar Securing at Federal College of Education F.C.E Kano on 30th September.
- Kola, J.K (2013) Effective Teaching and Learning of Science Education Through Information and Communication Technology (ICT) Journal of Research and Method in Education 2(5).
- Marbas, C.C. (2017). History of Education Nigeria, Enugu: Chuka education publishers.
- Nwosu, A. P.J, Ibe, E. Folorunsho, O, (2013) Senior Secondary School Students Improvisation of Ecological Instructional Materials; Implication for Attainment of Millennium

- Development Goals. In S.O Abonyi (Eds) 54th Annual Conference Proceedings of Science Teachers Association of Nigeria, 235-241 Ibadan. HEBN Publishers Plc.
- Ololube, P. E., (2006). Instructional material procedures in a challenging Education system. Paper presented at the Annual natural conference organized by the Curriculum Development and Instructional material Centre (CUDIMAS). University of Nigeria, Nsukka.
- Ololube, P. E., (2008). Effects of animated agricultural Science Instructional Package on attitude and performance of Junior Secondary School Students in South-West Nigeria. *Mediterr. J. Soc. Sci.* 3(1):425-435.
- Omojuwa, A.A. (2000). Fundamentals of instructional methods. Ilorin, Kwara State, Olives Production Ltd.
- Onche, A. (2014). Meeting the Challenge of Accessibility and Utilization of Modern Instructional Materials in Rural Secondary Schools in Nigeria. *International Journal of Multidisciplinary Studies*. I, (2): 1-13
- Saettler, (2000) The Evolution of American educational Technology Englewood co:Libraries Unlimited
- Webcrawler, C. (2013). Definition of Educational Media. California: Retrieved from http://www.ask.com/question/meaning-ofeducational-media on August 1, 2013.
- Zubairu A. (2014) Investigation of Students Attitude Toward Learning Physics in Federal College of Education (FCE) Zaria. In S.O Abonyi (Eds) 55th Annual Conference Proceeding of Science Teachers Association of Nigeria 339-344, Ibadan: HEBN