



Research paper

Instructional Resources and Teachers' Facilitation of Skill Based Subjects on attainment of Entrepreneurial Skills by Junior Secondary Students' in Rivers East Educational Zone, Nigeria

Godfrey-Kalio, I. A¹, Kalio, G. A^{2*} and Ndifon, R. A.¹

¹Department of Curriculum and Teaching, Faculty of Education, University of Calabar, P.M.B. 5111, Calabar, Nigeria.

²Department of Agricultural Science, Faculty of Vocational and Technical Education, Ignatius Ajuru University of Education, P.M.B. 5047, Rivers State, Nigeria.
Corresponding Author Email: ag.kalio@yahoo.com

Received 1 July 2017; Accepted 11 August 2017

Descriptive survey to investigate the relevance of instructional resources and teachers' facilitation of skill based subjects on the attainment of entrepreneurial skills by Junior Secondary Students' was conducted. The study was guided by two null hypotheses using 16,647 teachers and 19,737 students as the population. 10% of the teachers and 16.86% of the students were selected using the stratified sampling technique in each of the LGAs (state the names of the local government areas) to give a total of one thousand six hundred and sixty four (1,664) teachers and three thousand three hundred and twenty eight (3,328) students respectively. Two research instruments: "Instructional Resources and Teachers' Facilitation of Skilled Based Subject Questionnaire (IR&TFSBSQ)" and "Attainment of Entrepreneurial Skills Questionnaire (AESQ)" were used. The Pearson Product Moment correlation and Chi-square were used for data analysis. Results revealed a positive relationship between instructional resources and teachers' facilitation of skilled

based subject and the attainment of entrepreneurial skills. These variables influenced the attainment of entrepreneurship skills in making poultry feeds, soap and tie and dye of fabrics among the students. It is pertinent for basic education school leavers to acquire entrepreneurial skills to prevent negative societal influence on them. It is therefore recommended that educational authorities recruit qualified teachers in skill based subjects, provide adequate instructional resources, produce locally fabricated machines and tools in collaboration with the National Education Technology Centre (NETC) and laboratories for effective teaching and learning, training and retraining of teachers to impart relevant entrepreneurial skills to pupils for self-reliance.

Key words: Instructional resources, teachers' facilitation, skilled based subjects, entrepreneurial skills, Basic education students.

INTRODUCTION

Instructional resources which are educational inputs are imperative in the teaching of any skilled based subject

aimed at imparting entrepreneurial skills in the school curriculum. The use of instructional resources would

make discovered information stick firmly to the memory of students (Okobia, 2011). An adequately planned and ingenious use of visual aids in lessons would do much to drive out apathy, complement inadequacy of books as well as arouse pupils' interest by giving them something realistic to see and do. It can also at the same time help them to imagine things out and educate themselves (Sovary, 2006). Similarly, the use of audio-visual materials and the introduction of hands-on skilled based subjects are connected to teaching-learning situations that help to bring about lasting and significant experiences (Balo, 2008). Having satisfactory human wherewithal in terms of teacher quality for the teaching of skilled based subjects such as agricultural science, business studies, fine and applied arts and metal work in the school core curriculum is very important. The goals of education can be better achieved with the teachers implementing factors. Thus, in order to uphold good and effective teaching it is advocated that schools be appropriately and consistently equipped. On the significance of instructional resources to teaching, Oluyori, (2002) opined that if the newly introduced system (9-3-4) in agreement with the national policy on education is to be a success, then instructional resources has a function to play.

Consequently, with the introduction of the 9-3-4 educational system where emphasis is laid on acquisition of skills by the end of the nine year programme, it is emphasised that technically skilled manpower be available to implement projects as well as provide more skilled school leavers that may ambassadors of the nine year educational process (Oyetola and Okunuga, 2009). Furthermore, teachers are encouraged to adopt student-centred activities based on minds-on and hand-on approaches to organize students learning (Awofala and Awolola, 2011). Thus it is imperative for schools to have ample instructional resources for teachers to facilitate the process of acquiring entrepreneurial skills in the school curriculum. Without the instructional resources and its facilitation by tutors through the effective teaching of skilled based subjects, the aspirations of education cannot be achieved. It is based on this background that this study aimed at determining the instructional resources and teachers' facilitation of skilled based subjects on the attainment entrepreneurial skills by Junior Secondary Students' in Rivers State was designed. To fulfil the aim of this study, two research questions and hypotheses each were utilized.

Research questions

- (1) How does the use of instructional resources relate to students' attainment of entrepreneurial skills?
- (2) How does teachers' facilitation on skilled based subjects interfere with students' attainment of entrepreneurial skills?

Statement of hypotheses

The following hypotheses were stated to direct this study:

- (a) There is no significant influence between the use of instructional resources and students' attainment of entrepreneurial skills.
- (b) Teachers' facilitation on skilled based subjects does not significantly influence students' attainment of entrepreneurial skills.

METHODOLOGY

Research design

The study adopted the descriptive survey research design as described by Ezeji, (2004). The author opined that, a descriptive survey design is one which involves the assessment of public opinion using collection of detailed descriptions of existing phenomena with the purpose of using the data to validate current circumstances and practices or to make better plans for improving the phenomenon. This design is appropriate for this study because it uses questionnaire to get information from respondents.

Area of the study

The study was conducted in the Rivers East Educational zone of River State, Nigeria. River State is located in the Niger Delta Region. It is situated in the South-south Geopolitical zone comprising of River East, Rivers South and Rivers South-West senatorial districts of the Federal Republic of Nigeria.

The researchers choose this area because of its educationally advantaged environment in terms of availability of infrastructural facilities and natural resources.

In addition, it is believed that Rivers State being a state naturally endowed with physical amenities would facilitate the accomplishment of the laudable Universal Basic Education (U.B.E) objectives in terms of entrepreneurial skills acquisition among the students in the basic education programmes.

Population of the study

Sixteen thousand six hundred and forty-seven (16,647) teachers in three hundred and sixteen (316) Junior Secondary Schools were used for the study. Consequently, nineteen thousand, seven hundred and thirty-seven (19,737) JSS 3 students were used to give answers on the questions on the questionnaire on the dependent variable.

Sampling technique

The stratified sampling technique was adopted to select the schools and the respondents within the study area. The stratification criteria were based on Local Government Areas (LGAs) within the Rivers East Educational zone. This technique involved grouping the eight (8) Local Government Areas (Etche, Omuma, Ogbolo Ikwerre Emohua, Okrika and Port Harcourt) in the zone into 8 strata. 15% of the schools were selected out of each stratum representing the eight Local Government Education zone to give a total of forty seven (47) schools. 10% of the teachers and 16.86% of the students were selected in each of the LGAs to give a total of one thousand six hundred and sixty four (1,664) teachers and three thousand three hundred and twenty eight (3,328) students respectively (Godfrey-Kalio *et al.*, 2015).

Research instrument

Two questionnaires titled “Instructional Resources and Teachers’ Facilitation of Skilled Based Subject Questionnaire (IR&TFBSBQ)” and “Attainment of Entrepreneurial Skills Questionnaire (AESQ)” was used. The Instructional Resources and Teachers’ Facilitation of Skilled Based Subject Questionnaire (IR&TFBSBQ) was designed to have sections A and B. Section A was designed to elicit responses from respondents based on demographic data such as age, years of experience and marital status. Section B was designed to obtain responses on the independent variables (Instructional Resources and Teachers’ facilitation of skill based subjects during of entrepreneurial skills acquisition) from the respondents. The 4-point Likert type scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) was used in the questionnaires. The second questionnaire: Attainment of Entrepreneurial Skills Questionnaire (AESQ) was compiled to obtain responses considering the dependent variable. It was also separated into sections A and B. Section A was compiled to obtain data from the respondents based on their Age, class and name of school. Section B was designed to elicit a “yes” or “no” answer of attainment of entrepreneurial skills in making soap (question items 1 – 6 of AESQ); in making poultry feed (question items 7 – 12 of AESQ) and tie and dye of fabrics (question items 13 – 18 of AESQ) by the respondents.

Validity of the instrument

An expert in test and measurement in the Department of Educational Foundation was contacted to ascertain the face validity of the instrument. It was ensured that all the items in the questionnaire used measured what they are supposed to measure. Corrections were made and

confusing items were removed before using the instrument for the preliminary study.

Reliability of the instrument

The reliability of the instrument used for this study was first distributed to seventy (70) respondents outside the sampled schools. The results obtained were subjected to statistical analysis using Cronbach alpha to determine the internal consistency. The result of the reliability is presented in (Table 1).

Procedure for data collection

The questionnaires were distributed to the teachers through the assistance of the Head Teachers using the staff nominal roll to select teachers to provide answers to the questions on the questionnaires.

Procedure for data analysis

The Pearson Product Moment Correlation (PPMC) was used to determine the relationships between the independent and dependent variables using the SPSS package described by Levesque, (2007). The Chi-square was used because both variables were discrete, using SPSS package.

RESULTS AND DISCUSSION

General description of variables

Instructional Resources and Teachers’ facilitation of skill based subject are identified as the independent variables for this study. The main dependent variable is acquisition of entrepreneurial skills. The mean and standard deviation of the major variables were calculated and presented in (Table 2). A total sample of one thousand six hundred (1600) respondents was used for the study.

Presentation of results

In this section each hypothesis was re-stated, and the result of data analysis carried out to test it was presented. Each hypothesis of the study was tested at 0.05 levels, of significance.

Hypothesis one

There is no significant influence between use of instructional resources and students’ attainment of entrepreneurial skills.

Table 1. Chronbach alpha reliability estimate (N=70).

| Variables | No of items | \bar{X} | SD | rx _y |
|---|-------------|-----------|------|-----------------|
| Use of instructional materials | 6 | 18.16 | 2.72 | 0.55 |
| Teachers facilitation on skilled based subjects | 6 | 20.1 | 2.30 | 0.92 |
| Entrepreneurship skill attainment | | | | |
| Making poultry feed | 6 | 17.24 | 3.41 | 0.63 |
| Making soap | 6 | 16.56 | 3.24 | 0.54 |
| Tie and Dye | 6 | 17.56 | 3.11 | 0.75 |

rx_y = Reliability estimate of the independent variables (x) and the dependent variables (y). Where x = use of instructional materials; Teachers facilitation and y = entrepreneurial skills: making poultry feed, making soap and tie and die.

Table 2. General data description (N=1600).

| Variables | \bar{X} | SD |
|---|-----------|------|
| Use of instructional materials | 22.21 | 1.90 |
| Teachers' facilitation of skill based subject | 21.07 | 1.88 |
| Entrepreneurship skill attainment | | |
| Making poultry feed | 9.11 | 3.03 |
| Making soap | 9.13 | 2.98 |
| Tie and Dye | 9.18 | 2.98 |

Table 3. Presentation of the relationship between use of instructional materials and attainment of entrepreneurial skills using the Pearson Product Moment Correlation Analysis (N=1600).

| Variables | \bar{X} | SD | r-value |
|----------------------------------|-----------|------|---------|
| Use of instructional materials X | 22.21 | 1.90 | |
| Making poultry feed Y1 | 9.11 | 3.03 | 0.191* |
| Making soap Y2 | 9.13 | 2.98 | 0.182* |
| Tie and Dye Y3 | 9.18 | 2.98 | 0.179* |

* Significant at 0.05, critical r = 0.062, df = 1598.

The independent variable in this hypothesis is instructional resources (x), while the dependent variable is attainment of entrepreneurial skills (in making poultry feed (Y1), making soap (Y2) and tie and dye) (Y3). Pearson Product Moment Correlation Analysis was used to test this hypothesis. This result is shown in (Table 3).The result in Table 3 revealed that the calculated r-values for poultry feed making (0.191), soap making (0.182) and tie and dye production (0.179) were higher than the critical r-value of 0.062 at the 0.05 level of significance with 1598 degree of freedom. With this result, the null hypothesis which stated that there is no significant relationship between the use of instructional resources and attainment of entrepreneurial skills was rejected. This finding suffices that, use of instructional resources has a significant positive relationship with the attainment of entrepreneurial skills.

The positive response reveals that the higher the use of instructional resources, the higher the attainment of entrepreneurial skills tends to be. On the contrary, the lower the use of instructional resources the lower the attainment of entrepreneurial skills."

Hypothesis two

Teachers' facilitation of skill based subjects does not significantly relate to acquisition of entrepreneurial skills.
dependent variable is acquisition of entrepreneurial

The independent variable in this hypothesis is teachers' facilitation of skill-based subjects, while the skills (in terms of making poultry feed, "making soap and tie and dye). The Pearson Product Moment Correlation Analysis was used to test this hypothesis. The result of the analysis is presented in (Table 4)."The result of the analysis as presented in (Table 4) revealed that the calculated r-values for poultry feed making (0.65), soap making (0.46) and tie and dye production (0.92) were higher than the critical r-value of 0.062 at the 0.05 level of significance with 1598 degree of freedom. With this result, the null hypothesis which stated that there is no significant relationship between curriculum content implementation in skills-based subjects and acquisition of entrepreneurial skills was rejected. This result indicated that, teachers' facilitation of skill-based subjects has a

Table 4. The relationship between teachers facilitation of skill based subjects and attainment of entrepreneurial skills using the Pearson Product Moment Correlation Analysis (N=1600).

| Variables | \bar{X} | SD | r-value |
|--|-----------|------|---------|
| Teachers' facilitation of skill based subjects X | 21.07 | 1.88 | |
| Making poultry feed Y1 | 9.11 | 3.03 | 0.65* |
| Making soap Y2 | 9.13 | 2.98 | 0.46* |
| Tie and Dye Y3 | 9.18 | 2.98 | 0.92* |

* Significant at 0.05, critical $r = 0.062$, $df = 1598$.

Positive relationship with the attainment of entrepreneurial skills. The positive r-value implied that the more positive the teachers facilitation of skilled-based subjects the higher attainment of entrepreneurial skills tends to be. On the other hand the lower the teachers' facilitation of skilled-based subjects the lower the acquisition of entrepreneurial skills tends to be.

DISCUSSION

Use of instructional resources and attainment of entrepreneurial skills

The outcome of the first hypothesis shows that there is a significant positive relationship between use of instructional materials and attainment of entrepreneurial skills. The null hypothesis was rejected while the alternative hypothesis retained. The result implies that the use of instructional materials has a positive relationship with pupils attainment of entrepreneurial skills in terms of poultry feed making, soap making and tie and production."This finding is in line with the reports of Okobia, (2011) who was of the opinion that the use of instructional resources would make discovered facts retained firmly in the memory of students. Sovery, (2006) also in support of the result of this findings opined that a well articulated and creative use of visual aids in lessons would do much to eradicate apathy, complement inadequacy of books as well as stimulate pupils interest by giving them something realistic to see and do, and at the same time helping to guide them to think things out themselves.

The results suggest that an instructional resource has a part to play in agreement with the national policy on education. It is based on this that Balo, (2008) stated that audio-visual resources as a fundamental part of the teaching and learning situation can help to bring about lasting and significant knowledge to achieve maximally in the UBE programme and it is expected that the classroom teacher use good learning materials and improve where necessary. The school instructional resources according to Atakpa (2009) should have a balanced collection which must include printed and non-printed materials electronic materials and audio-visual. From the result of this study also there is a prove that

teachers who use relevant and suitable textbooks, visual and audio visual materials like slides, maps, globes, charts, tapes etc. make teaching less vague. Therefore, teachers' utilization of instructional materials serve as a means through which ideas, knowledge, message and information, are dispersed more easily. This kind of materials is usually selected in cooperation with the students to ensure it reflect their interest and culture without crossing reasonable limits of ethical standards.

Teachers' facilitation of skill based subjects and attainment of entrepreneurial skills

This hypothesis was stated as teachers' facilitation of skilled based subjects do not significantly relate to pupils attainment of entrepreneurial skills. The null hypothesis was rejected while the alternate hypothesis was retained. The result revealed that teachers' facilitation of skilled based subject has a significant positive relationship with pupils' attainment of entrepreneurial skills in terms of poultry feed making, soap making and tie and die production. This result is in consonance with the views of Dike (2009) who posit that the most significant aspect of the national policy on education is the new focus it gives to the Nigerian educational system, the need for industrialization of the nation in which skilled based subjects like vocational and technical subjects play crucial roles and the realization to change from white collar job oriented educational system to science, vocational and technical oriented system which prepares individual to be self-reliant and useful to the society."

The implication of this to national planning is that with the introduction of the Universal Basic Education where emphasize is laid on attainment of skills by the end of the nine year programme technically skilled manpower would be available to execute projects and even more skilled ones who may come up as the product of the nine years may be encouraged to move further up educationally. The result of this finding also supported the findings of Ogwu, (2007) who observed that the future of any nation lies on the skills knowledge and abilities of her children. Most of the high school leavers roam the streets without jobs and this is attributed to their lack of the required skilled for the world of work. It is based on this that Ezugu (2001) stated that for the UBE programme to be effective, the training

tool and equipment must be at least similar to those being use in renewed emphasis on practical exercise and test at the Junior secondary school level will provide a transition from the vocational orientation to vocational acquisition. From the findings of this research, it therefore follows that teachers' of skilled-based subjects are expected to enhance pupils' attainment of entrepreneurial skills in poultry feed making, soap making and tie and die production. It is also expected that pupils learning of the various school subjects should enhance the inculcation of the generic skills of inquiring, reasoning, conceptualization, problem solving and communication. By applying these skills, pupils are not only expected to construct their knowledge of the subject matter but use them to acquire long lasting skills for their future livelihoods.

Conclusion and Recommendation

This study shows that, instructional resources and teachers facilitation of skill based subjects will positively improved the students' attainment of entrepreneurial skills. It is therefore recommended that relevant educational authorities recruit qualified teachers in skill based subjects, provide adequate instructional resources, produce locally fabricated machines and tools in collaboration with the National Education Technology Center (NETC), as well as laboratories in schools for effective teaching and learning, training and retraining of teachers to impart relevant entrepreneurial skills among pupils for self-reliance.

REFERENCES

- Atakpa RA (2009). Entrepreneurship education: A sine qua-non in Business Education in Nigeria. *Business Education Journal*, 1(2):1-6.
- Awofala AO, Awolola SA (2011).Curriculum value orientations and reform in the 9 year basic education mathematics curriculum. In: Abonyi OS (Ed.). *Reforms in STEM Education. Proceedings of the 52nd Annual Conference of Science Teachers Association of Nigeria*. Pp. 297-305.
- Balo AA (2008). The use of Audio-visual materials in Geography teaching in post primary schools in Nigeria. *West African Journal of Education*, 1(3):211 – 212.
- Dike VE (2009). Technical and Vocational Education: Key to Nigeria's Development. Retrieved 20th June, 20014 from <http://www.nigeriavillagesquare.com/articles/victor-dike/technicalkeytonigeriadevelopment.html>
- Ezeji SCOA (2004). *Basic principles of research in education*. Enugu. Cheston Agency Ltd.
- Ezugu LC (2001).Selecting Appropriate Instructional Equipment for Vocational/Technical Programme Challenge for Nigeria Vocational and Technical Education. *Journal of Teacher Education*, 1(1), 95-102.
- Godfrey-Kalio IA, Duruamaku-Dim JC, Kalio GA (2015). Curriculum Content Organization and Teachers' Perception of Entrepreneurship Education of Basic Education Students' in Rivers East Educational Zone of Nigeria. *European Scientific Journal* 11(31): 378 – 387.
- Levesque R (2007), *SPSS Programming and Data Management: A Guide for SPSS and SAS Users* (4th ed.), Chicago, Illinois.
- Okobia EO (2011). Availability and teacher's use of instructional materials and Resources in Implementation of Social Studies in Junior Secondary Schools in Edo State, Nigeria. *Review of European Studies*, 3(5), 120 – 125.
- Oluyori F (2002).Delimiting factors to instructional media utilization in Nigeria school. *Journal of Curriculum and Instruction*, 1, 196-206.
- Ogwu CA (2007). Analysis of students' perception of Introductory technology as a course in the Junior secondary school. *Nigerian Vocational Journal*, 3(1), 103-107.
- Oyetola FE, Okunuga CJ (2009). Curriculum for wealth creation. *Paper presented at the seminar of the world council for curriculum and instruction (WCA), held at the Federal College of Education, Kano, Nigeria*.
- Sovary M (2006). An investigation into the relationship between instructional resources and students' academic performance in secondary schools in Abeokuta LGA of Nigeria. Unpublished M.Ed Thesis, University of Ilorin.