ASSESSMENT OF BUSINESS TEACHERS' CREATIVITY OF IMPROVISED INSTRUCTIONAL MATERIALS IN GOVERNMENT SECONDARY SCHOOLS IN BAUCHI STATE, NIGERIA

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ABSTRACT

The study assessed business teachers' creativity of improvised instructional materials in government secondary schools in Bauchi state, Nigeria. The study had three specific objectives. In line with the specific objectives, three research questions and three hypotheses were raised. Descriptive survey research design was used for the study. The population of the study was 1,463 business teachers in 2019/2020 academic session in Bauchi state and 500 teachers were randomly sampled and used for the study. The instrument for data collection was 4-point scale structured questionnaire. The instrument was validated by 4 experts and pilot tested using 60 business teachers in Gombe state. Cronbach Alpha was used to test the reliability and reliability coefficient of 0.84 was obtained. The data were collected by the researcher assisted by 4 research assistants using direct contact. The exercise lasted for four weeks. Description Statistics of mean was used to answer the research questions and the hypotheses were tested using Analysis of Variance (ANOVA) at the significant level of 0.05. The result revealed among others that business teachers have no creative skills for producing non-projected, two-dimension, and three-dimension improvised instructional materials in government secondary schools in Bauchi State. It was concluded that lack of the skills for the improvised the instructional materials has hamper the utilization of improvised instructional materials in teaching and learning exercise in the schools. It was recommended among others that the curriculum of training pre-service teachers should be enriched and skills for production of non-projected improvised instructional materials should be integrated into the curriculum Bauchi state.

Keywords: Creativity, Improvised, Instructional Materials

INTRODUCTION

Instructional materials refers to different kinds of materials, resources or forms of media that teacher and the learner use in teaching/learning situations to improve the quality and quantity of learning. According to Amadioha (2009) instructional materials are all forms of information carriers which can be used to record, store, preserve, transmit, concretize or retrieve information for the purpose of teaching and learning. Instructional materials according to Udeora (2017) are those channels of communication which a classroom teacher can use to concretize a concept during teaching and learning process. TIkon (2016) reported that the use of instructional materials gives the learner opportunity to touch, smell, or taste objects in the teaching and learning process. Instructional materials would enable the students

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to effectively learn and retain what they have learnt and thereby advancing their performance in the subject in question. It therefore means that students learn better when most of the senses are appealed to the instructions, and use of instructional materials has added a new dimension in the positive promotion of the teaching and learning process which enable learners to learn better.

Despite the importance of Instructional Materials in teaching, it was observed that there are inadequate needed materials for effective teaching. Inadequate funding to purchase adequate materials for construction of instructional material has been a problem in public secondary schools (Ogunlade, 2015). The study conducted by Tyler (2012) shows that schools area facing problem of inadequate instruction materials. The author stressed that, schools are facing problem of inadequate instructional materials. Similarly, the study of Utibe-Abasi (2015) also indicate that most schools are faced with challenges such as lack of adequate instructional facilities. The curb the problem of inadequate instructional materials in schools, Yusuf (2016) suggested that improvisation is the solution to unavailability of instructional materials in schools. Improvise instructional according to Tikon (2016) are the locally made teaching aids that can assist to improve quality of graduates turn out from schools and standard of education generally. The author maintained that resourceful and skilful teachers should improvise necessary instructional materials to promote academic standard in Nigerian schools. Udeora (2017) reported that many of the equipment used in teaching can be improvised that is why teacher should endeavour to utilize the use of discarded resources around them to improvised teaching aids. In the same lane, Tikon (2016) reported that the solution to the acute problem of inadequate instructional materials is improvised instructional materials. The inadequacy of instructional media materials calls upon school administration to create ways through which the instructional media in question can be increased (Tikon, 2016). Based on the foregoing, Tella (2007) earlier observed that teachers should be skillful on creating and utilization of improvised instructional materials.

From the empirical studies, improvised is the solution to the acute shortage instructional materials in schools. Meanwhile, the improvisation of instructional materials depends on the creativity skills of teachers. Abdullahi (2010) observed that useful skills and creativity are essential needed for improvised and utilization of instructional facilities, materials and tools. Study conducted by Tella (2007) reported that many teachers are not knowledgeable or find it difficult to improvised instructional materials because of lack of training on creativity. It therefore means that teachers are faced with the problem of talking about instructional materials without making bold attempts to improvise. Yusuf (2016) discovered most teachers find it difficult to improvised needed instructional materials in their subjects. It therefore means that the realization of educational goals and objectives is hampered by teachers competent and inability creativity to improvise and utilize the needed instrumental materials. Due to this background, this study sought to: (1) assess business teachers' skills on creativity of non-projected improvised instructional materials; (2) Assess business teachers' skills on creativity of two-dimensional improvised instructional materials; and (3) assess business teachers' skills on creativity of three-dimensional improvised instructional materials in Government Secondary Schools in Bauchi State.

Research Questions

The study answered the following research questions:

1. What are the business teachers' skills on creativity of non-projected improvised instructional materials?
2. What are the business teachers' skills on creativity of two-dimensional improvised instructional materials?

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3. What are the business teachers' skills on creativity of three-dimensional improvised instructional materials?

Research Hypotheses

The study had the following hypotheses:

$H0_1$: There is no significant difference among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on non-projected improvised instructional materials.

$H0_2$: There is no significant difference among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on two-dimensional improvised instructional materials.

$H0_3$: There is no significant difference among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on three-dimensional improvised instructional materials.

Methodology

Descriptive survey research design was used for the study. The approach allowed ascertaining of widespread opinions under natural conditions used for the decision making in the study. The population of the study was 1,463 business teachers in 2019/2020 academic session in Bauchi state. The sample for study was 371 as suggested by Gleen (2009). To enable the researcher have more representative in the study, the sample size was increased to 500. This is in line with the submission of Creswell (2011) who opined a researcher has liberty on increasing the sample size if he can effectively manage it.

The research tool for data collection was questionnaire titled Business Teachers' Creativity on Improvised Instructional Materials (BTCIIM). The instrument had two sections, Section A of the instrument sought for teaching subject of the respondents while section B contain 45 items. The items in section B was used to answer the research questions and testing of null hypotheses. The respondents were required to respond to the statements based on the agreement. The items were structured in 4-point rating scale of Strongly Agreed (SA) 4 points, Agreed (A) 3 points, Disagreed (D) 2 points and Strongly Disagreed (SD) 1 point.

The developed instrument was validated by 4 experts and their corrections were incorporated into the final copy before the study. The instrument was pilot tested using 50 business teachers in Gombe state. This was based on the suggestion of Connely (2008) who stated that extant literature suggests that a pilot sample should be 10% of the sample projected for the larger parent study. Data collected from pilot study was subjected to Cronbach Alpha reliability test. A reliability coefficient of 0.84 was obtained. The instrument was therefore considered reliable for the study as suggested by Hair et al., (2010) who opined that instrument with at least 0.7 reliability coefficient should be considered good enough for survey study.

Prior to the data collection, four researcher assistants were employed. The researcher trained three research assistants who assisted in the data collection. Direct contact was used for the data collection. The researcher visited each of the schools during data collection to coordinate and monitor the exercise. The method enabled the researcher to retrieved high proportion of completed questionnaire. The exercise lasted for four weeks.

The data collected from the respondents were coded into excel before entering the data into Statistical Package for Social Sciences (SSPS) version 21 for analysis. The excel was used to run description Statistics of mean was used to answer the research questions using index score of 2.5 as criterion for agree and score of less than 2.5 was considered as disagree. The

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hypotheses were tested using Analysis of Variance (ANOVA) at the significant level of 0.05. In the test of the hypotheses, where the attained probability value was greater than the significance value (0.05), the null hypothesis was retained and where the attained probability value was less than the significance value the null hypothesis was rejected.

RESULTS OF RESEARCH QUESTIONS

The results of research questions are as presented in Tables 1 to 3.

Results of research Question One

What are the business teachers' skills on creativity of non-projected improvised instructional materials in government secondary schools in Bauchi State?

Table 1: Descriptive statistics of mean used to answer the business teachers' skills on creativity of non-projected improvised instructional materials

S/No	Statement	MA	Std. dev	Remark
1.	I can make accurate measurement in creating non projected improvised materials.	2.54	0.64	Agree
2.	I can neatly draw for the creation of creating non projected improvised materials.	2.32	0.58	Disagree
3.	I can confidently manipulate Paper or cardboard folding creating non projected improvised materials.	2.61	0.65	Agree
4.	I can provide attractive and meaningful Lettering and Numbering when creating non projected improvised materials.	2.52	0.63	Agree
5.	I can combine color application when creating non projected improvised materials.	2.58	0.64	Agree
6.	I can manage Plotting points to provide creating non projected improvised instructional materials.	2.42	0.60	Disagree
7.	I can Cut paper/wood/metal when creating non projected improvised materials	2.16	0.54	Disagree
8.	I can mark paper/wood/metal production of non-projected improvised materials	2.47	0.62	Disagree
9.	I can mount small devices when creating non projected improvised materials	2.30	0.57	Disagree
10.	I can drive nails/office tag /thumb nail when creating non projected improvised materials	2.22	0.56	Disagree
11.	I can file blades/cutters and scissors when creating non projected improvised materials	2.54	0.64	Agree
12.	I can assemble paper/wood/metal/tool when creating non projected improvised materials.	2.50	0.62	Disagree
13.	I can Join paper/wood/meta/plastic when creating non projected improvised materials.	2.68	0.67	Agree
14.	I can make good selection of relevant tools during creating non projected improvised materials	2.56	0.64	Agree
15.	I can make a good collection of related materials when creating non projected improvised materials.	2.55	0.64	Agree
	Grand mean	**2.48**		**Disagree**

Source: Fieldwork, 2020

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The descriptive statistics used to answer research question one is as presented in Table 1. From the Table, the mean scores of 9 items ranged 2.68 to 2.50 which were classified under agreed. The mean scores of 6 items were found to be under the benchmark for disagreed with mean scores ranged 2.47 to 2.16. The grand mean score of 2.48 obtained suggested that the respondents business teachers have no creative skills for producing non-projected improvised instructional materials in government secondary schools in Bauchi State.

Results of research Question Two

What are the business teachers' skills on creativity of two-dimensional improvised instructional materials in government secondary schools in Bauchi State?

The weighted mean scores of 15 items used to answer research question two in Table 2 ranged 2.66 (agreed) to 2.28 (disagreed). The grand mean score obtained was 2.44 which was less than the 2.50 benchmark for agree. The obtained mean score indicated that business teacher' disagree that they have skills on creativity of two-dimensional improvised instructional materials in government secondary schools in Bauchi State

Table 2: Descriptive statistics of mean used to answer the business teachers' skills on creativity of two-dimensional improvised instructional materials

S/No	Statement	MA	Std. dev	Remark
16.	I can make accurate measurement in creating two dimensional improvised instructional materials.	2.38	0.59	Disagree
17.	I can neatly draw for the creation of creating two dimensional improvised instructional materials.	2.58	0.65	Agree
18.	I can confidently manipulate Paper or cardboard when creating two dimensional improvised instructional materials.	2.41	0.60	Disagree
19.	I can make attractive and meaningful Lettering & Numbering when creating two dimensional improvised instructional materials.	2.34	0.59	Disagree
20.	I can combine color application when creating two dimensional improvised instructional materials.	2.49	0.62	Disagree
21.	I can manage Plotting points when creating two dimensional improvised instructional materials.	2.56	0.64	Agree
22.	I can Cut paper/wood/metal when creating two dimensional improvised instructional materials.	2.37	0.59	Disagree
23.	I can make use of paper/wood/metal during production of two dimensional improvised instructional materials.	2.38	0.59	Disagree
24.	I can mount small devices when creating two dimensional improvised instructional materials.	2.41	0.60	Disagree
25.	I can drive nails/office tag /thumb nail when creating two dimensional improvised instructional materials.	2.66	0.67	Agree
26.	I can use blades/cutters and scissors when creating two dimensional improvised instructional materials.	2.54	0.63	Agree
27.	I can bore holes boring in wood/plastic/metal when creating improvised instructional materials.	2.36	0.59	Disagree
28.	I can assemble paper/wood/metal/tool when creating two dimensional improvised instructional materials.	2.28	0.57	Disagree
29.	I can Join paper/wood/meta/plastic when creating two dimensional improvised instructional materials.	2.55	0.64	Agree

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30.	I can Smoothen wood or paper when creating two dimensional improvised instructional materials.	2.31	0.58	Disagree
	Grand mean		**2.44**	**Disagree**

Source: Fieldwork, 2020

Results of research Question Three

What are the business teachers' skills on creativity of three-dimensional improvised instructional materials in government secondary schools in Bauchi State?

The result of the descriptive statistics used to answer research question three in Table 3 had mean scores ranged 3.03 to 2.4 with grand mean score of 2.49. The grand mean score obtained was less than the index score for agree (2.49<2.50). The obtained result indicated that business teachers' disagreed that they had skills on creativity of three-dimensional improvised instructional materials in government secondary schools in Bauchi State

Table 3: Descriptive statistics of mean used to answer the business teachers' skills on creativity of three-dimensional improvised instructional materials

S/No	Statement	MA	Std. dev	Remark
31.	I can make accurate measurement in creating three dimensional improvised instructional materials.	2.80	0.70	Agree
32.	I can neatly draw when creating three dimensional improvised instructional materials.	2.49	0.62	Disagree
33.	I can confidently manipulate Paper or cardboard folding when creating three dimensional improvised instructional materials.	2.57	0.64	Agree
34.	I can mould with clay when creating three dimensional improvised instructional materials.	2.60	0.65	Agree
35.	I can provide attractive and meaningful Lettering & Numbering when creating three dimensional improvised instructional materials.	2.79	0.70	Agree
36.	I can combine color application when creating three dimensional improvised instructional materials.	2.64	0.66	Agree
37.	I can manage Plotting points when creating three dimensional improvised instructional materials.	3.03	0.76	Agree
38.	I can Cut paper/wood/metal when creating three dimensional improvised instructional materials.	2.67	0.67	Agree
39.	I can make paper/wood/metal during production of three dimensional improvised instructional materials.	2.47	0.62	Disagree
40.	I can mount small devices when creating three dimensional improvised instructional materials.	2.40	0.60	Disagree
41.	I can drive nails/office tag /thumb nail when creating three dimensional improvised instructional materials.	2.45	0.61	Disagree
42.	I can file blades/cutters and scissors when creating two dimensional improvised instructional materials.	2.54	0.63	Agree
43.	I can use Clay collection when creating three dimensional improvised instructional materials.	2.60	0.65	Agree
44.	I can successfully Grind clay when creating three dimensional improvised instructional materials.	2.49	0.62	Disagree
45.	I can use ICT facilities to fast tract the creation of three dimensional improvised instructional materials.	2.24	0.56	Disagree
	Grand mean		**2.49**	**Disagree**

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RESULTS OF HYPOTHESES

The results of research hypotheses are as presented in Tables 4 to 6:

Research Hypothesis One

There is no significant difference among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on non-projected improvised instructional materials in secondary schools in Bauchi State.

The analysis of variance used to test null hypothesis one in Table 4 revealed the F 3: 417 value of 2.470 and *p=0.078.* The obtained p-value was greater than the level of significant (0.078>0.05). The p-value obtained indicated that there was no significant difference among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on non-projected improvised instructional materials in secondary schools in Bauchi State. The hypothesis was therefore upheld.

Table 4: Analysis of Variance Used to test difference among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on non-projected improvised instructional materials

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18.883	3	6.204	2.470	.078
Within Groups	1241.406	417	2.977		
Total	1260.389	420			

Source: Fieldwork, 2020

Research Hypothesis Two

There is no significant difference among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on two-dimensional improvised instructional materials in secondary schools in Bauchi State.

The ANOVA result used to test null hypothesis two in Table 5 revealed the F: 3 417 value of 2.496 and *p-value* was 0.059. The probability value was greater than the alpha value (0.059>0.05). The obtained p-value (0.059) disclosed that no significant difference exist among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on two-dimensional improvised instructional materials in secondary schools in Bauchi State. The hypothesis was therefore retained.

Table 5: Analysis of Variance Used to test difference among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on two-dimensional improvised instructional materials

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18.730	3	6.243	2.496	.059
Within Groups	1043.232	417	2.502		
Total	1061.962	420			

Source: Fieldwork, 2020

Research Hypothesis Three

There is no significant difference among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on three-dimensional improvised instructional materials in secondary schools in Bauchi State.

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The F 3:417 value of 2.466 was obtained in the test of null hypothesis three as seen in Table 6. From the Table, the *p-value* of 0.062 obtained was greater than the 0.05 level of significance. The obtained *p-value* suggested that the was no significant difference exist difference among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on three-dimensional improvised instructional materials in secondary schools in Bauchi State. The hypothesis was retained.

Table 6: Analysis of Variance Used to test difference among the mean responses of accounting, commerce, economics and marketing teachers creativity skills on three-dimensional improvised instructional materials

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18.509	3	6.170	2.466	.062
Within Groups	1043.406	417	2.502		
Total	1061.914	420			

Source: Fieldwork, 2020

DISCUSSION OF THE FINDINGS

The result of research question one indicated that business teacher's have no creative skills for producing non-projected improvised instructional materials in government secondary schools in Bauchi State. The test of the null hypothesis one further revealed that no significant difference among the mean responses of accounting, commerce, economics and principles of marketing teachers. The outcome of the study was found to be in line with the submission of Study conducted by scholars such as Udeora (2017) who argued that one of the major problem affecting teachers is lack of creativity on improvised non-projected teaching aids. Similarly, Usman and Adewumi (2016) reported that most teachers have problem of improvisation of unavailability of instructional materials in schools. Similarly, **Tyler** (2012) reported that many teachers have no skills to create locally made teaching aids that can assist to improve quality of graduates turn out from schools and standard of education generally. Tikon (2016) also corroborated the idea that resourceful and skilful teachers should improvise necessary instructional materials to promote academic standard in Nigerian schools are lacking. In the same lane, Shodeinde (2017) reported that the solution to the acute problem of inadequate instructional materials is improvised instructional materials which most teachers lack the basic skills for its creation.

The result of research question two which was further affirmed by test of null hypothesis two indicated accounting, commerce, economics and principles of marketing teachers opined that they have no creative skills for producing two-dimensional improvised instructional materials in government secondary schools in Bauchi State. The outcome of the study agreed with the study conducted by Anyakoha (1994) who observed that many teachers lack useful skills and creativity to improvised two or three dimension instructional materials that are essential for teacher and learning. Tella (2007) earlier observed that teachers should be skillful on creating and utilization of improvised instructional materials. Shirima (2013) discovered most teachers find it difficult to improvised needed instructional materials in their subjects. Study conducted by Shodeinde (2017) reported that many teachers are not knowledgeable or find it difficult to improvised instructional materials because of lack of training on creativity. It therefore means that teachers are faced with the problem of talking about instructional materials without making bold attempts to improvise. The inadequacy skills on creation of instructional media materials call institution of higher learning to create ways through which the instructional media in question can increase teachers creativity (Abdullahi, 2013).

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The result of research question three shows that business teachers' have no creative skills for producing three-dimensional improvised instructional materials in government secondary schools in Bauchi State. The test of the null hypothesis three indicated that no significant difference among the mean responses of accounting, commerce, economics and principles of marketing teachers. The result further affirmed the earlier submission of

According to Ogunlade (2005), lack of skills to improvised instructional materials in teaching/learning process can therefore be traced back to lack of initiative on the part of teachers. Improvisation of instructional materials needs committed individual, judgment, self-direction and initiative. The author stressed that teachers lack the knowledge, skills of improvisation in order to allow for maximum utilization of potentials which will be revealed through such improvisation. Factors like the characteristics of teachers, skills and knowledge hinder them from production of instructional materials for effective teaching (Abdullahi, 2010). The author added that, resistance to the use of materials may arise from the negative attitudes of teachers, or lack of expertise and training in material utilization. Anini (2011) who opined that production of instructional materials from local leather is difficult to most teachers. Anini (2011) reported that local teachers have difficulties on improvised instructional materials. The author added that locally-rooted materials such as certain palm leaves indigenous to some communities, bamboo, chicken feet and local baskets were used as instructional materials. Teachers do not familiar themselves with what is in the syllabus, the variety of local material available within the environment relating to the topics and subjects handled (Shodeinde, 2015). According to Shodeinde (2015), modifying traditional teaching methods will be very difficult as most teachers have conservative attitudes towards the use of instructional materials in teaching. Also lack of fund, equipment and time are known obstacles to successful media integration in teaching. Contrary to this result, the study of Lam (2000) reported that most of the teachers who are confident in their ability use improvised materials as instructional tools to enhance students learning

CONCLUSION

The study showed that business teachers have no creative skills for producing non-projected improvised instructional materials in government secondary schools in Bauchi State. Based on general complain of shortage of instructional materials in secondary schools in Bauchi, it was concluded business teachers do deliver their lesson without the using of instructional materials that will enhance students understanding, interest and active participation. By implication, one of the causes of low performance of students in business related subject can be attributed to lack of creative skills for improvised instructional materials among business teachers. Based on the results, it was recommended that Bauchi state government should organize workshop for training business teachers on how to improvise alternatives to real objects to enhance teaching and learning.

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REFERENCES

[1]. Abdullahi, M. (2010). *Designing and Developing Instructional Materials By School Teachers*. Department of Education, Bayero University Kano.

[2]. Amadioha, W.S (2009). The Importance of Instructional Materials in our Schools an Overview. *https://www.researchgate.net/publication/322368912*.

[3]. Anini, F. (2011). *Design and Production Of Instructional Materials Made With Leather For Pre-School Education.* MA Thesis. Department of General Art Studies, Kwame Nkrumah University of Science and Technology, Ghana.

[4]. Connely, I. M. (2008). Pilot studies. *Medsurg Nursing*, *17*(6), 411–422.

[5]. Creswell, D. (2011). *Research Design, Qualitative, Quantitative and Mixed Research Approches. (4th.ed).* Washington DC. Sage publications

[6]. Federal Government of Nigeria (2014). *National Policy on Education* (Revised edition) Abuja: NERDC.

[7]. Gleen, D. I. (2009). Dternining sample size. Retrieved September 22, 2018, from *http://edis.ifas.ufl.edu/*.

[8]. Ogunlade, A. (2015). Improvisation in Instructional Technology: Implications, for Primary and Secondary Schools. *Journal of Teacher Education and Teaching, 1*(2).

[9]. Shodeinde, B. I. (2017) *Effect of Improvised Instructional Materials On The Academic Performance Of Junior Secondary School Students In Social Studies In Kaduna State*, Nigeria. An unpublished masters theses Ahmadu Bello University Zaria.

[10]. Tella, A. (2007). The Impact of Motivation on Students‟ Achievement and learning outcomes in mathematics in Nigeria. Eurasic *Journal of Mathematics Science and Technology Education, 2* (3), 149-156.

[11]. Tikon, B. (2016). *Improvisation of materials and teaching aids in Physical education at the primary schools. A paper presented at training workshop for physical education supervisors* LGUBEA, game teachers and physical education teachers. Monday14th to19th Aug, 2016.

[12]. Tyler, R. W. (2012). *Basic principles of curriculum and instruction.* 7th edition.

[13]. Udeora, S.N. (2017). Improvisation of instructional materials in teaching and learning of agricultural science in Nigeria secondary schools. Roles constraints and strategies *journal of Educational studies and Research*, 1 (5), 86-98.

[14]. Usman, K.O. & Adewumi, A.O. (2016). Factors responsible for inability of teachers to improvise instructional materials for the teaching of business. *Journal of Science Teachers Association of Nigeria*, *41*(1&2), 51-56.

[15]. Utibe-Abasi, S.S. (2015). Problems of improvising instructional materials for the teaching and learning of physics in Akwa Ibom state secondary schools, Nigeria. *British Journal of Educatio,* 3 (3), 27-35.

[16]. Yusuf, M. (2016). Influence of availability of learning resources on the academic performance of students in the senior secondary schools in Kebbi State. *Journal of Curriculum and Instruction*, *Ilorin*: *6*(1&2), 123-145.

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