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Impacts of Construction of Instructional Resources on Upper Basic Social Studies Students' Academic Performance in Delta State, Nigeria

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ABSTRACT

This study examines the impact of construction of instructional resources on Upper basic Social Studies students' academic performance in Delta State, Nigeria. The study was guided by two research questions and two null hypotheses. The study adopted the quasi-experimental research design on a population of 850 who were administered treatment chosen through the simple random sampling method of balloting type. The instrument for data collection was the Social Studies Achievement Test (SSAT). Data generated were analyzed using the mean and standard deviation for the stated research questions, while the Analysis of Covariance (ANCOVA) was used to test the formulated null hypotheses at an alpha of 0.05 level of significance. Findings revealed that; there is a significant effect of location on the pretest posttest mean scores on learners and academic performance taught Social Studies with construction learning method and lecture methods; there is a significant effect of sex on the pretest and posttest mean scores on learners academic performance taught Social Studies with construction learning method and lecture method. The study concluded that construction learning method have effect on the pretest posttest mean scores of the learner and that it enhances their cognitive, affective and psychomotor domain of knowledge; equipping the learner based on their characteristics to improvise instructional materials, which have been teacher-centered activities. The study recommended amongst others that teachers of Upper Basic Social Studies should adopt constructive learning method in the delivery of instruction as this method make learning concrete, tangible and effective as against lecture learning method that tends to isolate the students during the delivery of instruction.

KEYWORDS

Construction, Instructional Resources, Social Studies, Students



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Introduction

Constructed or improvised instructional resources are those teaching and learning materials produced using available local materials with the help of an expert. It is the responsibility of teachers to improvise instructional materials in teaching Social Studies Education. The observation points to the fact that learners are exclusively denied the participation in the process of improvisation. The consequence is that if the improvisation is the sole responsibility of the teacher, students could be alienated and their psychomotor domain of knowledge will be inhibited. Moiseenko (2015) believed that learner should be encouraged to create learning materials. She discovered that students' participation in creating material for their learning consists of educational value. She observed that as learners improvise instructional materials, they are able to review contents themselves, contribute to the collection of stored materials available to other classes and future learners. Based on the nature of social studies learning which involves construction activity learning method, construction method demonstration method, project method ought to have shifted the paradigm of improvisation of Social Studies materials from the teachers to the students.

Instructional construction encourages construction behaviour of learners' participation in the production of locally made materials for learning in place of standard instructional materials. This has the ultimate goal of encouraging creativity and learners' exposure to improvise their learning materials. Construction learning and construction learners are most desirable in the acquisition of social studies content. This is because construction learning according to John (2017) simplified the way the learner acquires knowledge and skills. The implication of the above is that learners' involvement in improvisation makes learning tangible and concrete. However, different factors are considered for effective involvement of learners in the improvisation of instructional materials for social studies learning. In this study, the researcher attempts to link three main demographic characteristics of students to the issue of improvisation.

Fund is an essential element in the construction of materials for learning. Most instructional materials could be affordable while others are not affordable. Assigning a project involving improvisation by learners demands a consideration on the part of the school. This is because while most learners may show interest to improvise their learning materials, majority could be frustrated because of financial constrain. In addition, the sex of the students may contribute to ineffective practice of improvisation; students as well as the age bracket and the location where they lived. Irrespective of the above observation, Iji, Ogbole and Uka (2014) and Onyesom and Igberaharha (2021) are of the opinion that if students are allowed to improvise their instructional materials, it could result to high achievement in their test score. It is against this background that the study will investigate the extent to which learner's characteristics affects improvisation of instructional resources and the academic performance in Upper Basic Social Studies in the study area.

Statement of the Problem

Concentration on instructional improvisation has continued to be practiced in the school system by classroom teachers without incorporating students. It has resulted to students being passive and deprived of acquiring enterprising skills. Exposure of students to the process of constructing their instructional materials was encouraged in the study by Utibi-Abasi (2015). He says that participation of learners in the improvisation of instructional materials in Social Studies encourages creativity, enhances psychomotor domain and high performance in test scores. Hence, the study sought to find out if the constructional of instructional resources will have an impact on Social Studies students' academic performance at the Upper basic level in the state.

Research Questions

The study was guided by the following research questions:

- i. What is the effect of location on the pre-test and posttest mean scores of learners' academic performance taught Social Studies with construction and lecture learning method?
- ii. What is the effect of sex on the pretest posttest mean score of learner academic performance taught Social Studies with construction and lecture methods respectively?

Hypotheses

The following null hypotheses were formulated to be tested at 0.05 level of significance

- i. There is no significant effect of location on the pretest posttest mean scores of learners academic performance taught Social Studies with construction learning method and lecture method
- ii. There is no significant effect of sex on the pretest posttest mean scores of learner' academic performance taught Social Studies with construction learning method and lecture method.

Construction of Resource Materials in Social Studies

The peculiarity of the upper basic Social Studies programme has raised construction of instructional materials to a dominant place in the school system. This is because every lesson taught in Social Studies will require an appropriate instructional material to be used to implement the aspect of the curriculum; where it is not available, construction become inevitable. Improvised instructional materials are those teaching and learning materials produced using available local material with the help of an expert (Moiseenko, 2015; Igberaharha & Onyesom, 2021). Operationally, constructions of instructional resources are local content materials sourced by the students from their immediate environment that facilitates delivery of instructions and learning. Every discipline appears to experience deficit of adequate appropriate relevant, available resource material to execute their curriculum. Meaning there is a high need of construction of instructional materials in order to bridge the gap created by the deficit. The study by Abdu-Raheem and Oluwagbohunmi (2015) supports the need for construction of instructional materials in Social Studies. Their study was conducted in Ekiti State University using a sample of 90 Social Studies pre-service teachers. The outcome of their study reveals that in-service teachers do not have problem of improvisation of resource materials in their study areas. This implies that teachers are able to construct instructional materials where they are not available. The exclusion of students in the process of construction indicate that there is a gap between teachers' improvisation and students' construction of resource materials. What is the implication on the learning capacity of the child? The teacher feels that the responsibility of construction rest on them, which is affecting the psychomotor domain of the students; whereas, if the students are made to improvise learning material, it will arouse their curiosity to know more thereby leading to internalization of knowledge.

Olibie, Nwabunwanne and Ezenwanne (2015) were concerned about improvisation of instructional materials for Nigerian Home Economics curriculum delivery. The study was designed to ascertain the challenges of improvising instructional materials by Home Economics teachers at the Upper basic economics level in Nigeria and as a result identify strategies for enhancing improvisation.

The study used survey research design based on two research questions. The sample was four hundred and thirty-one Home Economics teachers in Upper basic school in Anambra State of Nigeria. A structured questionnaire designed on a 5 point scale was used to collect data. Findings indicated that some of the challenges faced by the teachers include how to improvise materials to arouse and sustain learners optimism and enthusiasm, access expert assistance and technical support, stay informed of innovative developments, have confidence to share ideas with other teachers, interpret research and statistical data, diplomatically handle students resistance, align improvised materials with curriculum guidelines and timelines, and develop materials to cater for individual learners need in overcrowded classroom. Some strategies on teacher self and group professional development, training and Internet literacy were identified as capable of enhancing improvisation. These strategies if implemented might provide the teachers with opportunities to develop more improvisation insights for engaging young people the highest quality learning activities. This study limits the activity of improvisation of resource materials for teachers. This is an indication that a paradigm shift has not been noticed in literature where students are made to improvise instructional materials. This has made improvisation of instructional materials a teacher-based activity. Bawa and Ibrahim (2019) attribute the activity of improvisation of instructional materials for innovative second language teaching in the 21st century to resourceful and skillful teachers. In the same vein, Igberaharha (2014) is of the view that teacher has the skill and the resourcefulness to improvise necessary instructional materials with the objective of improvising teaching and learning as well as to promote academic standard in Nigeria schools. These studies do not consider students having the capability to do the same. This has widened the gap between teacher and students improvisation of resource materials in schools.

Utibe-Abasi (2015) investigates the problems faced by secondary school Physics teachers in improvising instructional materials for effective teaching and learning in Akwa Ibom State of Nigeria. All Physics teachers currently teaching Physics formed the population for the study. This gave the population size of three hundred (300) Physics teachers. Random methods of selection was used in selecting 150 Physics teachers to form the sample for the study. A structured questionnaire called an improvised Physics Instructional Material Questionnaire (IPIMQ) was used in generating the data for the study. The instrument has two sections, A and B. Section A sought information on personal data (sex and educational qualification) of the respondents while section B sought information on problems faced by secondary school Physics teachers in the course of improvising instructional materials. The reliability of the coefficient of the instrument determined using Cronbach Alpha was 0.78. One research question and two research hypotheses were formulated to guide the investigation. Mean and t-test statistics were used in analyzing the data. The findings of the study reveals that the problem faced by physics teachers during improvisation to include financial constrain, lack of skills and strategies on improvisation, large class size, time constraint, unavailability of tools and lack of exposure on improvisation. The implication of the finding on Social Studies students is the fact that students appear to be neglected in terms of involving them in the process of improvising their learning materials. The consequence of this neglect is that the self reliant aspect of the child development which link the psychomotor domain of knowledge of the child is likely to be stalled. Whereas, where teacher involves the child in the process of improvisation, it has the potential of increasing the psychomotor knowledge of the learner.

Ogbe and Omenka (2017) investigated improvisation and utilization of resources in the teaching and learning of science and mathematics in secondary schools across River State. Their discussion was on the importance of improvisation. They found that human and material resources are inevitable in enhancing the teaching and learning of school subjects as shown in the teaching and learning of science and mathematics. They discovered that instructional materials lend credence and

reality to abstract concepts taught at this level. Materials to be improvised as identified by their study include charts, computers, television, audio and visual materials respectively. The authors assigned improvisation of this material where not available or inadequate to the teacher. Mention is not made on the involvement of students in respect to improving the identified instructional materials. The fact that the learner is not considered in the process indicates that majority of studies appeared not to be conscious of the effect of the non-involvement of the students in improvising their learning materials.

However, there is a link between improvisation of instructional materials and students academic performance in schools. This is because students exposed to improvising their learning materials are likely to acquire high cognitive, affective and psychomotor domain of knowledge as against when they are excluded from the process (Igberaharha, 2016). The assumption here is that the knowledge acquired through participation in the process of learning such as improvising enables the learners to express creativity, enhance critical thinking and device the language of describing the knowledge in concrete terms. This characteristics or quality are vital when the child is evaluated under examination condition. Ahmed (2010) shows that when students are involved in the production of improvised materials, it enhances their construction ability and imagination, it gives the learner new concept of things outside the range of ordinary experience and that it makes learning last longer in their memory. The observation by Ahmed has not taken root in the contemporary school system. This is because improvisation revolves round the teachers. Whereas, where students are involved, it has the capacity of improving learners academic performance.

The study by Onasanya and Omosewo (2011) linked students improvisation of their instructional materials to academic performance. They came to this realization after conducting a study on the effect of improvised and standard instructional materials on secondary school students academic performance in Physics in Ilorin, Nigeria. Findings in their study suggests that there was significant difference between students taught with standard instructional materials and those taught with improvised instructional materials. The existing difference was attributed to non involvement of students in the improvisation of instructional materials for the study of physics in the study area. It means that if students were made to improvise their instructional materials, it will be reflected on their academic performance. Therefore, improvisation of instructional materials by students if encouraged, can lead to improved academic performance amongst students. Though, there are many other factors of students' improvisation of resource materials that relates to academic performance in the school system.

Improvisation of resource materials for the teaching of Social Studies have revolved around the classroom teacher to the exclusion of their students. The assumption is that students lack the skill, fund and the intelligence required for the process of improvising of their learning materials. Improvisation is the use of alternative resources in solving a given problem in the absence or shortage of original resources. In teaching and learning situation, improvisation of instructional materials is the use of local resources in our immediate environment to enrich the instructional activities in the classroom. It is most advisable to introduce students to resource materials from their environment when the problem of absence or shortage of original resources is being experienced. In any teaching and learning, there is the need to provide and improvise instructional materials in order to make teaching and learning so effective. Based on this conceptual understanding, different studies have been carried out to evaluate and access the importance of improvisation of instructional materials with the inclusion and participation of students in the process, particularly in the teaching and learning of Social Studies.

The study by Abdu-Raheem and Oluwagbohunmi (2015) investigated the problem of improvisation of instructional materials in Social Studies by pre-service teachers in Ekiti State University. In order to investigate the problem, all Social Studies pre-service teachers in the Faculty of Education in the Ekiti State University were employed. Of the entire population, 90 Social Studies pre-service teachers were selected from 200, 300 and 400 levels. Simple random sampling was used to select 90 out of the 220 consisting of 34 males and 56 females. The instrument used for the study was a questionnaire titled Problem of Improvisation of Social Studies Instructional Materials Questionnaire (PISSIMQ) designed by the researchers. The validity of the instrument were ensured by Social Studies experts who determined the face value and appropriateness of the instrument in measuring pre - service teachers problem of improvisation of instructional materials in Social Studies. Test retest method of reliability was adopted for the instrument and the reliability coefficient of 0.70 was obtained. The data collected were analyzed using t-test and ANOVA statistical tools. The study revealed that there is no significant difference in problem of improvisation of instructional materials between male and female pre-service teachers. It was also discovered that there is no significant difference in the problem of improvisation of instructional materials among the levels of pre-service teachers.

The subject of the above empirical study points to the fact that Social Studies when properly implemented, has the objective of assisting learners (student-teachers) to become more competent in the delivery of instruction. It is on this note that training teachers in solving the problem of improvisation of instructional materials is highlighted. The impact of pre-service teachers training on the knowledge and skills of improvisation of instructional materials has implication for Social Studies students. Also, it attempts to support the idea of students being trained in the act of improvisation of their instructional materials. It is on this note, pre-service teachers during their school years are encouraged to acquire the necessary skills involved in the improvisation of instructional materials. The observation drawn from the above empirical studies indicates that the study was carried out in Ekiti State, a territory outside the current study.

A similar empirical survey on the effect of improvisation of instructional materials in relation to academic performance of Social Studies students in junior secondary schools in Kaduna State, Nigeria was conducted by Shodeinde (2015). The author utilized four research objectives alongside four research questions and research hypotheses respectively. A quasi-experimental design was adopted to process the entire study involving 117 students sampled for the experimental group while control group was made up of 116 students. A pre-test post-test treatment was developed for data collection. In order to analyze collected data, the descriptive and inferential statistics were employed. Major finding drawn from the study among others revealed a positive significant difference in performance of students taught Social Studies with the use of improvised instructional materials at 0.05 alpha level of significance. Also, findings show a positive significant difference in the performance of boys and girls taught Social Studies using improvised instructional materials. It was concluded among others that since the students taught Social Studies with the use of improvised instructional materials had a better mean scores than those students without the use of improvised instructional materials, there is need for teachers to be trained to improvise as this will enable them acquire the appropriate techniques and skills necessary for improvisation.

The implication of the empirical study above indicates that improvised instructional materials have linear correlation with academic performance of students. What is understood from the empirical study is that, if instructional materials are improvised because of their absence or shortage whether by teachers or by students, the importance is that it has a way of encouraging both the students and teachers performance. The students performance will be more improved if they were involved in the

project of improvisation; although, emphasis is placed on teachers improvisation of instructional materials to the neglect of their students. It means that studies have not sufficiently considered the environment of students in the process of improvisation of instructional materials particularly students in Kaduna State.

Hadiza (2014) investigated the effects of resource improvisation on the academic performance of students in Social Studies in Katsina State. The study developed three objectives, three research questions and three hypotheses. The research design for this study was quasi-experimental research design. The population for the study was 192,516. The sample size for the study is three hundred and eighty four (284) JSS students (control and experimental) which were selected from the population. The SPSS was used for the analysis of t-test. The hypotheses were tested at 0.05 level of significance. The result showed that hypotheses one and three were rejected while hypothesis two was retained. The implication of this study reveals that the use of resource improvisation has effects on the academic performance of students in social studies education learning and exposure of JSS II and JSS III to the use of improvised instructional resources improves students' performance in social studies education. Students' use of improvised instructional material is not in contention and its effect as a result of their exposure is not also in doubt. The result from the empirical study supports the idea that improvisation is more or less a teachers' assignment. As long as this argument favours teachers only, students are likely to be left frustrated not knowing the relevant techniques involved in the act of improvisation of instructional materials for their use. The construction ability of the child which is one of the objective of teaching and learning of Social Studies will continue to be hampered unless there will be a rethink were teachers involve students on the planned process of improvisation of instructional materials for use for the delivery of instructions.

According to Akinlaye (2002), improvisation can be carried out by teachers as well as students. This is because Akinlaye viewed improvisation of instruction as aspect of the teaching and learning of social studies involving construction method. Bawa and Ibrahim (2013), supports the view and sued for the need of the construction method recommended by Akinlaye because its stimulates students interest in the subject and enhances applicability of the concept in real situation, more especially students assimilates better on what they see, hence their involvement cannot be overemphasized.

Methodology

The study is a quasi-experimental research design. The population for the study was made up of the Social Studies students in Delta State, Nigeria, numbering 54, 205 in all. The study adopted the simple random sampling method of balloting type to select sampled participants with which the researcher conducted the experiment involving treatment of the experimental and the control group respectively. The study adopted the Social Studies Achievement Test (SSAT) from the standardized instrument for Basic Examination Certificate Examination in Delta State – 2023. The pretest and posttest treatment were utilized for the collection of data; where a six week teaching lesson note was prepared to accommodate the content from the themes in the standardized test used for the Basic Education Certificate Examination in Delta State. The researcher employed the descriptive analysis of the Mean Score and Standard Deviation to answer the stated research questions while the null hypotheses formulated for the study were analyzed using Analysis of Covariance (ANCOVA).

Results

Research Question One

What is the effect of location on the pre-test and posttest mean scores of learners' academic performance taught Social Studies with construction and lecture learning method? The computed data are presented on the mean/standard deviation analysis table as follows

Table 1: Mean and Standard Deviation Analysis on Effect of Location on the Pre-Test Posttest mean scores of learner academic performance taught Social Studies with Construction and Lecture Learning Methods

| Group | N | Pre-test | | Posttest | | Mean Diff |
|---------------------|-----|----------|------|----------|------|-----------|
| | | Mean | SD | Mean | SD | |
| Urban | 436 | 35.93 | 9.75 | 43.25 | 3.81 | |
| Rural | 414 | 39.48 | 8.32 | 42.58 | 3.62 | 0.67 |
| Construction Method | 421 | 39.29 | 8.44 | 42.69 | 3.66 | |
| Total | 850 | | | 3.21 | | -0.46 |
| Lecture Method | 429 | 36.08 | 9.74 | 43.15 | 3.79 | |
| Total | 850 | | | | | |

Table 1 revealed that urban pre-test mean score of 35.93 with standard deviation of 9.75 and rural pretest mean scores of 39.48 with standard deviation of 8.32 and a mean score difference of -3.55, while construction learning method had a pre-test mean score of 39.29 with standard deviation of 8.44 and lecture method had a pre-test mean score of 36.07 with standard deviation of 9.74 and a mean score difference of 3.21. The table also showed that urban had a posttest mean score of 43.25 with standard deviation of 3.81 and rural had a posttest mean score of 42.58 with standard deviation of 3.62 with a mean score difference of 0.67, while construction learning method had a posttest mean score of 42.69 with standard deviation of 3.66 and lecture method had a posttest mean score of 43.15 with standard deviation of 3.79 with a mean score difference of -0.46. The question is answered that location had effect on the pretest and posttest mean scores of learners academic performance taught Social Studies with construction and lecture methods respectively.

Research Question Two

What is the effect of sex on the pretest posttest mean score of learner academic performance taught Social Studies with construction and lecture methods respectively? The purpose of this question is to explain the difference between the pre-test and posttest mean score of male and female learners taught with the two independent variables of construction method compared with lecture method. Data generated from this variable were computed and analyzed. The result is presented in Table 2 as follows

Table 2: Mean and Standard Deviation on the Effect of Sex on the Pre-Test Posttest Mean Scores of Learners' Academic Performance taught Social Studies with Construction Learning Method and Lecture Method

| Group | N | Pre-test | | Pre-test Mean Diff | Posttest | | Posttest Mean Diff |
|------------------------|-----|----------|------|--------------------------|----------|------|--------------------------|
| | | Mean | SD | | Mean | SD | |
| Male | 413 | 38.48 | 8.89 | | 43.19 | 3.83 | |
| Female | 433 | 37.17 | 9.44 | 1.31 | 42.56 | 3.95 | 0.63 |
| Total | 850 | | | | | | |
| Construction Method | 421 | 32.75 | 9.42 | | 43.05 | 4.16 | 0.36 |
| | | | | -0.13 | | | |
| Lecture Method | 429 | 37.88 | 8.98 | | 42.69 | 3.63 | |
| Total | 850 | | | | | | |

Table 2 shows that male had a pretest mean score of 38.48 with standard deviation of 8.89 and female had a pretest mean score of 37.17 with standard deviation of 9.44 and a mean score difference of 1.31, while construction learning method had a pre-test mean score of 32.75 with standard deviation of 9.42 and lecture method had a pre-test mean score of 37.88 with standard deviation of 8.98 with a mean difference of -0.13. The table also indicated that male had a posttest mean score of 43.19 with standard deviation of 3.83 and female had a posttest mean score of 42.56 with standard deviation of 3.95 with a mean score difference of 0.63, while construction learning method had a posttest mean score of 43.05 with standard deviation of 4.16 and lecture method had a posttest mean score of 42.69 with standard deviation of 3.63 with a mean difference of 0.36. Based on this result, the question is answered that there is effect of sex on the pre-test posttest mean scores of learners academic performance taught Social Studies with construction learning method and lecture method.

Hypothesis One

There is no significant effect of location on the pretest posttest mean scores of learners academic performance taught Social Studies with construction learning method and lecture method

Table 3: Two-Way ANCOVA Analysis on Effect of Location on the Pretest Posttest Mean Scores of Learners Academic Performance taught Social Studies with Construction Learning Method and Lecture Method

| Source | Type III Sum of Squares | df | Mean Square | F | sig |
|----------------------------|-------------------------|-----|-------------|---------|------|
| Current Model | 155.309 | 5 | 31.062 | 2.063 | .068 |
| Intercept | 10517.571 | 1 | 10517.571 | 698.650 | .000 |
| Pretest | .327 | 1 | .327 | .022 | .883 |
| Posttest | 1.422 | 1 | 1.422 | .094 | .759 |
| Location | 42.483 | 1 | 42.483 | 2.822 | .093 |
| Teaching Methods | 20.989 | 1 | 20.989 | 1.394 | .238 |
| Location * Teaching Method | 110.214 | 1 | 110.214 | 7.321 | .007 |
| Error | 12705.690 | 844 | 15.054 | | |
| Total | 1575837.000 | 850 | | | |
| Corrected Total | 12860.999 | 849 | | | |

The result in Table 3 reveals that F value of 7.321 at $df = 1$, $P(\text{sig}) = 0.007$ and alpha level of 0.05. The result in the analysis shows that the p-value of 0.007 is less than the alpha level. So, the null hypothesis which state that there is no significant effect of location on the pretest posttest mean score of learners academic performance taught Social Studies with construction learning method and lecture method is rejected. This shows that the interaction is significant. The main effects for location and teaching methods are not statistically significant (location: $p = .093$; teaching methods: $p = .238$). We cannot say that one interaction is better than the other, because we must consider whether we are referring to urban or rural. We cannot say that urban benefit more than rural because we must consider which interaction was involved.

Hypothesis Two

There is no significant effect of sex on the pretest posttest mean scores of learner' academic performance taught Social Studies with construction learning method and lecture method.

Table 4: Two-Way ANCOVA Analysis on the Effect of Sex on the Pretest Posttest Mean Scores of Learners Academic Performance taught Social Studies with Construction Learning method and Lecture Method

| Source | Type III Sum of Squares | df | Mean Square | F | sig |
|----------------------|-------------------------|-----|-------------|---------|------|
| Current Model | 167.964 | 5 | 33.593 | 2.234 | .049 |
| Intercept | 10810.253 | 1 | 10810.253 | 718.808 | .000 |
| Pretest | 6.297 | 1 | 6.297 | .419 | .518 |
| Posttest | 13.020 | 1 | 13.020 | .866 | .352 |
| Sex | 46.730 | 1 | 46.730 | 3.107 | .078 |
| Teaching Methods | 22.751 | 1 | 22.751 | 1.513 | .219 |
| Sex* Teaching Method | 95.280 | 1 | 95.280 | 6.335 | .012 |
| Error | 12693.035 | 844 | 15.039 | | |
| Total | 1575837.000 | 850 | | | |
| Corrected Total | 12860.999 | 849 | | | |

The analysis in Table 4 shows that a F-value of 6.335 at $df = 1$, $P(\text{sig}) = 0.012$ and alpha level of 0.05. The result indicates that the P-value is less than the alpha level. Therefore, the null hypothesis which states that there is no significant effect of sex on the pretest posttest mean scores of learners academic performance taught Social Studies with construction learning method and lecture method is rejected. The table shows that the interaction is significant. The main effect for sex and teaching methods are not statistically significant (sex: $p = 0.078$, teaching method: $p = 0.219$). Hence, we cannot say that one intervention is better than the other because we must consider whether we are referring to male or female. We cannot say that males benefit more than the females because we must consider which intervention was involved.

Discussion of Findings

The test of significant of this item of the null hypothesis proved that there is a positive significant. The result of the test show that the interaction between location of the effect on pretest and posttest mean score of learners and academic performance taught Social Studies with construction learning method (improvisation by learners) is significant. The implication of this finding revealed that learners in urban and rural school location who taught Social Studies based on construction method have a better achievement in their test scores. That is, construction learning method affords the learner to have first hand information on their learning as well as enhanced cognitive, affective

and psychomotor domain knowledge domain. Improvisation of instructional materials implies to the local content materials sourced by the students from the immediate environment that facilitates delivery of instruction and learning. The result aligned with the study by Sawyer and Keith (2007). Finding in their study revealed that students' improvisation is a very active concept where students have to act on their new knowledge in a flexible way.

There was also an agreement with the finding of the researcher in the work by Abdu-Raheem and Oluwagbohunmi (2015) who found that students should be supported whether in urban or in rural school location to be involved in the improvisation of their instructional material in Social Studies, at all level of education. This conclusion was reached based on the outcome of their study that was conducted in Ekiti State University using a sample of 90 Social Studies pre-service teachers. The outcome of the study revealed that in-service students-teachers do not have problem of improvisation of resource materials in their study areas. The deduction from the result implies that teachers are able to improvise instructional materials where they are not available. It presupposes that exclusion of students whether they are in urban or in rural school, when they are not taught the process of improvisation, there would be a gap between teachers' improvisation and students' improvisation of resource material. Therefore, exposing students to learning involving improvisation or learning through construction method is an important means of skill development as well as improving their cognitive, affective and psychomotor domain knowledge with the implication on their academic performance.

The finding of the researcher on the effect of construction method as moderated by location was accepted in the study by Olibie, Nwabunne and Ezenwanne (2015). These researchers found that teaching strategy involving improvisation of instructional materials would arouse and sustain learners' optimism and enthusiasm, access expert assistance and technical support, stay informed of innovative development. Students with this experience of improvisation will have confidence to share their ideas with their peers. Ahmed (2010) shows that when students are involved in the production of improvised materials, it enhances their construction ability and imagination; it gives the learner new concept of things outside the range of ordinary experience and that it makes learning last in the memory of the student. Onasanya and Omosewo (2011) found that students' improvisation enhances their academic performance. This conclusion was based on the fact that students taught with standard instructional materials and those taught with improvised instructional material had different achievement test scores, with students taught with improvised material having better test scores.

The result of the test measuring the effect of sex on the pretest posttest mean score of learners academic performance taught Social Studies with construction (improvisation) and lecture methods respectively, shows that the interaction is significant. The implication of the result implies that the introduction of the innovative strategy of students being made to improvise their learning instructional material has effect on both male and female students' academic performance. It means that students – male and female who are taught the basic element of improvisation through construction method rather than conventional lecture method will perform better in their test score. It will also mean that without this intervention, students' academic performance may not have improved. Shodeinde (2015) in agreement with the result of the test found that there is a positive effect on students, whether male or female students academic performance in Social Studies when they are taught how to improvise their instructional material. The researcher shows that since the students taught Social Studies with the use of improvised instructional material had a better mean score than those students without the use of improvised instructional materials, there is therefore the need for students to be trained to improvise. This will enable them to acquire the appropriate techniques and skills necessary for improvisation of their own instructional materials.

The study by Hadiza (2014) supported the result of finding linking sex of students' academic performance with the effect of resource improvisation. The study was carried out in Katsina State, using three hundred and eighty four junior secondary schools students – control and experimental – which were selected from the population. Study found that students' use of improvised instructional material is not in contention and that its effect on male and female students as a result of their exposure is not also in doubt. This result supports the idea that improvisation is more or less a teacher's assignment. Therefore, as long as this argument favours teachers only, students (male and female) are likely to be left frustrated and not knowing the relevant techniques involved in the act of improvisation of instructional materials for their use. The construction ability of the child which is one of the objectives of teaching and learning of Social Studies will continue to be hampered unless there will be a rethink where teachers involve students on the planned process of improvisation of instructional materials for use for the delivery of instructions.

Conclusion

The study found that students' ability to improvise and construct their instructional resources was due to the fact that they were exposed to construction learning method. Therefore, the study concluded that construction learning method has effect on the pretest posttest mean scores of the students and that it enhances their cognitive, affective and psychomotor domain of knowledge.

Recommendations

The study recommended that teachers of Upper Basic Social Studies should adopt constructive learning method in the delivery of instruction. This method makes learning concrete, tangible and effective as against lecture learning method that tends to isolate the students during the delivery of instruction and also that teachers should involve the students in the improvising and constructing of instruction during a lesson using construction learning method.

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