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EFFECTS OF MASTERY LEARNING ON ACADEMIC PERFORMANCE OF UPPER BASIC SOCIAL STUDIES STUDENTS IN DELTA STATE

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Abstract
The study investigated the effect of mastery learning against the use of lecture method for teaching Upper Basic Social Studies.. The study utilized the quasi-experimental design. The Social Studies Achievement Test (SSAT) was the main instrument for data collection from a sample of 587 students randomly selected from a total population of 12,962. This achievement test is the standardized instrument overtly used by the Basic Education Certificate Examination by the Board of Delta State Ministry of Education 2017. The instrument had its reliability coefficient of 0.71 established by the Ministry of Basic and Secondary Education. Data generated from the administration of instrument were subjected to an independent sample t-test. The analysis was conducted at 0.05 level of significance. Results revealed the following findings; the effect of mastery learning is better than lecture method for teaching and learning Social Studies at the Upper Basic level. Findings also show a significant interaction effect of instructional strategies and sex on the academic performance of students in Upper Basic Social

Studies. Therefore, the study concluded that learning involving the combined use of the instructional strategy of mastery learning positively influence high academic performance in test scores of students in Upper Basic Social Studies. Consequently, it was recommended that teachers should employ innovative instructional strategies such as mastery learning during instruction.

Keywords: Mastery Learning, Social Studies, Academic performance, Quasi Experimental Design

Introduction

The teaching of Social Studies develops in the learners a systematic appreciation of the diversity and interdependence of members of the local community and wider national and international community. The subject is also directed at promoting citizenship and value education in addition to skills development. There are various methods of teaching. Some of such methods are demonstration method, lecture method and peer tutoring. Some methods are more effective than the other. The method(s) used for teaching can influence students' academic performance. Social Studies provides a foundation for learners to acquire the ideal of the subject through classroom learning. Thus, teachers' use of methods and strategies have been sought in a bid to arouse the waning interest in the discipline among many students at that level. According to Akinlaye (2003), it is true that teachers play fundamental roles in any country's educational system. This is because students' interest in a subject matter is connected to teacher characteristics.

It was observed that from the time Social Studies was introduced in 1963 into the school curriculum to its present state, the issue of effective and efficient delivery of its contents has been a major concern among educators and researchers (Umudi, 2012). He is of the opinion that content implementation is what makes a designed curriculum meaningful. According to him, "it is at the implementation stage that the objectives whether general or specific of a curriculum is being achieved (p.2)". The implication of the above

observation links methodology to the implementation of Social Studies curriculum. Thus, the search for appropriate instructional strategies has continued to be debated in line with how students' learning in the subject can be promoted. Mezieobi and Onyeanusi (2011) argued that Social Studies teaching has not achieved its desirable objectives because of the consistent use of the traditional method by Social Studies teachers. Therefore, enquiry about effective teaching of the subject demands that innovative strategies should be introduced if it will effect a change in the education and erudition of the subject matter; in contrast to traditional teaching of the subject such as lecture methods, discussion methods and enquiry methods. Innovative strategies according to Golam (2018) are necessary because they help the students reach their full potentials. It is on this note that the innovative strategy of mastery learning is introduced for the teaching of Social Studies. The premise for the introduction of innovative strategy is based on the facts that innovative strategies are able to arrest learners' interest and put across ideas that are imbued in them long after they have left the classroom. It further suggests that innovative strategy is students-centered.

Mastery learning as an innovation which in its various forms are designed towards making learners to perform beautifully well in an academic task (Adepoju, 2002). In the same vein, Adeyemi (2007) described mastery learning as a teaching approach that entails a pre-specific criterion level of performance which students must master in order to complete the instruction and move on. The study by Agboghoroma (2014) found mastery learning approach to be very relevant for teaching of integrated science. His study was a quasi-experimental non-randomized pre-test posttest control group design. He purposively sampled a total of 120 students from junior secondary school three for the study. The mechanism employed for collection of data was ISAT which was used to measure students achievement test. The generated information was subjected to ANCOVA statistics. Findings indicated that mastery learning teaching method results in higher achievement. This means that mastery learning strategy was an effective teaching method in Integrated Science. Consequently, Social Studies teachers could also

adopt this technique for effective instruction in the implementation of curriculum content in Social Studies.

Mastery learning approach is found suitable for the instruction and erudition of other school subjects such as English Language, Integrated Science, Mathematics and Physical Geography sparsely used for Social Studies. In these various school disciplines where it has been used, results has always been that achievement in test scores were higher. For instance, Wanbugu and Changeiywo (2008) engaged mastery learning technique on physics learners. Their study utilized a purposive sampling of 161 students in a quasi experimental and Solomon four non-equivalent control group design. The study was carried out in Kieri East Division of Nyeri District, Kenya. The study involved four co-educational secondary schools. The results of the study shows that MLA teaching method resulted in higher achievement, meaning that MLA is an effective method; although, mastery learning is not the only effective strategy for promoting higher test scores. It is against this background that this study attempts an investigation into the effects of mastery learning instructional strategy on the academic performance of Upper Basic Social Studies students in Delta State

The idea about academic performance in nearly all third world countries revolved round the concept of placement evaluation and description of nomenclature or standard of judgment for written difference in the level of performance. This concept aligned with receiving of grades from test, assignment, examination, classroom attendance and classroom interaction, which enable the examiner to determine the level to which a particular student can be adjudged to have passed or failed after being exposed to a condition that required a response. Osadebe (2009) agrees that evaluation enables the examiner to objectively judge students' performance by identifying those who pass and fail in the examination. The implication of this finding is that when students are evaluated, pass or fail may be used to describe their performance. Examination, test and assignment measures test scores in the academic performance scale. In addition, many educators and researchers prefer academic measure with the use of achievement test that enable examiners to include the teacher to assess the

three domains of knowledge of the child under instruction. The use of achievement test has been shown to be a strategy for explaining both cognitive knowledge and comprehension. The use of achievement test to determine performance of learners was examined in the study by Kendra (2018) who posited that in other to determine a persons level of performance in a certain subject is to expose them to an achievement test. According to her, this is the most probable way to assess performance. This is because she views achievement test as a designed measure to expose a person's level of skill, accomplishment or knowledge in a specific area. The implication of her findings points to the importance of the use of achievement test in determining academic performance.

Ashley (2018) showed the importance of achievement test involving standardized instrument the importance is shown in the fact that they serve as a sampling of where students are in their learning and if they are "on track" to hit the achievement milestone that have been set for them. The explanation given by Ashley in respect to use and importance of standardized achievement test for determining performance of students is a major problem to most teachers and school administrators. Whereas, administrator, according to Ashley, will gain knowledge that using achievement test will enable administrators to evaluate the level to which the objective of education have been achieved, evaluated, revised and improved. It helps to classify school objectives; it discovers the types of learning experiences that will achieve these objectives with the best possible results and it will enable administrators to select talented pupils for special classes and courses.

Also, the classroom teacher will be able to understand or identify the general range of abilities of students in the class. He will be able to select appropriate materials of instruction, so that all individuals benefit from instruction to the maximum. He or she will be able to determine and diagnose the weakness of the students in various subjects; it will enable him to spot brilliant and backward children; it will enable him determine the progress of the group in a particular subject over a period of time; although scholars are interested in factors affecting students performance in examinations in school subjects. Some of these factors issues of students' socio-

economic, learning environment, teacher and instructional material and mode of delivery, among others.

One of the factors influencing academic achievement found in the study by Von, Hell and Chamoro-Premuzid (2011) is individual differences of the students that learn under us. It is their opinion that individual differences in academic performance are linked to disparity in astuteness and personality. Astuteness is the ability to perceive or inferred information and to retain it as knowledge to be applied towards adaptive behaviours within an environment or context. The implication of the concept intelligence is that learning revolves around it. Thus, students with higher mental ability tend to achieve highly in academic setting. Therefore, teachers ought to recognize these differences when planning the use of resource materials for instruction, instructional strategy that will moderate the perceived differences cost by differences in intelligence.

It is a strategic instructional approach, involving the development of intellectual skills of learners. It is used in the school system as a means of achieving cognitive abilities and skill development. The use of mastery learning is considered a fundamental approach in making learners to grasp subject content with aspect of module introduced in a specific educational discipline and in this case in Social Studies.

Proponent of the strategy, Bloom (1976) theorized that the goal in mastery learning approaches is to have all students to learn instructional materials at roughly equivalent high levels. The implication of the theory is that teachers are under instruction not to give learners learning materials or experience that is beyond their capacity within a given time frame. This is because the observation implies that most teachers who are in haste to cover scheme of work often undermine the length and breadth of where to cover. Such approach is consequential because materials would be learnt half-hazardly.

In Bloom's taxonomy and philosophy of learning, mastering learning focuses on a manner of teaching that provides the instructor the required time for different student to learn the same materials and attain the same echelon of mastery. This is very much in contrast with the classic models of teaching which focuses more on differences

in students' ability and where all students are given the same time to learn and the same set of instructions. Bergmann (2016), avered that mastery approach is a practical way to personalize learning for each learner. According to him, in a mastery learning environment, students are projected to grasp certain objectives and competencies, and then progress when they learn the competency. Renard (2017), on her part posited that mastery learning aims at changing, by letting go, of the concept that everyone is the same time schedule. This implies that mastery learning is technical, mediating, and remediating. The indication is that mastery learning helps the slow learner to match up with fast learners. In addition, mastery learning is used to advance an individual's potentials for learning, compared to traditional learning models. Sufficient time, attention, and help are accorded to each student. Further, mastery learning relates to feedback mechanism in learning. In this sense mastery learning is a technique of teaching where the hub is on the position of feedback in learning. Since it involves feedback, it entails category of instructional technique which create a level of feat that all learners must grasp before advancing to the next unit in a given lesson.

Renard (2017) explained that mastery learning as an approach to learning entails mastering a topic before moving on to a more advanced one. According to her, in most school system, time table hardly allowed the implementation of mastery learning. This is because learners/students are arranged jointly usually by maturity and seeming ability and are taught collectively at the same pace. Teachers have to follow the curriculum making it difficult to provide extra support for students who have difficulties with a topic, whereas mastery learning according to Jade (2019) provides a model of instruction that is learners-centered and recommended its use as a way of prompting high performance in a course unit. In other words, mastery learning implies content mastery.

Bean (2016) provided another dimension to the debate on the relevance of mastery learning in classroom situations. She attempted to scrutinize the model from the perspective of personalized learning. It means that there is personalized mastery learning. According to her, personalized mastery learning is when together, a teacher and

a students defined what is learned, how learning happened and when mastery is reached. Her definition supports the idea of the significance of engaging all students in high-quality, developmentally appropriate, research-based instruction in the general education classroom. The understanding drawn from her perception is that mastery learning has a goal. Mastery oriented goal are describe based on the focus of erudition, understanding the task in-line with self-set principles. The goals also encompass developing new skills improving or developing competencies, trying to accomplish something challenging and trying to gain an understanding or insight. She believed that students exhibit mastery when they attain over 80% precision on an evaluation.

The variable of gender as it is operationally used in this study, simply refers to male and female student. The design of the study accommodates male and female for exposure to control and experimental treatment. Thus, occupying a socially or economically oriented position is determined by factors such as qualifications, experience, knowledge and skill and competence for job performance. Also, in the academic circle, achievement is not measured on the basis of whether the individual is a male or female. Rather abilities and skills are often the criteria of the evaluation when learners are exposed to achievement tests. Okorie and Eze (2016) conducted an investigation on the weight of gender and location on students' achievement in Chemical Bonding using 311 students in Nsukka, Enugu State, Nigeria. The study exposes the students to a pretest, posttest quasi-experimental design of the nonequivalent type. A validated and reliable achievement test and students interest scale were instrument employed for the study. The analysis, using covariance revealed that mean achievement score of female students was higher than that of the male students. The result does not show that the performance was demographically brought by the factor of being male or female. The result measured achievement based on their performance which means ability and cognitive that was displayed on the subject regulated by interest of students.

The study by Kayode and Olatoye (2014) contrasted male and female students learning outcomes in science in Katsina State. The

sample consisted of 204 students selected from the three zones of the state. The attitudinal questionnaire and achievement were the instruments used in the study. Data generated were analyzed with the t-test statistics. Investigation revealed that there were no significant disparity in male and female students in overall science achievement ($t = -0.678$, $p>0.05$).

Also, the study by Ernesto, Ruel and Allen (2015) examined gender parity generally and interaction in science and mathematics classrooms as well as classroom management. The researchers employed the mixed methods research. Quantitative data were collected with the OPGEE. Interviews, group discussions and classroom observations generated the qualitative data in the study. Participants were conveniently selected by the researchers. Findings revealed agreement and disagreement with the observation reports. Investigation showed that participants believed that parity in sex should always take centre stage in the classroom and that if difference manifests, both the learner and the instructor are in charge of maintaining parity in the classroom. The perception drawn on this finding indicates that gender bias is caused by both students and teachers characteristics as it affects the classroom situation.

The teaching of Social Studies develops in the learners a systematic appreciation of the diversity and interdependence of members of the local community and wider national and international community. The subject is also directed at promoting citizenship and value education in addition to skills development. Despite the important task of the subject in Nigerian educational system, it is very unsatisfactory to state that learners' achievement in the subjects in examinations have remained poor overtime. Analysis of performance of candidates who sat for the Basic Education Certificate Examination (BECE) in five selected schools in Delta State for the 2015/2016 session indicated that candidates from Oteri secondary school, Ufuoma had 36.47% credit pass; in Oghara secondary school, Oghara candidates obtained 36.16% credit pass, those in Ekiedjeba secondary school, Ekiedjeba had credit pass of 34.99 performance, for candidate in Uvwiama secondary school, Uvwiama performance were at 32.03% credit pass while candidate from Eneragb secondary school, Ekrehavwen had credit pass

performance of 17.73%. The average percentage performance from these analysis indicated that of the five selected schools' performance of candidates in Social Studies has a total of 31.47%. These result points to the fact that performance is below a pass mark of the average percentage performance of 50%. In spite of the immense benefit derivable from the introduction of Social Studies in the school curriculum, there seems to be a poor handling of the subject among teachers of Upper Basic Social Studies.

Purpose of the Study

This study examined the effect of mastery learning instructional strategy on the academic performance in Upper Basic Social Studies students in Delta State. The following are the specific objectives of the study to:

1. investigate if there is any disparity in the pre-test and post-test mean scores of students taught Social Studies with mastery learning and those taught using lecture method in Upper Basic level in Delta State
2. ascertained if there is any disparity in the mean scores of male and female students taught with mastery learning instructional strategy and those not taught with lecture method

Research Questions

The following research questions were asked to guide the study:

1 Is there any disparity in the pre-test and post-test mean scores of students taught Social Studies with mastery learning and those taught using lecture method in Upper Basic level in Delta State?

2 Is there any disparity in the mean scores of male and female students taught with mastery learning instructional strategy and those not taught with lecture method?

Hypotheses

The subsequent hypotheses were tested at 0.05 level.

Ho_1 There is no significant disparity in the pre-test and post-test mean scores of students taught using mastery learning and those

taught using lecture method in Upper Basic Social Studies in Delta State.

Ho_2 There is no significant disparity in the mean scores of male and female students taught using mastery learning instructional strategy and those taught with lecture method.

Methodology

This study employed a quasi-experimental pretest and posttest factorial design involving experimental and control groups respectively. This study took into consideration the entire Social Studies students in Basic 8 in Uvwie local government area because the study is an experimental study which required intact classes. The entire students of the local government are 12,962 (Ministry of Education, Delta State, 2018).The distribution of the school and students' population is presented at the appendix section of the study. The study adopted the simple random sampling of balloting technique in the selection of schools as well as 587 participants from the 15 schools in Uvwie Local Government Area. Adopted for this study as a means for data collection was the Social Studies Achievement Test (SSAT) instrument. This achievement test is the standardized instrument overtly used by the Basic Education Certificate Examination by the Board of Delta State Ministry of Education 2017. The instrument had its reliability coefficient of 0.71 established by the Ministry of Basic and Secondary Education. The instrument was validated by two experts in the Department of Measurement and Evaluation, Delta State University, Abraka.Thus, it was considered reliable for use. The researcher adopted the descriptive analysis of the mean score and standard deviation to answer the stated research questions. The hypotheses were subjected to Independent Samples t-test analysis, and it was conducted at 0.05 level of significance.

Results

Research Question 1

Is there any disparity in the pre-test and post-test mean scores of students taught Social Studies using mastery learning and those taught with lecture method in Upper Basic level in Delta State?

Table 1: Mean and Standard Deviation (SD) of Pre-test and Post-test Mean Scores of Students taught with Mastery Learning and those taught with Lecture Method

Variables	N	Type of Test	Mean($\bar{X}$)	Sd	M.d	95% confidence interval of the difference	
						Lower	Upper
Mastery learning	278	Pretest	30.69				
		Posttest	36.29	11.31			
Lecture method	309	Pretest	29.71		4.07	2.51	5.60
		Posttest	32.22	7.29			

Table 1 showed that mastery learning instructional strategy had a pretest mean score of 30.69 and a posttest mean score of 36.29. This gives a difference of 5.60 with the SD of 11.31. The lecture method, which is the control group had a pretest mean score of 29.71 and a posttest man score of 32.22, which gives an increase of 2.51 with a SD of 7.29. The increase in post-mean scores of mastery learning instructional strategy 36.29 and lecture method 32.22 gives the mean difference (MD) of 4.07 which is quite more than the minute increase recorded by lecture method which is the control group. From the result in Table 1, the answer to the question is that, there is a lean disparity in the students taught with mastery learning instructional strategy and those taught with lecture method.

Research Question 2

Is there any disparity in the mean scores of male and female students taught with mastery learning instructional strategy?

Table 2: Mean and SD of Male and Female Students taught using Mastery Learning

Variables	N	Type of Test	Mean($\bar{x}$)	Sd	M.d	95% confidence interval of the difference	
						Lower	Upper
Male	320	Pretest	32.95	8.89			
		Posttest	33.33				
Female	267	Pretest	36.66	7.79	-0.98	-2.35	0.38
		Posttest	34.31				

Table 2 showed the mean disparity between male and female students taught with mastery learning instructional strategy in Social Studies in Upper Basic level in Delta State. The male students had a pretest mean scores of 32.95 and a posttest mean score of 33.33 which gives a mean difference of 0.38 with SD of 8.89. Female students also had a pretest mean score of 36.66 and a posttest mean score of 34.31 which is showing the difference of -2.35 with SD of 7.79. Therefore, the answer to the question is that there exists disparity between male and female students taught with mastery learning instructional strategy at the Upper Basic level.

Hypotheses 1

Ho_1 There is no significant disparity in the pre-test and post-test mean scores of students taught with mastery learning and those taught with lecture method in Upper Basic Social Studies in Delta State.

Table 3: Independent Sample t-test Analysis of the Pre-test and Post-test mean Scores of Students taught with Mastery Learning and those taught with Lecture Method

Variable	N	Type of Test	Mean	Mean Diff.	Sd	df	t-cal	Sig (2-tailed)	Remark
Students taught with mastery learning	278	Pretest Posttest	29.47 32.29	0.07	11.31	585	5.237	0.000	Significant
Students taught with lecture method	309	Pretest Posttest	29.80 32.22		7.29				

N=587, df =585, pd 0.05 level of significance

Table 3 showed the data analysis for statistical significance on whether there is disparity in the scores of students taught with mastery learning and those taught by lecture method. It shows that mastery learning had a mean scores of 32.29 with SD of 11.31 while the students taught with lecture method had a mean scores of 32.22 and a SD of 7.29. Based on their mean scores, it means that the students in the mastery learning group had a higher scores than the students taught by lecture method by a mean difference of 0.07. When this mean score was subjected to independent sample t-test, a calculated t-value of 5.237 was obtained as against the p-value of 0.000. Testing the hypothesis at alpha level of 0.05, the p-value of 0.000 was less than the alpha level of 0.05. Hence, the null hypothesis was rejected. Meaning there exist a significant difference in the performance of students taught with mastery learning and those taught by lecture method at the Upper Basic level in the State.

Hypothesis 2

Ho_2 There is significant disparity in the mean scores of male and female students taught with mastery learning instructional strategy.

Table 4: Independent Sample t-test Analysis of the Mean Scores of the Male and Female Students taught with Mastery Learning Instructional Strategy

Variable	N	Type of Test	Mean	Mean Diff.	Sd	Df	t-cal	Sig (2-tailed)	Remark
Male	320	Pretest	34.33		8.89				
		Posttest	33.33						
Female	267	Pretest	34.72	-0.98	7.79	585	-1.416	0.157	Not Significant
		Posttest	34.31						

The data analysis for statistical significance on whether there is disparity in the mean score of students taught with mastery learning instructional strategy. It shows that male students had a mean scores of 33.33 with SD of 8.89 while the female students had a mean scores of 34.31 with SD of 7.79. Based on their mean scores, it means that the male students had a smaller score than the female students by a Md of -0.98. When this mean scores was subjected to

independent sample t-test, a calculated t-value of -1.416 was obtained as against the p-value of 0.157. Testing the hypothesis at alpha level of 0.05, the p-value of 0.157 was higher than the alpha level of 0.05. Hence, the hypothesis is accepted. Implicit here is that there exists no significant disparity in the mean scores of male and female students taught with mastery learning instructional strategy.

Discussions

The result of hypothesis one revealed that there exists a significant disparity in the mean scores of students taught with mastery learning and those taught by lecture method at the Upper Basic Social Studies in Delta State. The result points to the fact that mastery learning instructional strategy improves instruction with a positive effect on the test score when students were subjected to standardized achievement test in Social Studies evaluation. The positive gain of this innovative method for teaching has been employed in several disciplines. This finding was supported in the study by Akinlaye (2013). The author found that teacher use of appropriate method correlated students' learning outcomes. Its positive influence was shown on the performance of students taught with the strategy in subjects such as chemistry (Furo, 2014). Bergmann (2016) found that the method, that is, mastery learning approach is a practical way of personalizing learning for each learner. In addition, physical geography (Figona, Figona and Sababa, 2017) and mathematics (Mayanchi, Anya and Kainuwa, 2017). The study by Figona et al., (2017) was in consonant with the findings in their investigation with regards to mastery learning and its influence on students' retention in physical geography. The result of data found that mastery learning strategy have the capacity to improve student's learning retention and performance. Also, the study aligned with Mayanchi et al., (2017). The effect of the strategy on students' of mathematics as it affects their academic performance was experimented. The outcome of the result indicated that students can gain improved learning in their test scores due to exposure to mastery instructional strategy. Furthermore, this finding also agrees with the study by Dasimeokuma (2017) who support the relevance of mastery learning for promoting academic performance. Similarly,

Jade (2019) revealed that mastery learning provides a model of instruction that is learners-centered. Jade was of the view that the strategy is a way of prompting high performance in a course unit. Dasimeokuma on his part discovered that mastery learning can be a good instructional strategy for Social Studies classroom. He found that its model is suitable because it can provide the learners the possibilities to become aware of their evolving environment.

Findings of hypothesis two shows that there is no significant disparity in the mean scores of male and female students taught with mastery learning instructional strategy and those taught by lecture method at the Upper Basic level in Delta State. In other words, analysis of data on this variable shows no significant disparity in the mean scores of male and female students taught with mastery learning instructional strategy. While a no significant difference may be peculiar to the study which confirmed with conclusion found by previous studies. The main reason for this is that instructional strategy is not peculiar to any group or sex, students, irrespective of sex, get equivalent chance or opportunity and equivalent level of motivation or encouragement or positive instruction to update or improve their academic performance.

Conclusion

The effects of mastery learning was measured against lecture method for teaching and learning of Social Studies at the Upper Basic level. Findings revealed that the independent variables of the study greatly enhanced students' academic performance compared to the conventional (lecture) method in the study area. Also, there exists differences in the performance based on sex with regards to the innovative strategies of mastery learning when compared to the conventional method of instruction.

Recommendations

The study recommended that teachers should employ innovative instructional strategies such as mastery learning as against conventional lecture method. This will result in having improved test scores. Teachers should use a combination of instructional strategies. This will result in high achievement test scores in Social

Studies at the Upper Basic level of education in the state. Teachers should avoid parity in sex as gender bias is caused by both students and teachers characteristics as it affects the classroom situation.

References

Adepoju, A. A. (2002). Mastery learning strategies and secondary school teaching. In: S. O. Ayodele (ed). *Teaching strategies for Nigerian secondary school*. Ibadan: Power House Press and Publishers

Adeyemi, B. A. (2007). Learning Social Studies through mastery approach. *Educational Research and Review,* 2(4), 060-063. Retrieved online from *www.academicjournal.org/ERR*

Agboghoroma, T. E. (2014). Mastery learning approach on secondary students integrated science achievement. *British Journal of Education,* 2(7), 80-88.

Akinlaye, F. A. (2003). F*undamentals of Social Studies curriculum planning and instruction*. Lagos: Pumark Nigeria Limited

Ashley, F. (2018). *What are the advantages and disadvantages of achievement tests*? *www.classroom.com*

Bean, K. (2016). *Personalized mastery learning: What it is and what it is not*. Available at *www.relevant-ed.org* Retrieved January 6, 2019.

Bergmann, J. (2016). *The five stages of mastery learning*. *www.jonbergmann.com* September 6, 2018

Bloom, B. (1976). *Human characteristics and school learning*. New York: McGraw- Hill

Ciorbea, L. & Pasarica, F. (2013). The study of the relationship between personality and academic performance. *Procedia-Social and Behavioural Sciences*, 78, 400-404.

Dasimeokuma, P. (2017). *The role of Social Studies education in promoting religious tolerance in Nigeria*. *www.medium.com.* July 18, 2018

Ernesto, J. D. M., Ruel, A. A. & Allen, A. E. (2015). Exploring gender disparities in science and mathematics classrooms in the basic

education. *International Journal of Research Studies in Education,* 5(3), 39-58.

Figona, J., Figona, J. & Sababa, L. K. (2017). Mastery learning strategy and learning retention: Effects of senior secondary school students achievement in physical geography in Ganye educational zone, Nigeria. *Asian Research Journal of Arts and Social Sciences*, 2(3), 1-14.

Furo, P. T. (2014). Effect of mastery learning approach on secondary school students achievement in chemistry in Rivers State, Nigeria. *Chemistry and Materials Research*, 6(9), 101-108.

Golam, K. (2018). *What is innovative teaching*. *www.researchgate.net.* June 18, 2018

Jade, M. (2019). *Mastery learning model: Definition, theory and approach*. Available at *http://www.study.com*. Retrieved January 6, 2019.

Kayode, J.O. & Olatoye, R.A. (2014). Comparison of male and female senior secondary school students' learning outcomes in science in Katsina State, Nigeria. *www.richmann.org*

Kendra, C. (2018). *What is an achievement test? How achievement test measure what people have learned*? *www.everywellmind.com*

Mayanchi, L. M., Anya, C. A. & Kainuwa, M. A. (2017). Effects of mastery learning and problem solving methods of teaching on students academic performance in mathematics in Zamfara State. *International Journal of Educational Research and Technology*, 8(3), 01-08.

Mezieobi, D. I. & Onyeanusi, O. C. (2011). Repositioning Social Studies education in Nigerian tertiary institutions for the attainment of vision 20:2020 in Nigeria. *African Review of Arts, Social Sciences and Education*, 1(1).

Osadebe, P. U. (2009). Evaluation of students academic performance in senior secondary schools with counseling services. *African Journal of Education and Development Studies*, 6(1), 142-150.

Renard, L. (2017). *What is mastery learning? A different approach to learning*. *www.bookwidgets.com* September 6, 2018.

Umudi, B. A. (2012). Content implementation in junior secondary school Social Studies in Nigeria. *Nigerian Journal of Curriculum and Instruction*, 20(1). *www.globalacademicgroup.com*

Von, S. S., Hell, B. & Chamorro-Premuzic, T. (2011). The hungry mind: Intellectual curiosity is the third pillar of academic performance. *Perspectives on Psychological Science,* 6(6), 574-588.

Wambugu, P. W. & Changeiywo, J. M. (2008). Effects of mastery learning approach on secondary students achievement. *Eurasia Journal of Mathematics, Science and Tech*