# ASSESSMENT OF INTEGRATED GROUP BASED MASTERY LEARNING MODEL ON SECONDARY SCHOOL STUDENTS' ACHIEVEMENT IN SOCIAL STUDIES IN ABEOKUTA METROPOLIS, OGUN STATE

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#### **Abstract**

The study examined the integrated group-based mastery learning model on Secondary School Students' Achievement in Social Studies in Abeokuta. This study employed descriptive survey research design where questionnaire was used to acquire necessary data for the research work. Population comprises of all Junior Secondary School II Students in Abeokuta, Ogun State. Simple random sampling technique was used to select 200 Junior Secondary School II Students as sample for the study. Four (4) research questions were raised and answered in this study. Reliability of the instrument was determined using Test-retest method and data collected were analyzed using frequency count and simple percentage statistical tools. The research findings revealed that there is a significant difference between students taught using the Mastery Learning Approach and those taught using the conventional approach and it also revealed integrating Group based Mastery Learning Model have effect on the students' retention of learnt Social Studies contents and so on. Therefore, it is recommended that secondary school teachers should adopt Bloom's mastery learning approach for teaching Social Studies as it is more effective and useful as compared to traditional learning approach.

**Keywords:** Integrated, Assessment, Group mastery learning, Achievement.

## Introduction

Social Studies as a school subject introduced by the Federal Government was to help students acquire basic social knowledge, positive attitudes, values and social skills needed to make the students functional and responsible citizens and contributing members of the society (Mehar & Rana, 2012).

Adeyemi and Babajide (2014) define teaching of Social Studies as a process of facilitating student learning through a proper management by the teacher of the inter-relationships among the students' interest, the content for learning and the methods and materials he or she intends to use in the teaching and learning of the content materials.

According to Adediran, Sobola and Olawuni (2019), mastery learning is an instructional process that provides students with multiple opportunities to demonstrate content mastery. Initial instruction is presented at a fast pace to engage all learners. Students who do not demonstrate mastery are given additional instruction specifically designed to correct their misunderstandings. Re-teaching should involve strategies that are different from the original instructional methods.

Integrated Group based Mastery Learning Model is a combination of the theories of Bloom's and Keller's model of instruction. It involves the direct application of Bloom's and Keller's model to the teaching and learning of Social Studies in order to enhance students' achievement in the subject (Adediran, Atanda & Adelegun, 2018). Mastery of each unit is shown when the student has acquired the set pass mark of a diagnostic test. Mastery Learning Approach (MLA) helps the student to acquire prerequisite skills to move to the next unit. Mastery Learning Approach (MLA) can help

the teacher to know students' area of weakness and correct it thus breaking the cycle of failure. Results from research studies carried out on MLA suggest that MLA yields better retention and transfer of material, yields greater interest and more positive attitudes in various subjects than non-mastery learning approaches (Wang, Schuaab, Fenn & Chang, 2013).

The problems of student's poor performance and underachievement in Social Studies have been major issues of concern and interest in the Nigerian educational sector. The need for intervention is not only recognized but also acknowledged by all stakeholders. This problem has been approached from many angles by researchers. The approach emphasizes academic, intellectual and cognitive aspect of teaching social studies (Orukotan,,Dorgu &Adediran,2019). This has continued to attract criticisms and as a result, researchers have continued to stress the need for learner-centred methods, one of which is the Mastery Learning Models. Is this instructional approach not likely to enhance students' achievement in social studies?

# **Purpose of the Study**

The major purpose of this study is to assess the effectiveness of integrated group based mastery learning models on students' achievement in social studies at the JSS level. The study is specifically aimed to:

- examine the difference between students taught using the Mastery Learning Approach and those taught using the conventional approach;
- find out the effect of integrating Group based Mastery Learning Model on students' retention of learnt Social Studies content;
- iii. determine the effect of Mastery Learning Approach on students' interest in secondary school; and
- iv. determine the interaction effect of gender and teaching approach on students' retention of learnt Social Studies content;

# **Research Questions**

The following research questions were raised to guide the study:

- Will there be difference between students taught using the Mastery Learning Approach and those taught using the conventional approach?
- To what extent is the effect of integrating Group Based ii. Mastery Learning Model on students' retention of learnt Social Studies content?
- What are the effects of Mastery Learning Approach on iii. students' interest in secondary school Academic performance?
- iv. What are the interaction effect of gender and teaching approach on students' retention of learnt Social Studies content among student of Secondary School?

#### **Methods**

The descriptive research survey design was used in carrying out this study. The population for this study consisted of all Secondary School Students in the selected schools in Abeokuta, Ogun State. The sample for this study consisted of 200 Secondary School Students from the selected ten (10) Schools in Abeokuta metropolises, Ogun State. The sampling techniques employed in the cause of this research work was stratified random sampling techniques, and twenty(20) Students were selected from each of the school chosen from the selected Schools in Abeokuta to make two hundred (200) in all. The instrumentation for the research work was questionnaire. In order to validate the research instrument, a draft copy of questionnaire was given to experts for corrections, modification, and necessary suggestions before the administration of the questionnaire. Reliability of the instrument was analysis through test-retest method to ascertain it reliability and the correlation coefficient obtained was 0.92. Data collected was analyzed using Simple Percentage statistical tool.

#### Results

**Research Question 1:** Will there be difference between students taught using the Mastery Learning Approach and those taught using the conventional approach?

Table 1: The difference between students taught using the Mastery Learning Approach and those taught using the conventional approach

		SA+A		SA+A SD+D		TOTAL	
SN	Items	F	%	F	%	F	%
1	Bloom's mastery learning approach for teaching Social Studies is more effective than traditional learning approach	190	95	10	5	200	100
2	Mastery Learning Approach is a method of teaching where the learner is seeking to discover and create solution to problems	186	93	14	7	200	100
3	Mastery Learning Approach helps in creating learners' awareness to social studies contents	179	89.5	21	10.5	200	100
4	Mastery Learning Approach will improve students' learning academic performance	182	91	18	9	200	100
5	Students taught with Mastery Learning Approach will better than students taught using the conventional approach	196	98	4	2	200	100
	Total	933	93.3	67	6.7	1000	100

From Table 1, the study revealed that the cumulative data of "agree" with the state that says "Will there be difference between students taught using the Mastery Learning Approach and those taught using the conventional approach?" was 933 (93.3%) while cumulative response for "disagree" data was 67 (6.7%). This showed that agree responses were more than disagree response.

**Research Question 2:** To what extent is the effect of integrating Group Based Mastery Learning Model on students' retention of learnt Social Studies content?

Table 2: The effect of integrating Group Based Mastery Learning Model on students' retention of learnt Social Studies content

		SA+A		SA+A SD+I		TOTAL	
SN	Items	F	%	F	%	F	%
1	Integrating Group Based Mastery Learning	176	88%	24	12%	200	100
	Model in teaching Social Studies contents						
	will help students' retention						
2	The use of conventional approach in	158	79%	42	21%	200	100
	teaching Social Studies will not actively						
	influence students' academic performance						
	than mastery approach						
3	The use of traditional method by teachers	186	93%	14	7%	200	100
	contributes to low academic performance						
	of students in social studies	100	010/	10	00/	000	100
4	Integrating Group based mastery learning	182	91%	18	9%	200	100
	method of teaching increase learners'						
	academic performance than the use of traditional method						
5	traurional motion	100	94.5%	11	5.5%	200	100
Э	Group Based Mastery learning of teaching	189	94.5%	11	5.5%	200	100
	give students opportunities to interact and share different idea than tradition method						
	of teaching						
	Total	891	89.1%	109	10.9%	1000	100

From Table 2, the study revealed that the cumulative data of "agree" with the state that says "To what extent is the effect of integrating Group Based Mastery Learning Model on students' retention of learnt Social Studies content?" was 891 (89.1%) while cumulative response for "disagree" data was 109 (10.9%). This showed that agree responses were more than disagree response.

**Research Question 3:** What are the effects of Mastery Learning Approach on students' interest in secondary school Academic performance?

Table 3: The Effects of Mastery Learning Approach on students' interest in secondary school Academic performance

		SA+A		SD+D		TOTAL	
SN	Items	F	%	F	%	F	%
1	Using Mastery learning approach in teaching Social Studies increases the students' learning interest	184	92%	18	8%	200	100
2	Group Based or Mastery learning method of teaching is the best teaching methodology in teaching Social Studies contents	194	97%	6	3%	200	100
3	Mastery learning approach in teaching Social Studies content aid effective performance and assimilation of contents	182	91%	18	9%	200	100
4	Students will perform better when integrating Group based mastery learning approach in teaching different contents of Social Studies	192	96%	8	4%	200	100
5	Integrating Group based mastery learning approach in teaching increase students' academic performance	194	97%	6	3%	200	100
	Total	944	94.4%	56	5.6%	1000	100

From Table 3, the study revealed that the cumulative data of "agree" with the state that says "What are the effects of Mastery Learning Approach on students' interest in secondary school Academic performance?" was 944 (94.4%) while cumulative response for "disagree" data was 56 (5.6%). This showed that agreed responses were more than disagreed response.

**Research Question 4:** What are the interaction effect of gender and teaching approach on students' retention of learnt Social Studies content among student of Secondary School?

Table 4: The interaction effect of gender and teaching approach on students' retention of learnt Social Studies content among student of Secondary School

		SA+A		SD+D		TOTA	
SN	Items	F	%	F	%	F	%
1	When female is taught using Group Based Mastery Learning Model and male is taught with traditional method outcome will be difference	182	91%	18	9%	200	100
2	There will be disparity in performance and interest among boys and girls in when there is different in teaching methodology	194	97%	6	3%	200	100
3	Teacher choice of action methods in teaching Social Studies will contribute to student's academic performance.	188	94%	12	6%	200	100
4	When there is equality in the teaching method used by teacher in class, students' academic performance will be relevant	194	97%	6	3%	200	100
5	Integrating Group based mastery learning approach will not create disparity in teaching Social Studies contents	174	87%	26	13%	200	100
	Total	888	88.8%	112	11.2%	1000	100

From Table 4, the study revealed that the cumulative data of "agree" with the state that says "What are the interaction effect of gender and teaching approach on students' retention of learnt Social Studies content among student of Secondary School?" was 888 (88.8%) while cumulative response for "disagree" data was 112 (11.2%). This showed that agree responses were more than disagree response.

#### **Discussions**

The study revealed that the cumulative data of "agreed" with the state that says "Will there be difference between students taught using the Mastery Learning Approach and those taught using the conventional approach?" was 933 (93.3%) while cumulative response for "disagree" data was 67 (6.7%). This statement was in line with Mevarech (2001) that, the conventional approach does not accommodate the natural diversity in learning abilities among different groups of students.

The study revealed that the cumulative data of "agree" with the state that says "To what extent is the effect of integrating Group Based Mastery Learning Model on students' retention of learnt Social Studies content?" was 891 (89.1%) while cumulative response for "disagree" data was 109 (10.9%). The study revealed that the cumulative data of "agree" with the state that says "What are the effects of Mastery Learning Approach on students' interest in secondary school Academic performance?" was 944 (94.4%) while cumulative response for "disagree" data was 56 (5.6%). However, this was in line with the statement of Achufusi and Mgbemena (2015) that MLA helps the students to acquire prerequisite skills to move to the next unit.

From Table 4 above, the study revealed that the cumulative data of "agree" with the state that says "What are the interaction effect of gender and teaching approach on students' retention of learnt Social Studies content among student of Secondary School?" was 888 (88.8%) while cumulative response for "disagree" data was 112 (11.2%). However, this was in line with the statement asserted by Agboghorom(2014) that there is disparity in performance and interest among boys and girls in science. Boys perform better than the girls when instructional approach adopted in sciences is competitive while girls perform optimally in a cooperative academic environment. The studies by Adeyemo and Babajide (2014) lend credence to non-significant gender effect in Socio-science achievement.

## **Conclusion**

Conclusively, the findings revealed that Bloom's mastery learning approach has a positive effect on students' academic achievement and retention in the subject of Social Studies. Furthermore, Bloom's learning approach was found more effective, successful and useful in different level of cognitive domains i.e., knowledge, comprehension, application, analysis, synthesis and evaluation as compared to traditional learning approach in Social Studies at secondary level.

#### Recommendations

Sequel to the findings of this study, it was recommended that, Secondary School Teachers should adopt Bloom's mastery learning approach for teaching Social Studies as it is more effective and useful as compared to traditional learning approach. Furthermore, it is recommended that such type of study should be conducted at elementary, higher secondary and tertiary level as well as in other academic subjects. Curriculum developers will find this study helpful in designing appropriate instructional strategies involving Mastery Learning, which would enhance the learning of Integrated Science. Social Studies teachers and education inspectors will identify this as an effective teaching method that would be suitable, to provide favourable learning conditions for all students rather than just for the top fraction of the class. All teachers' educators will find the study useful in developing programmes aimed at producing teachers capable of structuring learning environment that can equalize their interaction with learners enabling greater learner participation, satisfaction and further academic aspirations.

## References

- Achufusi, N. N. and Mgbemena, C. O. (2012). The effect of using mastery learning approach on academic achievement of senior secondary school II physics students. Elixir Edu. Tech, 51, 10735.
- Adediran, A. A., Atanda, J. O. & Adelegun, K. O. (2018). Social Studies education as an antidote in strengthening the state economic empowerment and development strategy (SEED) for poverty eradication in Ogun state. Nigerian Journal of Sociology of Education, 12(1), 131-137.
- Adediran, A. A., Sobola, I. & Olawuni, A. O. (2019). Effectiveness of social enterprise and service learning strategies in Social Studies outcomes among students of Junior secondary schools in Ogun State. Journal of Contemporary Issues in Educational Planning and Administration, 4(1), 80-92.
- Adeyemo, S. A. and Babajide, V. F. T. (2014). Effects of mastery learning approach on Students' Achievement in Physics. International Journal of Scientific & Engineering Research, 5(2), 910-920.
- Agboghorom, T. E. (2014). Mastery learning approach on secondary

- students' integrated science achievement. British Journal of Education, 2 (7), 80-88.
- Mehar, R. and Rana, A. (2012). Effectiveness of bloom's mastery learning model on achievement in economics with respect to Attitude towards Economics. Journal of All India Association for Educational Research, *24*(1): 1-13.
- Mevarech, Z. M. (2001). The effects of cooperative mastery learning strategies on mathematics achievement. Journal of Educational Research, 78(6), 372-377.
- Orukotan, A. F., Dorgu, T. E. & Adediran, A. A. (2019). Perception of lecturers on the importance of using internet services for the teaching and learning process in colleges of education in Nigeria. International Journal of Operational Research in Management, Social *Sciences Research*, *5*(1), 243-251.
- Wang, C., Schwab, G., Fenn, P. & Chang, M. (2013). Self-efficacy and self-regulated learning strategies for Englishlanguage learners: comparison between Chinese and German college students. Journal of Educational and Developmental Psychology, 3(1), 173-191.
- Wambugu, P. W. & Changeiywo, J. M. (2008). Effects of mastery Learning Approach on Secondary School Students' Physics Achievement. Eurasia Journal of Mathematics, Science & Technology Education, 4(3), 293-302.