EFFECTS OF PEER ASSESSMENT AND MODELS ON SOCIAL STUDIES STUDENTS ACHIEVEMENT AND INTEREST IN JUNIOR SECONDARY SCHOOLS IN NIGER STATE, NIGERIA

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Abstract

The trust of this study focused on the effects of peer assessment and models on social studies students achievement and interest in junior secondary schools in Niger State, Nigeria.Two research questions and two null hypothesis guided the study. The population for the study consisted of all 4,311 junior secondary school two students and a sample of 155 students were randomly selected from three secondary schools. Social Studies Achievement Test (SOSAT) and Social Studies Interest Inventory (SOSII) were used as instruments for dada collation. The instruments, SOSAT and SOSII were validated which yielded 0.84 and 0.82 validity indexes and Kuder-Richardson 21 was used to determined reliability of the internal consistency of the SOSAT gave 0.83 and Cronbach Alpha for SOSII yielded 0.80 reliability indexes. Data collected were analyses using mean and standard to answered research question and ANCOVA was used for testing of hypotheses at 0.05 level of significant. The finding revealed that, there is significant difference in the achievement mean scores of students taught Social Studies using peer assessment strategy (PAS), using Model and those taught using conventional teaching method (CTM) and there is significant difference between the interest mean scores of students taught social studies using PAS, model and CTM. Based on these findings, it was recommended that, Niger State Ministry of Education should formulate

policies that will mandate Social Studies teachers to use peer assessment strategy (PAS) and pictorial models to enhance students' interest and academic achievement in Social Studies among other.

Index Terms: *Peer Assessment, Models, Social Studies, Achievement, Interest*

INTRODUCTION

Social studies as a subject deal with the relationships among people and between people and their environment. It recognizes the challenges and benefits of living in a diverse cultural and ideological society. Social studies is the integrated study of the social sciences and humanities as the subject draws all its contents from such disciplines as sociology, history, economics, anthropology, archaeology, geography, law, philosophy, political science, psychology, religion, as well as appropriate content from mathematics and natural sciences. Social Studies can be defined as the study of man's interaction with his environment. It exposes learners to how man influences and is being influenced by his physical, social, political, economic, psychological and cultural environment. According to Adeyemi and Ajibade (2011) described Social Studies is a discipline that can be used in solving problems of relationship and interaction in man's dynamic environment. The inclusion of Social Studies in the Junior Secondary Education curriculum exposes learners to the uniqueness and diversity of man's culture thereby inculcating in learners the ability to develop high level of acceptance of differences among people, be it socio-economic, religious, political or life style-related. The teaching of Social Studies increases the chances that students will imbibe and adhere to ethical and moral values in life. Social Studies aim at creating educated individuals who can be responsible citizens to their nation. This subject engages students in a comprehensive process of confronting multiple dilemmas, and encourages students to speculate, think critically, and make personal and civic decisions based on information from multiple perspectives (Jacob, Joel and Sababa, 2016). Despite, this importance attached and efforts made

in the teaching and learning of social studies in school, students academic achievement in social studies does not equate with the magnitude of importance attached to it. Essien, Akpan and Obot (2016), reported that there has been a fall in students' academic performance in social studies over the years. Academic achievement according to Galle (2021) is the ability to function effectively, respond quickly or perfectly to a given task. Thus to achieve is to accomplish a task successfully with a skill. Achievement describes the level of success in relation to a task that is carried out using a standardized test under planning instruction (Anikweze, 2015). He further argued that achievement test could be teacher made test or standardized tests.

According to Ajaja (2011), for effective learning to take place, students must be actively involved in the learning process through physical interaction with instructional materials and engaging in varied kinds of activities. Akinleye (2010) postulated that effective teaching and learning requires a teacher to teach the students with instructional tools and use practical activities to make learning more vivid, logical, realistic and pragmatic. Anikweze (2015) stated that:

One of the ways of ensuring effective learning is by making the experience real for learners. This requires using true examples that they can relate with, real life situation that they see happening around them. When these real life experiences cannot be presented, teachers need to use other materials, devices, techniques or items that closely represent them. At the end of the day, what the teacher hopes to achieve is to put across the intended message as effective and meaningful as possible to learners (P.91).

However, this can be achieved using Peer assessment (PA) and models. PA refers to the assessment of students within the same class range. PA as the process whereby students or their peers grade assignments or test based on a teachers benchmark. It is a kind of innovative and creative assessment that helps to improve the quality of learning and empower learners where the conventional method bypasses learners needs; this method actually puts learners in the centre of the learning process. According to Reinholz (2016), PA plays a very crucial role in learners, as

they are assisted in gathering information about their own knowledge, skills and abilities. In addition, peer assessment gives students room to assess each other's works rather than the teacher, this in exchange improves transfer of feedback because of the use of similar language by peers, this also helps cut down the negative sentiment of being assessed/evaluated by an authoritative (Liang, and Chin-Chung Tsai, 2010. It represents a system of learning built on the basis of that learning directed around the learner with the other in depending on effective learning, which focuses on the full integration of the student in the process of collaborative learning with peers under the supervision of the teacher (Thomas, 2010).

Similarly, model is a representation of real objects or persons which could take the form of concrete objects, pictures, posters, symbols, diagrams, charts, diorama and cartoons used as instructional tools where the presentation of real objects or persons is not feasible. According to Damar, Hulda and Jonah (2016), the relevance of models in teaching and learning include: simplifying the otherwise complex relationships of the Social Studies phenomena in the real world, it is a vehicle for teaching and learning about the world, it makes learners free from abstraction of the subject and it serves as bridge between theoretical and observable phenomena. It is also used to stimulate the growth of the spirit of inquiry, training of the mind resulting in a balance intellectual approach to problem solving and seasoned capacity to analyze issues objectively. According to Bayram (2016), there are three kinds of models: concrete, pictorial, and abstract. Concrete model can be moved around or manipulated by students. Models that are basically visual which include pictures, diagrams and charts are defined as pictorial. Numerals and words are called abstract models. Essien, Akpan and Obot (2016), put concrete, pictorial, and symbolic models in the category of representational models. Blocks, sticks, chips, cuisenaire rods and diene blocks are examples of concrete models. Pictures of the very same items represented on worksheets, textbook pages, papers or cards are examples of pictorial models. Numerals on worksheets, textbook pages, papers, cards, chalkboards, or bulletin boards are examples of symbolic models.

This can be achieved when learner have interest in the learning activities. Interest has been variously defined as a kind of consciousness accompanying and stimulating attention, a feeling, pleasant or painful directing attention, the pleasurable or painful aspect of a process of attention, and as identical with attention of itself (Mohammed, 2017). Interest is defined and whether it is described as a cause of attention, an aspect of attention or as identical with attention, its' special significance lies in its intimate connection with the mental activity or attention. Interest is the focusing of the sense organs on or giving attention to some person, activity, situation or object. Interest is a motivating factor in teaching and learning process hence it influences learners' academic achievement and retentive power.

However, several literature reveals on relate study such as Coulibaly (2021) findings revealed that there was significant difference between the mean achievement scores of students taught Social Studies using models and concept mapping and those taught using conventional instructional tools. Coulibaly (2021) findings revealed that students in both the DVM and SPM groups showed significant improvements as they visualization skills increased while using pictorial models, in both the static and dynamic modalities. Anikweze (2015) findings revealed that there was a significant difference between the mean achievement scores of students taught social studies with PAM and CM. Galle and Kukwi (2020) findings revealed that there was significant differences between the interests mean scores of students taught social studies with PAM and CM. The poor academic achievement of students in social studies in Niger State, Nigeria over the years has been a thing of concern to educational stakeholders: Ministry of Education, school administrators, teachers, parent and the society. The major cause of this problem, have been identified by previous studies, to be the poor instructional strategy, insufficient instructional materials and poor assessment methods used by the teachers which do not enable the students to fully understand the content of the subject and participate in the learning process. This trend, therefore, makes the subject seemingly difficult and as a result, makes the subject a little more complex to comprehend. Therefore, the study investigated effects of PA

and Models on Social Studies students' achievement and interest in Junior Secondary Schools in Niger State, Nigeria.

Research Questions

The following Research Questions guided the study

RQ1: What are the achievement mean scores of students taught Social Studies using peer assessment strategy (PAS), using Model and those taught using conventional teaching method (CTM)?

RQ2: What are the interest mean scores of students taught Social Studies using peer assessment strategy (PAS), using Model and those taught using conventional teaching method (CTM)?

Hypotheses

The following null hypotheses guided the study an were tested at 0.05 level of significant

Ho1: There is no significant difference in the achievement mean scores of students taught Social Studies using peer assessment strategy (PAS), using Model and those taught using conventional teaching method (CTM)

Ho2: There is no significant difference in the interest mean scores of students taught Social Studies using peer assessment strategy (PAS), using Model and those taught using conventional teaching method (CTM)

MATERIAL AND METHODS DESIGN

The researchers adopted quasi-experimental design, non-randomized pretest-posttest control group. The choice of this design and its significance to this study was considered suitable non-equivalent constitute the three groups that were used for the study. The study comprised two experimental groups (A&B) and one conventional group C. The selection was done based on two junior secondary school students. The JSS II students that were taught on content/topics; family, marriage drug and drug Addiction abuse selected from the junior secondary education curriculum for JSS II (NERDC. The testing procedures were the same within the two groups. The design is symbolically represented in fig1.

Table 1: Illustration of the Design of the Study

Groups	Achievement			Interest		
Experimental Group A:	0_1	X_1	0_2	0_3	X_1	0_4
Experimental Group B:	0_1	X_2	0_2	0_3	X_2	0_4
Control Group C:	0_1	-	0_2	0_3	-	0_4

Where:

0_1 = Pretest with SOSAT

0_2 = Post-test with SOSAT

X_1 = Treatment (use of Peer Assessment Strategy (PAS)

X_2 = Treatment (use of Models)

- = Control (use of conventional Teaching Method (CTM)

0_3 = Pretest with SOSII

0_4 = Post-test with SOSII

The experimental group A students were exposed to the use of PAS, and experimental group B students were exposed to the use of models, while the control group C students were was exposed to the use of CTM. This strategy, according to ., Steckelberg and Srinivasan (2008) allows the researcher not only to control the effects of the independent moderator variable but also to determine any differences that may be attributed to them in the study. Below is the Table of specification for 40 Items.

Table 2: Table of Specification for 40 Items Social Studies Achievement Test for JS II Students

Content Area	Time(Hrs)	Know 45%	Comp 35%	App 20%	Items
Family	2	**5**(1, 2, 3, 4, 5)	**3** (7, 9, 10)	**2** (6, 8)	10
Marriage	2	**5**(11,13,14,15, 19)	**3**(12, 16, 20)	**2** (17,18)	10
Drug Abuse	2	**4**(21,24,25, 27)	**4**(22, 23, 28, 29)	**2**(26,30)	10
Drug Addiction	2	**4**(31, 32, 33, 39)	**4**(34,35, 37, 38)	**2** (36, 40)	10
Total Items	**8**	**18**	**14**	**8**	**40**

Population and Sample

The population for the study consisted of all 4,311 junior secondary school two students (JSS II) that offered Social Studies in Niger State, Nigeria 2021/2022 academic season. A simple 155 JSS II Social Studies Students from three schools in Nigger State were selected through random sample technique.. Before obtaining the sampled size, lottery method of simple random sampling was employed to selected sample three schools namely: Day Secondary School, Tunga Minna 52 students were exposed to experimental group A, El- Amin International School Minna 51 students were exposed to experimental group B and Government Secondary School, Minna 52 students were exposed to control group C. Serial numbers of the elements on pieces of papers folded and mixed thoroughly before respondents were asked to pick at once without replacement. This technique gave equal opportunity to the respondents thereby reducing the bias effect that may interfere with the validity and reliability of the study.

Instrument for Data Collection

For the purpose of the study, the researchers developed two instruments namely; Social Studies Achievement Test (SOSAT) and Social Studies Interest Inventory (SOSII).

SOSAT was used as the instrument for data collection. The researchers developed the items after the Item Analysis (IA) of the Multiple Choice Questions prepared for Social Studies students. According to the Item Analysis (IA), questions with a degree of discrimination of more than 0.30 were selected in such a way that they would not prejudice the validity of the test. A 30 items multiple choice questions contained in the SOSAT. The construction of SOSAT was based on four topics (family, marriage, drug abuse and drug trafficking). **SOSII** was used for collection of pretest interest scores and posttest interest scores. The SOSII was made up of sections "A" containing bio-data of the respondents and "B" that contained a 20-item interest inventory developed by the researcher. It was constructed by generating a list of statements to show the extents of students' interest in Social Studies and providing a set of graduated response options. The response options consisted of a 5-point rating scale, ranging from like very much to dislike very much. The scale and the scoring guide were; Like very much = 5, Like = 4, Neutral = 3, Dislike = 2, Dislike

very much = 1. The items with negative questions were scored in reverse form.

Validity and Reliability of Instrument

SOSAT and **SOSII** were subjected for face and content validation. Two experts, who are knowledgeable in the skills being measured in Social Studies department and Educational Measurement and Evolution in Nasarawa state University keffi, by checking for appropriateness, comprehensiveness and relevance of the items, clarity of expression and size of print. Items that did not measure what they ought to measure were deleted or modified, while good items were retained. The experts verified if the items were in line with the content and objectives stated in the curriculum. The consensus of the expert's judgment rating for SOSAT yielded 0.84 and **SOSII** 0.82 validity indexes. The Kuder-Richardson method was used to determined reliability of the internal consistency of the SOSAT and **SOSII.**. Pilot study was conducted on small portion of the population who are not part of the sample of this study, result for SOSAT gave 0.83 and **SOSII** 0.80 reliability indexes. The reliability results of SOSAT and SOSII were compared with the guidelines for interpreting alpha coefficients suggested Ugunduluwa (2015) that "$\alpha \geq 0.9$ excellent, ≥ 0.8 good, ≥ 0.7 acceptable, ≥ 0.6 questionable, ≥ 0.5 poor, ≤ 0.5 unacceptable". Therefore, the results of the reliability enabled the researchers to use the instrument for both pretest and posttest, since the correlation was considered high and significant.

Procedure for Data Collection

Three research assistants were trained by the researchers to assist in administering the instrument (SOSAT) and teaching the topics selected for the study. The researchers' assistants are Social Studies teachers with years of teaching experience and the researchers monitor their activities. A week training programme was organized with the research assistants. The training programme was to acquaint the research assistants with how to use PAS and models with the experimental group A and B as well control group C. The following features were addressed during the training: the objectives of the strategy, topics, contents, duration, teaching' and students' activities, methods and how the test administration, scoring of tests papers were discussed and research assistants were given the

opportunity to demonstrate the use of the packages in teaching before the commencement of the treatment.

The training ensured that the teaching was comparable, applying the same teaching skills with little or no variation in their teaching effectiveness. Items for the tests lasted for one hour fifteen minutes. During the period of testing, the researchers and research assistants ensured that the students were not cheating. Test items were given to the students as a pretest for the purpose of ascertaining the prior knowledge of the students in Social Studies before the treatment was given to the experimental groups. Students were required to encircle the correct option out of four alternatives (A, B, C, D) provided for each question on the answer sheet. After the time allocated for the test, the scripts were collected marked and scored using a marking scheme. The experimental group A students were taught using PAS, experimental group B used Model while conventional group C students were taught using CTM covering four lessons taught within seven weeks (4 time lessons in every week). At the end of the seven weeks of teaching the posttest on SOSAT was administered to both the experimental and conventional groups. The posttest lasted for one hour, twenty minutes. The pretest and posttest results were compared to obtain the mean gain scores of the experimental and conventional groups. Means, standard deviation were used for answering research question and analysis of covariance (ANCOVA) using IBM SPSS version 23 was used for testing hypotheses at 0.05 level of significant. The results are presented in below tables.

RESULTS
Research Questions/Hypotheses
RQ1: What are the achievement mean scores of students taught Social Studies using peer assessment strategy (PAS), using Model and those taught using conventional teaching method (CTM)?

Table 3: Achievement Mean Scores and Standard Deviation for Experimental and Control Groups

Groups	Treatment	N	Pre-test Mean	SD	Post-test Mean	SD	Achievement Gain
A:	Used of PAS	52	15.25	0.82	19.88	1.02	4.63
B:	Used of Model	51	15.21	0.81	19.80	1.01	4.59
C:	Used of CTM	52	14.85	0.72	17.38	1.07	2.53

Result of question one in Table3 above shows difference between mean achievement scores of students taught Social Studies using PAS, Model and those taught using CTM. Pre-test mean scores of 15.25, 15.21 and 14.84 with standard deviation of 0.82, 0.81 and0.72 for the three groups while, post-test mean scores of 19.88, 19.80 and 17.38 with standard deviation of 1.02, 1.01and 1.07 for the three groups. The variations between the pre-test and post-test mean score for the three groups were 4.63, 4.59 and 2.52 as mean achievement gains. This implies that student taught Social Studies using PAS and Model had higher mean achievement gain scores than their counterparts in CTM. To test the variation effects of the treatments, the null hypotheses one was tested using ANCOVA at 0.05 level of significant and results are presented in Table 4 below.

Ho1: There is no significant difference in the achievement mean scores of students taught Social Studies using peer assessment strategy (PAS), using Model and those taught using conventional teaching method (CTM)

Table 4: ANCOVA Test for Significant Difference in Achievement Mean Scores of three Groups

Source of Variation	Type III Sum of Squares	Df	Mean Square	F_{cal}	P-value	Sig
Corrected model	44304.53	3	22152.27	189.028*	.000	P<0.05
Intercept	620.99	1	253.17	44.716*	.000	P<0.05
Pre-SOSAT	6462.22	1	2594.72	116.15*	.000	P<0.05
Groups	41308.84	1	168.23	422.280*	.000	P<0.05
Error	5953.29	152	46.26			
Total	344586.00	155				
Corrected Total	50257.82	154				

The result in Table 4 shows the ANCOVA for significant difference in the achievement mean scores of students taught Social Studies using PAS, Model and those taught using CTM (df=1, 152, F_{cal} =422, p<0.05). This suggests a

statistically significant difference between the mean achievement scores of students' taught social studies using PAS, Model and CTM. Hence, the null hypothesis one was rejected. To determine the source (s) of significant difference in the mean achievement scores of students in the groups were further subjected to post hoc mean comparisons test using the Bonferroni test and the result of the comparisons is presented in Table 5.

Table 5: Pair-wise Comparisons of Diff between Mean Achievement Scores of Students in three Groups

Groups	Treatment	Mean Diff	Sig.
A:	PAS Vs CTM	-.257	1.000
	PAS Vs Model	.216	1.000
B:	Model Vs PAS	2.667*	1.000
	Model Vs CTM	1.667*	1.000
C:	CTM Vs Model	2.566*	1.000
	CTM Vs PAS	1.667*	1.000

The pair-wise multiple comparison test in Table 5 shows that there is a significant difference between the mean achievement scores of students taught social studies using PAS, Model and CTM as revealed by the values (-.257, .216) without asterisk (*) in the column labelled mean difference or the p-values (1.000) in the column labelled sig which is greater than 0.05. However, there is significant difference between the achievement mean scores of students taught social studies with PAS, model and CM as revealed by the values (1.667*, 1.566*) in the column labelled mean difference or the values (.001) in the column labelled sig which is less than 0.05. This means that the mean achievement scores of students in the experimental groups (PAS, Model) are significantly higher than their counterparts in the CTM.

RQ2: What are the interest mean scores of students taught Social Studies using peer assessment strategy (PAS), using Model and those taught using conventional teaching method (CTM)?

Table 6: Interest Mean Scores and Standard Deviation for Experimental and Control Groups

Groups	Treatment	N	Pre-test		Post-test		Interest Gain
			Weighted Mean	Weighted SD	Weighted Mean	Weighted SD	
A:	Used of PAS	52	15.05	0.82	20.51	1.52	5.46
B:	Used of Model	51	15.01	0.81	20.40	1.51	5.39
C:	Used of CTM	52	14.05	0.72	16.78	0.87	2.73

Result of question two in Table 6 above shows difference between interest mean scores of students taught Social Studies using PAS, Model and those taught using CTM. Pre-test interest weighted mean scores of 15.05, 15.01 and 14.05 with standard deviation of 1.52, 1.51 and 0.87 for the three groups while, post-test interest weighted mean scores of 20.51, 20.40 and 16.78 with standard deviation of 1.52, 1.51and 0.87 for the three groups. The variations between the pre-test and post-test weighted mean score for the three groups were 5.46, 5.39 and 2.73 as interest weighted mean gains. This implies that students taught Social Studies using PAS and Model had a higher weighted interest mean gain scores than their counterparts in CTM. To test the variation effects of the treatments, the null hypotheses two was tested using ANCOVA at 0.05 level of significant and results are presented in Table 7 below.

Ho2: There is no significant difference in the interest mean scores of students taught Social Studies using peer assessment strategy (PAS), using Model and those taught using conventional teaching method (CTM)

Table 7: ANCOVA Test for Significant Difference in Achievement Mean Scores of three Groups

Source of Variation	Type III Sum of Squares	Df	Mean Square	F_cal	P-value	Sig
Corrected model	44304.53	3	22152.27	189.028*	.001	P<0.05
Intercept	620.99	1	253.17	44.716*	.001	P<0.05

Pre-SOSII	6462.22	1	2594.72	116.15*	.001	P<0.05
Groups	41308.84	1	168.23	442.280*	.001	P<0.05
Error	5953.29	152	47.26			
Total	344586.00	155				
Corrected Total	50257.82	154				

The result presented in Table 7 shows the ANCOVA for significant difference in the interest mean scores of students taught Social Studies using PAS, Model and those taught using CTM (df=1, 152, F_{cal} =442, p<0.05). This suggests a statistically significant difference between the interests mean scores of students' taught social studies using PAS, Model and CTM. Hence, the null hypothesis two was rejected. To determine the source (s) of significant difference in the interests mean scores of students in the groups were further subjected to post hoc mean comparisons test using the Bonferroni test and the result of the comparisons is presented in Table 8.

Table 8: Pair-wise Comparisons of Diff between Mean Interest Scores of Students in three Groups

Groups	Treatment	Mean Diff	Sig.
A:	PAS Vs CTM	-.457	1.000
	PAS Vs Model	.416	1.000
B:	Model Vs PAS	2.467*	1.000
	Model Vs CTM	1.467*	1.000
C:	CTM Vs Model	2.466*	1.000
	CTM Vs PAS	1.467*	1.000

The pair-wise multiple comparison test in Table 8 shows that there is a significant difference between the interest mean scores of students taught using PAS, model and CTM as revealed by the values (-.457, .416) without asterisk (*) in the column labelled mean difference or the p-values (1.000) in the column labelled sig which is greater than 0.05. However, there is significant difference between the interest mean scores of students taught

social studies using PAS, model and CTM as revealed by the values (1.467*, 1.466*) in the column labelled mean difference or the values (.001) in the column labelled sig which is less than 0.05. This means that the interest mean scores of students in the experimental groups (PAS, Model) are significantly higher than the interest mean scores of their counterparts in the CTM.

DISCUSSION

Result of question one in Table3 above shows difference between mean achievement scores of students taught Social Studies using PAS, Model and those taught using CTM. Pre-test mean scores of 15.25, 15.21 and 14.84 with standard deviation of 0.82, 0.81 and0.72 for the three groups while, post-test mean scores of 19.88, 19.80 and 17.38 with standard deviation of 1.02, 1.01and 1.07 for the three groups. The variations between the pre-test and post-test mean score for the three groups were 4.63, 4.59 and 2.52 as mean achievement gains. This implies that student taught Social Studies using PAS and Model had a higher mean achievement gain scores than their counterparts in CTM. Drawing inference from null hypothesis one in Table 4 shows significant difference in the achievement mean scores of students taught Social Studies using PAS, Model and those taught using CTM (df=1, 152, F_{cal} =422, p<0.05). This suggests a statistically significant difference between the mean achievement scores of students' taught social studies using PAS, Model and CTM. Hence, the null hypothesis one was rejected. To determine the source (s) of significant difference in the mean achievement scores of students in the groups were further subjected to post hoc mean comparisons test using the Bonferroni test of pair-wise multiple comparison test in Table 5 shows that there is a significant difference between the mean achievement scores of students taught social studies using PAS, Model and CTM. This means that the mean achievement scores of students in the experimental groups (PAS, Model) are significantly higher than their counterparts in the CTM. This finding is in agreement with that of Lutze-Mann, (2014) findings revealed that students in both the DVM and SPM groups showed significant improvements as they visualization skills increased while

using pictorial models, in both the static and dynamic modalities. Mohammed (2017) Findings revealed that there was significant difference between the mean achievement scores of students taught Social Studies using models and concept mapping and those taught using conventional instructional tools. Coulibaly (2021) findings revealed that there was a significant difference between the mean achievement scores of students taught social studies with PAM and CM.

Lastly, result of question two in Table 6 above shows difference between interest mean scores of students taught Social Studies using PAS, Model and those taught using CTM. Pre-test interest weighted mean scores of 15.05, 15.01 and 14.05 with standard deviation of 1.52, 1.51 and 0.87 for the three groups while, post-test interest weighted mean scores of 20.51, 20.40 and 16.78 with standard deviation of 1.52, 1.51and 0.87 for the three groups. The variations between the pre-test and post-test weighted mean score for the three groups were 5.46, 5.39 and 2.73 as interest weighted mean gains. This implies that students taught Social Studies using PAS and Model had a higher weighted interest mean gain scores than their counterparts in CTM. Drawing inference from null hypothesis two in Table 7 shows significant difference in the interest mean scores of students taught Social Studies using PAS, Model and those taught using CTM (df=1, 152, F_{cal} =442, p<0.05). This suggests a statistically significant difference between the interests mean scores of students' taught social studies using PAS, Model and CTM. Hence, the null hypothesis two was rejected. To determine the source (s) of significant difference in the interests mean scores of students in the groups were further subjected to post hoc mean comparisons test using the Bonferroni test of pair-wise multiple comparison test in Table 8 shows that there is a significant difference in the interest mean scores of students taught using PAS, model and CTM, hence, there is significant difference in the interest mean scores of students taught social studies using PAS, model and CTM. This means that the interest mean scores of students in the experimental groups (PAS, Model) are significantly higher than their counterparts in the CTM. This finding is in agreement with that of Mohammed (2017) findings revealed that there was significant difference between the interest mean

scores of students taught Social Studies using models and concept mapping and those taught using conventional instructional tools. Coulibaly (2021) findings revealed that there was a significant difference between the interest mean scores of students taught social studies with PAM and CM.

CONCLUSION

Based on these findings, it was concluded that peer assessment strategy (PAS) and models were more effective in enhancing students' achievement and interest in social studies than conventional teaching method (CTM). This is beaus most of the students exposed to the using peer assessment strategy (PAS) and using Model achieved and demonstrated high interest than those students exposed to conventional teaching method (CTM). Based on these findings, the study made the following recommendations thus: Niger State Ministry of Education should formulate policies that will mandate Social Studies teachers to use peer assessment strategy (PAS) and pictorial models to enhance students' interest and academic achievement in Social Studies and Niger State Ministry of Education should organize workshop/seminar to educate Social Studies teachers on how to create or develop pictorial models and peer assessment strategy (PAS) to enhance students' interest and academic achievement in Social Studies.

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