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Effects of Formative Assessment Strategy on Post Basic Students' Attitude and Achievement in Social Studies in Katsina Metropolis, Nigeria

GLADYS ODUA OTI, ADEYEMO DAUDA ARIYA
University of Jos, Nigeria

HALIMAT UPE SALAU
Federal College ofEducation Katsina, Katsina State, Nigeria.

Abstract. Social Studies is a core subject in post basic schools in Nigeria because of the vital role it plays in the attitudinal development of Nigeria citizenry. A shortfall in the knowledge of the students in Social Studies means that the goal may not be realized, hence the need to improve instructional practices for solving the problem of poor achievement in the subject. This study investigated the effects of formative assessment strategy on post basic students' attitude and achievement in Social Studies in katsina metropolis, Nigeria, using a quasi-experimental design. A simple random sample of 84 Post Basic two (JSS 2) students was selected for the study from a population of 5,996 JS 2 students. A Social Studies attitude questionnaire and Social Studies achievement test were used for data collection. Data were analyzed using descriptive and inferential statistical techniques. The findings revealed that formative assessment lead to increase positive attitude towards Social Studies and improved Social Studies achievement of the students. It was recommended that post basic school teachers should be trained and re-trained to update their knowledge in the use of formative assessment for making the teaching and learning of Social Studies more interesting and rewarding.

Keywords: Formative assessment, Social Studies, students attitudes, achievement.

1. Introduction

Basic education in Nigeria is considered to be one of the rights of the individual. This is because education in Nigeria is considered as an 'instrument per excellence' for effecting national development (Federal Republic of Nigeria (FRN), 2014). The levels of education in Nigeria includes; early childhood education, basic education (lower and post or upper basic), senior secondary education and tertiary education. While the lower basic is the primary school, the post basic (PB) also known as upper basic (UB) education is the junior secondary (JS). In Nigeria, the post basic (JS/UB) is the last three years of the basic education system and students' are usually admitted into this level after they might have passed the primary (lower basic) school leaving certificate examination.

The curriculum at the post basic level is geared towards the development of good virtues, some forms of literacy and vocational skills that would make learners to be law-abiding and contribute meaningfully to national development. At this level, some of the subjects taught include: English Language; Mathematics; Basic Science; Basic technology; Social Studies; Pre-Vocational studies among others (FRN, 2014). Social Studies is a dynamic subject with major focus on how to reshape the thinking patterns; social life; skills; attitudes and values of

recipients.' The subject is aimed at developing in the student appropriate skills and attitudes needed for the development of the community.

The above position was seen to be in line with Ibhafidon (2011) view of Social Studies as a subject that equip students' with the capability to make sound judgments and take appropriate actions that will contribute to sustainable development of human society. It is a subject that is geared towards self realization, better human relationship, individual and national efficiency, effective citizenship, national unity, national consciousness among other forms of behavior of positive value in the society in which the individual lives. The realization of the importance of Social Studies to Nigerian society accorded it a pride of place in the school curriculum as a core subject at the lower and post basic school level (FRN, 2014). From the discourse thus far, no doubt Social Studies is an important subject in Nigeria school curriculum, but what about its pedagogy and other problems associated with teaching the subject? Without effective teaching could the subject still be considered an innovative and versatile?

The problems associated with Social Studies instructional practices made the Katsina State Government to organize workshops from 2010-2017 in Katsina metropolis for teachers to improve their instructional practices. Despite these efforts there is still persistent poor achievement in Social Studies in the Junior School Certificate Examination (JSCE). According to Education Resource Centre, Katsina State, the JSCE result between 2012 and 2017 showed students inability to score high in Social Studies in Katsina metropolis. The failure rate ranged from 60.00% to 84.25%.

Report from National Education Research and Development Council (NERDC) (FRN 2007) indicates that most students are generally weak in their understanding of basic concepts regarding topics in culture, social issues, science and technology. The NERDC report revealed that practicing and pre-service teachers of Social Studies encounter great difficulty when teaching these contents. This observation requires that investigation be carried out on how these concepts can be taught. This is because curriculum contents that are not assimilated by students can lead to poor achievement.

Social Studies instructional practices in most Nigerian post basic schools have continued to be the conventional practices. These practices have been found to promote superficial learning and thus learners' inability to internalize the learned knowledge, attitudes and values and thus poor achievement in school subjects (Teresa- de-Sousa 2007; James & Folorunso, 2012; Mehmood, Hussain, Khalid & Azam,2012; James, Amos & Adeniyi, 2013; Kline, 2013; James, 2014; Benjamin, 2014; Ebuoh,2014;). Therefore for learners' to be able to internalize learned knowledge, attitudes and values, Social Studies should be taught using contemporary classroom practices that enable the learners to conceptualize, analyze and synthesizes issues.

Other factors that have been identified to be responsible for the poor achievement of students in Social Studies in Katsina metropolis include non utilization of instructional materials, student's lack of interest in the subject (Ekpenyong, 2015), lack of appropriate assessment techniques ((Ibhafidon, 2011; Udonkpong, 2015); general apathy by students due to perception of Social Studies as very easy and parents' perception of the subject (Okon, 2014). These observations necessitated this present study that investigated the effects of formative assessment strategy on post basic students' attitude and achievement in Social Studies.

Formative assessment also known as "assessment for learning" is a range of formal and informal assessment procedures employed by teachers during the learning process in order to modify teaching and learning activities to improve student attainment. Formative assessment focuses on classroom practices in which evidence about student achievement is elicited, interpreted, and used by teachers and learners to make decisions about the next steps in instruction that are likely to be better, than the decisions they would have taken in the absence of the evidence that was elicited (Black & Wiliam, 2009).

Formative assessment is concern about the efficacy of teaching and learning, it is against the traditional goal-oriented evaluation model. It emphasizes students' initiative and comprehensive development in cognition, emotion and attitude, it also emphasizes the

process of students' learning, and hence the teacher and learners can both obtain timely the relevant feedback information which gives chances to students to participate in modifying or planning the upcoming classes. To James and Folorunso (2012), James, Amos and Adeniyi (2013) and James (2014) Moyosore (2015), Ugodulunwa and Okolo (2015), Kivuti (2015), Eremina and Reginald (2016), Amina and Hafida (2017), Ozan and (Kincal) (2018), Huisman (2018) Chemeli (2019) and Kenyon, (2019) students who are taught using formative assessment, perform better than those taught using the conventional method. Formative assessment tools include self-assessment forms, learning portfolios, peer reviews, quizzes, questionnaires among others.

At the center of formative assessment is the concept of feedback. According to Ebuoh (2014) feedback is information transmitted to students that allows or encourages students' to organize their thoughts or behaviors in order to improve their learning. This explained why Black (2015) concluded that the impact of formative assessment is dependent on the strength of the feedback provided to students about their learning and to teachers about their teaching. Therefore feedback provided through formative assessment has significant benefits when motivating students, helping students improve their learning, reinforcing students' work and helping students to develop positive attitude towards school subjects. The present study thus made feedback an integral part of the study.

Attitude may be defined as a predisposition to respond in a favourable or unfavourable manner with respect to a given person or object. It is an internal belief that influences personal actions which is learned through a person's experience (Adu, 2012). Therefore when a person believes that a particular person or object is beneficial to him or her, a positive attitude is developed. This is in line with Udonkpong (2015) observation that perception determines the direction of attitude formation. To the author, the perception a student has about a subject influences the students' attitude towards that subject. Teachers thus need to make classroom instructional practices interesting in order to motivate student's interest in school subjects. Also Thiveos and Moroz (2001), Hansberry and Moroz (2001), Khaled (2013), Ayaaba (2013), Ciftci (2013), Benjamin (2014) and Udonkpong (2015) findings revealed that attitude of students towards school subjects can be influenced positively when classroom instructional practices is changed from teacher centred approach to student centred approach To this end, it can be concluded that teachers' instructional practices can influence students' attitude toward school subject. The trust of this research therefore is to determine the effect of formative assessment strategy on students' attitude towards Social Studies.

2. Theoretical Framework, Aim, Research Question and Hypotheses

The theoretical foundation upon which this study is build is the theory of socio-cultural learning by Lev Vygotsky. This theory has had a profound impact in classroom instruction for all subjects at all levels. Vygotsky (1978) postulated that learning is best achieved by determining what the students' have already internalized known as zone of proximal development (ZPD) and what students' are capable of learning through the help of an educational intervention.

The present study employed Vygotsky's theory in the arrangement of the learning tasks within the Formative Assessment Strategy from known to unknown. Efforts was also made before teaching any concept to ascertain what prior knowledge students had and to use that as prerequisite for new learning. The purpose was to examine the effects of formative assessment on Upper Basic Students' attitude and academic achievements in Social Studies in Katsina Metropolis, Nigeria. Also investigated was the direction of attitude of students towards social studies before and after the experiment. In order to achieve these purposes, the following hypotheses were tested at .05 level of significance:

- There is no significant difference between the attitude mean scores of the experimental and control groups before and after exposure to treatment.
- There is no significant difference between the achievement mean scores of

the control and the experimental group before and after exposure to treatment

3. Methodology

3.1 Design

This study adopted a quasi-experimental design, specifically the non-randomized pretest posttest control group design. The choice of this design was based on the fact that it is an experimental study using intact classes. It also provides major control against factors like differential selection of students, testing procedures, instrumentation and statistical regression that could constitute a threat to the internal validity of the experiment. The selection was based on students in the same class of JS 2 suitable to study of the concept Culture, Social issues, Science and Technology within the students' curriculum. Students that were not administered the pretest were not used for the experimental study and the provision of major controls was introduced through the use of a Social Studies teacher in the experimental school.

2.2 Population and Sample

The population for the study consisted of all public post basic school class two (PB2/UP2 /JS2) students in Katsina metropolis, Nigeria. The sample for the study was randomly selected from a population of 5,996 JS2 students distributed among 15 public secondary schools in Katisina metropolis. The choice of post basic 2 students was informed by the fact that the topics practicing and pre-service teachers of Social Studies find difficult to teach are within post basic 2 Social Studies curriculum. Also students at this level were assumed to have acquired some basic concepts, knowledge and skills in Social Studies to enable them answer the pretest items. A sample of 86 students in intact classes from one school within Katsina metropolis was selected. The selection of classes into control and experimental group was done by balloting. This study used 44 students in the intact class as the experimental group and 42 students as the control group. There were 25 male and 19 female students in the experimental group, 24 male and 18 female students in the control group. Altogether, 49 male students and 37 female students from the school participated in the study.

3.3 Instrument for Data Collection

Social Studies Achievement Tests (SSAT) and Students Attitude towards Social Studies Questionnaire (SATSSQ) were the instruments for data collection. The Social Studies achievement test (SSAT) has two sections. Section A which sought demographic data like gender and section B which was a multiple choice, objective test consisting of 50 items with four options lettered A – D adopted by the researchers from NECO questions from 2014-2018. This tests was used for the pre-test and post-test. The SSAT covered the Social Studies themes selected for the study. These themes were culture, social issues, science and technology. In addition, essay items were constructed each week as a teacher-made test. These essay questions were used for assessing students' understanding of subject-matter content and their ability to reason with their knowledge of the concepts under investigation.

Students' attitude towards Social Studies questionnaire (SATSSQ) had two sections. Section A which sought the demographic data like gender and the section B which contained 21 items constructed to determine students' attitude towards Social Studies. The SATSSQ had a 4 point modified likert-type response scale. The respondents (Social Studies students) indicated their degree of agreement or disagreement on a number of statements. The scale included: Strongly Agree (SA); Agree (A); Disagree (D) and Strongly Disagree (SD).

3.4 Validity and reliability of instrument

The content validity of the SSAT was ascertained through the use of a table of specification and by subjecting the instrument to experts' scrutiny. Three experts in Social Studies and two test constructions, expert in Research Measurement and Evaluation Unit from the University of Jos, Nigeria, were requested to vet the items in terms of comprehensiveness, clarity of words, appropriateness of language to the class levels and plausibility of distracters. The

observations of the experts were strictly adhered to accordingly. While the content validity for SATSSQ was also ascertained by subjecting the instrument to the scrutiny of three experts in Social Studies and two test constructions, expert in Research Measurement and Evaluation Unit from the University of Jos, Nigeria, to make sure that the statements used relate only to students' attitudes towards Social Studies, construct validation for the SATSSQ was ascertained through factor analysis.

The reliability of internal consistency of SSAT was determined using Pearson Product Moment Correlation Co-efficient technique. The SSAT was administered to 54 JS 2 Social Studies students of Government Day Secondary school Batagarawa, Batagarawa Local Government Area of Katsina state. The scores obtained through test-retest were used to compute the coefficient of internal consistency of SSAT at 0.05 level of significance. The reliability coefficient of 0.962 was obtained for the SSAT.

The reliability of internal consistency of SATSSQ was ensured using the Cronbach alpha procedure. The researcher administered the final SATSSQ to 54 upper basic 2 Social Studies students from Government Day Secondary school Batagarawa. The responses were used to compute the coefficient of internal consistency of SATSSQ and the result was 0.966.

3.5 Procedure for Data Collection

One research assistant was trained in a five- day training programme by the researchers to assist in the study. The research assistant was a senior Social Studies teacher in a post basic school with a B.Ed. degree in Social Studies with three years' post qualification experience. These qualities were necessary to ensure that the teacher had good knowledge of the subject matter and also possessed the professional qualification required for the successful conduct of the study. The objectives of the training was to enable the teacher acquire the necessary competencies for implementing the experimental conditions. The items that were addressed during the training included; the objectives of the schedules, review of the lesson plan prepared by the researcher, review of contents and topics, familiarization with the key concepts in the study, review of teacher and students' activities, test administration, scoring of tests papers, feedback and remediation. Before the start of the experiment, students that did not form part of the experiment were used in illustrating to the research assistant the techniques of formative assessment strategy. On the fifth day of the training, the research assistant was given the opportunity to demonstrate the use of the strategy in teaching the experimental group and the use of conventional method with the control group before the commencement of the experiment.

The SATSSQ was administered within 25 minutes followed by the SSAT which lasted for 50 minutes as pretest to both groups for the purpose of determining students' attitude towards Social Studies and to ascertain student's prior knowledge of the concept, culture, social issues, science and technology before the treatment was given to the experimental group. During the period of testing, the researchers and research assistant ensured that the students were not cheating. Students were required to thick the options that suit their attitude towards the subject as well as circle the correct option out of four alternatives provided for each question on the question paper. After the time allocated for the test, the scripts were collected, marked and scored using a marking scheme.

The Formative Assessment schedule was developed by the researchers, using the post basic 2 curriculum. The scheme of work was split into weeks and days. Sixteen lessons were taught within nine weeks; weekly formative assessments; feedback and the remediation procedure, which focuses on correction of misconceptions. The daily topic was developed into a lesson plan. The objectives were tested using formative assessment during the lessons. Assessments were conducted at the beginning of each lesson, during lesson delivery to monitor students'strengths and weaknesses, and at the end of the lesson. Assignments were given at the end of each lesson, weekly feedback and remediation of areas of difficulty encountered during instruction were addressed. The schedule was subjected to evaluation by three secondary

school Social Studies teachers and two experts from the University of Jos.

While the experimental group was taught using this Formative Assessment strategy, the control group were exposed to a conventional method of teaching. Although they were taught all the topics using lesson plans and were given a monthly test, there were no feedback and remediation. The researchers frequently visited the classes during each treatment session to ensure that the research assistant complied with the instructions given in the schedule. At the end of the nine weeks of teaching, the posttest on SATSSQ and SSAT were administered to both the experimental and control groups. The posttest lasted for one hour fifteen minutes, twenty-five minutes for the SATSSQ and fifty minutes for the SSAT. The pretest and posttest results on the SATSSQ and SSAT were compared to obtain the gain scores of the experimental and control groups. The scripts were collected after the posttest and given to the researchers who scored them personally using the marking scheme.

For SSAT, two marks were awarded to every correctly answered item in the SSAT. The highest obtainable mark was 100 while the lowest score was 0. The scores in the first administration of the test were the pretest scores and the score in the second administration of the same test were the posttest scores. With respect to SATSSQ, scoring, for positive items were; strongly Agree (SA) = 4 points; Agree (A) = 3 points; Disagree (D) = 2 points Strongly Disagree (SD) = 1 point. For negative items, it was: Strongly Agree =1 point; Agree =2 points; Disagree = 3 points; Strongly Disagree = 4 points. The highest scores were 84 and the lowest scores were 21. The data collected were analysed using frequency counts, means, standard deviation, t-test, and analysis of covariance (ANCOVA) techniques. The results are presented in tables.

4. Results

4.1 The direction of attitude of the experimental and control groups before the experiment

Table 1: Result of the Direction of Attitude of the Experimental and Control Groups before the Experiment

		Control Pre- test					Experimental Pre-test				
S/No	Items	SA	A	D	SD	Total	SA	A	D	SD	Total
1	Social Studies is my favourite subject	00	00 (39.0%)	16 (61.0%)	25 (100%)	41	00	00	22 (50%)	22 (50%)	44 100%
2	I like attending Social Studies Lesson	00	00	16 (39.0%)	25 (61.0%)	41 (100%)	00	00	00	44 (100%)	44 100%
3	During Social Studies lesson I copy note in other subjects	16 (39.0%)	25 (61%)	00	00	41 100%	22 (50%)	22 (50%)	00	00	44 100%
4	I am happy when the Social Studies teacher is absent from the class	16 (39.0%)	25 (61.0%)	00	00	41 100%	22 (50%)	22 (50%)	00	00	44 100%
5	I usually complete My Social Studies Assignment in time	00	00	24 (58.5%)	17 (41.5%)	41 (100%)	00	00	44 (100%)	00	44 100%
6	I enjoy studying Social Studies on	00	00	16 (39.0%)	25 (61.0%)	41 100%	00	00	22 (50%)	22 (50%)	44 100%

	My own											
7	I enjoy pasting Social Studies write -ups on the wall of my room	00	00 (39.0%)	16 (61.0%)	25 100%	41			22 (50.0%)	22 (50.0%)	44 100%	

Table 1 showed that the direction of attitude of students' in both control and experimental groups towards Social Studies before the experiment tilted toward the negative. This is because the responses to all the items by students' from both groups indicated students' disfavour for the subject.

4.2 The direction of attitude of the experimental and control groups after the experiment

Table 2: Result of the direction of Attitude of the Experimental and Control Groups after the Experiment

		Control Pre- test					Experimental Pre-test				
S/No	**Items**	**SA**	**A**	**D**	**SD**	**Total**	**SA**	**A**	**D**	**SD**	**Total**
1	Social Studies is my favourite subject	00	00 (65.1%)	28 (34.9%)	15 (100%)	43 (40.0%)	26 (57.8%)	26 (2.26%)	1 100%	00	45
2	I like attending Social Studies Lessons	00	00 (83.7%)	36 (16.3%)	7 (100%)	43 (42.2%)	19 (55.6%)	25 (2.5%)	1 100%	00	45
3	During Social Studies lesson I copy note in other subjects	7 (16.3%)	36 (83.7%)	00	00 100%	43	00 (2.2%)	1 (17.8%)	8 (80.3%)	36 100%	45
4	I am happy when The Social Studies Teacher is absent From the class	16 (37.2%)	27 (62.8%)	00	00 100%	43	00 (2.2%)	1 (22.2%)	10 (75.5%)	34 100%	45
5	I usually complete my Social Studies Assignment in time	00	00	15 (34.9%)	28 (65.1%)	43 (100%)	32 (71.1%)	11 (24.4%)	1 (2.2%)	1 (2.2%)	45 100%
6	I enjoy studying Social Studies on My own	00	00	28 (65.1%)	15 (34.9%)	43 100%	37 (82.2%)	7 (15.6%)	1 (2.2%)	00 100%	45
7	I enjoy pasting Social Studies write-ups on the well of my room	00	00 (34.9%)	15 (65.1%)	28 100%	43	00	00 (46.7%)	21 (53.3%)	24 100%	45

Table 2 showed that after the experiment, the direction of attitude of students in the control group towards Social Studies remained negative. Although there was shift in the direction of attitude either from strongly disagree to disagree, or from agree to strongly agree, students' response in this group still indicated a disfavour towards Social Studies after the experiment. On the other hand, the direction of attitude of students in the experimental group towards Social Studies after exposure to treatment tilted towards the positive direction. Although the direction of attitude towards the last items (I enjoy pasting Social Studies write-ups on the wall of my room) before and after the experiment remained the same (negative direction), the response of students in this group indicated a favour for Social Studies after the intervention. This is contrary to the students' responses before the experiment.

4.3. Attitude mean scores of students before and after the experiment

Table 3: Result of Analysis of Covariance (ANCOVA) of students' overall Attitude Mean Scores in SATSS before and after Experiment.(Tests of Between-Subjects Effects)

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	5.556[a]	2	2.778	306.911	.000	.883
Intercept	1.367	1	1.367	151.048	.000	.651
PRE_TEST	.016	1	.016	1.818	.181	.022
GROUPS	3.548	1	3.548	392.022	.000	.829
Error	.733	81	.009			
Total	499.583	84				
Corrected Total	6.289	83				

The F calculated for SATSS was 392.022 against the critical value of .829 at the 0.05 level of significance, 1 df for numerator and 81 df for denominator. Since the calculated value exceeded the critical value, the null hypothesis of no significant difference in the mean attitude scores is rejected. It is therefore inferred that the effect of formative assessment strategy on students' attitude towards Social Studies is significant.

4.4. Achievement mean scores of students before and after the experiment

Table 4: Results of Analysis of Covariance (ANCOVA) of students' overall Achievement mean scores in SSAT before and after the Experiment.(Tests of Between-Subjects Effects)

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	25159.251[a]	2	12579.626	1601.697	.000	.976
Intercept	1585.804	1	1585.804	201.912	.000	.716
PRE_TEST	2.820	1	2.820	.359	.551	.004
GROUPS	23961.977	1	23961.977	3050.951	.000	.974
Error	628.315	80	7.854			
Total	386544.000	83				
Corrected Total	25787.566	82				

The F calculated for formative assessment strategy in SSAT was 3050.951 at the 0.05 level of significance and 80 degree of freedom (df) while the F critical value was .974 Since F calculated (3050.951) was greater than f critical (.974), the decision was to reject the null hypothesis. This implies that there is a significant ($P<0.05$) difference between the two groups (experimental and control) as measured by the students' mean SSAT scores using Analysis of Covariance (ANCOVA). This appears equally to suggest that the early observed difference between the means of the two groups was not attributed to chance error but due to the treatment.

5. Discussions

The findings revealed that the direction of attitude of students' towards Social Studies in both control and experimental groups before the experiment tilted toward the negative direction. This is because students' responses to all the items by both groups indicated students' disfavour for the subject. However, while the direction of attitude of students' towards Social

Studies in the control group after the experiment still tilted towards the negative direction, the direction of attitude of students' towards Social Studies in the Experimental group after the experiment tilted towards the positive direction. This is because the responses of students in the experimental group after the experiment indicated students' favour for Social Studies.

This findings is in line with Thiveos and Moroz (2001), Hansberry and Moroz (2001), Khaled (2013), Ayaaba (2013), Ciftci (2013), Benjamin (2014) and Udonkpong (2015) findings that attitude of students towards school subjects can be influenced positively when classroom instructional practices is changed from teacher centred approach to student centred approach. Therefore the study has shown that formative assessment in the form of divergent classroom questions, assignment, weekly test, feedback and remediation make students develop love for Social Studies and thus has positive effects on student's attitudes towards the subject. This in turn enhanced learning and improves achievement.

The findings revealed that while the pre-test and post-test Social Studies achievement of students in the control group, as well as the pre-test scores of students in the experimental group were generally low, the posttest scores of students in the experimental group is higher than students' pretest scores. The poor performance in the pre-test of students' in both groups is in line with the National Examinations Council (NECO) Chief Examiner's report that candidates exhibited significant weakness in culture, social issues, science and technology. This is also in agreement with NERDC (2007) observation that culture, social issues science and technology are areas of difficulty for practicing and pre-service teachers of Social Studies during classroom instructional practices.

Again, the poor performance of students in the control group is in agreement with the findings of Teresa- de- Sousa (2007), James and Folorunso (2012), Mehmood, Hussain, Khalid and Azam (2012), James, Amos and Adeniyi (2013), Kline (2013), James (2014), Benjamin (2014), Ebuoh (2014), Moyosore (2015), Ugodulunwa and Okolo (2015), Kivuti (2015), Eremina, Reginald (2016), Amina and Hafida (2017), Ozan and Kincal (2018), Huisman (2018) , Chemeli (2019) and Kenyon (2019). These scholars revealed that conventional method used in teaching students, is ineffective and could lead to poor performance of students'. This explains the poor performance of students in the control group who were taught using conventional classroom practice and the high performance of students in the experiment group who were taught with formative assessment strategy. However this finding is contrary to Ruland (2011) findings that conventional method is supportive of effective and efficient subject learning.

The result of this study also shows that the use of formative assessment improved students' understanding of the concepts taught and the strategies employed improved their achievement. With formative assessment, teachers are able to assess students often and to re-teach concepts students' find difficult to learn in culture, social issues, science and technology. this agrees with the earlier findings of James and Folorunso (2012), James, Amos and Adeniyi (2013) and James (2014), that students who are taught using formative assessment, perform better than those taught using the conventional method. Generally, the findings of this study corroborated earlier findings and demonstrated the efficacy of the Formative Assessment Strategy developed and validated in this study.

6. Conclusion

The focus of this study was to establish the efficacy of formative assessment strategy for increasing post basic school students' attitude towards Social Studies and improving their achievement in the subject. The ultimate goal was to solve the problem of poor achievement in Social Studies, particularly in the concepts culture, social issues, science and technology. The findings of the study has shown that formative assessment can be used to increase students' attitude towards Social Studies in order to improve achievement of post basic school students in the concepts culture, social

issues, science and technology in particular and social studies in general.

One limitation of the research is that opinions of the students were sought on their attitude towards the subject without triangulation with other data sources to validate their responses. In future research, the use of mixed methods approach and the application of information and communication technology driven formative assessment technique could yield interesting comparisons. Nonetheless the findings have implications for Social Studies education. Therefore Social Studies teachers should be trained and re-trained on the development and use of formative assessment strategies in teaching for effective implementation of post basic school curriculum in Social Studies. This will go a long way in meeting the learning needs of students in the subject and solving the problem of fluctuation in the performance in social studies at post basic school level of education in Nigeria.

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