

THE IMPACT OF CONTEXTUALIZED LEARNING INSTRUCTIONAL METHOD ON STUDENTS' ACHIEVEMENT IN SOCIAL STUDIES IN AKWA IBOM STATE

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ABSTRACT

The study Investigated Contextualized Learning Instructional Method and Students' Academic Achievement in Social Studies by adopting an experimental study of pre-test, post-test control group design. Three research questions and three null hypotheses guided the study. The sample of the study consists of 225 JS3 students and were selected using the stratified proportionate sampling technique. The instrument, SSAT used had reliability coefficient of 0.83 using the Pearson Product Moment Correlation formula (PPMC). Data generated were analyzed using mean and standard deviations for the research questions while analysis of covariance (ANCOVA), Paired t-test and independent t-test were used to test the hypotheses. Significant deference exist in schools ownership as private school students' performed better than their public school counterparts when taught with CLIM and TCM. Also, gender differences occurred in the academic achievement of students as male students outperformed their female colleagues..

Key words: SSAT, CLIM, TCM, mean gain, ANCOVA

INTRODUCTION

Contextualization refers to a collection of instructional strategies designed to link the learning of foundational skills and academic content by focusing teaching and learning on concrete applications in a specific context that is of interest to the student. A conception of teaching and learning that helps teacher relate subject matter content to real word applications, teaching basic skills in the context of disciplinary topic areas Mazzeo (2008) and Perin (2011). Contextualized learning include the characteristics;: abstract ideas through sensory method; personalizes the instruction for each student; effectively combine academic learning with relevant career application; strive to focus on concrete skills and knowledge required for work and life; contextualized learning presents information in smaller increments. Contextualized learning learning strives to emphasize problem-solving and is anchored in teaching to students' varied life contexts

The concept of contextual learning is based on the premise that learning can be more meaningful if the resultant effect can be connected to workplace, real world and real life contexts. Learning therefore is simply the process of adjusting our mental models to accommodate new experience. It considers the engagement of student in meaningful experience as the essence of learning, and also the shift from passive transfer of information to active problem solving Heinisch, Molenda, Russell & Smaldino, (2002).

CTL also known as contextualized instruction has been defined in different ways based on the intent of the group championing it use. Most recently, the United States Department of Education, Office

of Vocational and Adult Education (2001) characterized CTL as a “conception of teaching and learning that helps teachers relate subject matter content to real world situations” Berns & Erickson,(2001). Mazzeo (2008) broadened the definition, describing CTL as a “diverse family of instructional strategies designed to more seamlessly link the learning of foundational skills and academic or occupational content by focusing teaching and learning squarely on concrete application in a specific context that is of interest to the students.

Satriani, Emilia & Gunawan, (2012) defined CTL as an approach that focuses on students’ center. The purpose of the approach is to motivate the learners to take charge of their own learning and to relate between knowledge and its application to the various contexts of their lives.

National Research Council (1996) defined contextual learning as learning in which teachers relate subject matter to real world situations. The above definitions emphasized that contextualization is an activity conducted by speakers and hearers, not in a static structure, but changes as the participant interact. Therefore, there is never a single “context” that can be imposed on a whole set of data but rather multiple contexts that are created and shaped by participant during interaction.

Bell and Gilbert (1996) pointed out that contextualized educators focus on making connections between factors and fostering new understanding in student’s responses and encourage students to analyze, interpret, and predict information. Teachers also rely heavily on open ended questions and promote extensive dialogue among students. Contextualization calls for the elimination of grades and standardized testing. Instead, assessment becomes part of the learning process so that students play a larger role in judging their own progress. Contextualized learning aims at increasing achievement and interest of the students. Research findings show that students learn best when what they are learning is connected to what they already know and when they are actively engaged in their own learning (American Association for the advancement of Science, (1993); National Research Council, (1996) and Brown, (1998).

Johnson (2002) describe CTL as a “holistic system” with several components working together to create a systematic learning approach. This suggests that instruction and learning derives from the whole and not from a discreet part. She argues that these components jointly create a network by which students are able to create meaning and retain information. The component include: making meaningful connections; doing significant work; self-regulated learning; collaborating, critical and creative thinking, nurturing the individuals, reaching high standards, and using authentic assessment.

Contextualization is concerned with how subject content and culture relate to one another across geographic space and down through time. In Heldref publications, the authors emphasized that contextualization is the act of placing event in a proper context. They pointed at three activities that help students think contextually as they read through documents as: (i) providing background knowledge (ii) asking guiding questions, and (iii) explicitly modeling contextualized thinking.

Context and culture is being regarded by Bauman and Briggs as the shift from looking at a context to looking at contextualization as a process within the realm of performance studies. They also state that “communicative context are not dictated by the social and physical environment but emerge in negotiations between participants in social interactions”. They argue that researchers are faced with multiple contexts and the best way to interpret a communicative event is to conduct “agent-centered view of performance. Therefore, when studying “cultural rituals and traditions”, scholars can better grasp what these cultural practices mean to people performing them.

From the literatures considered above, not much has been done on the influence of CLIM on students’ achievement in social studies on the ground of location, gender and the difference in mean achievement of students taught with CLIM and TCM. This constitute the thrust of our study.

Objectives of the Study

1. To ascertain if CLIM influences students’ mean achievement in social studies based on school ownership.
2. To find out the influence of CLIM on students’ mean achievement based on their gender.
3. What difference exists in the mean achievement of students’ taught with CLIM and TCM based on their gender?

Research Questions

The following research questions guided the researcher in the conduct of the study

1. To ascertain if CLIM influences students’ mean achievement in social studies based on school ownership.
2. To find out the influence of CLIM on students’ mean achievement based on their gender.
3. What difference exists in the mean achievement of students’ taught with CLIM and TCM based on their gender?

Research Hypotheses

The following null hypotheses (Ho) guided the researcher in making decision concerning the study being investigated.

1. How does CLIM influence students’ mean achievement in social studies based on their schools ownership?
2. To what extent does CLIM influence students’ mean achievement in social studies based on their gender?
3. There is no significant difference in the mean achievement of students taught with CLIM and TCM based on their gender.

Significance of the Study

The study will be of immense benefit to the social studies students and teacher in the junior secondary schools, ministry of education and the stake holders of education.

The interest of the learner in social studies learning is maximally protected. The social studies learner is no longer in a fix on why studying a given concept as the real life application of the concept outside the classroom is certain and known. Realizing the importance of studying the concept and their applications to human lives help the learner to see how such knowledge applies in our society. It will open the eyes of the learner to career prospects, other than that offered by the conventional approach that is academic intention.

The social studies teachers stands to gain in that they will no longer spend much time attempting to explain imaginary concepts inherent in some social studies topics or teaching in isolation. The teacher thus builds a lesson on learners' previous experiences to ensure that no missing links exists, and relates their relevance to life in the society. The knowledge reservoir of the teacher is increased. The teacher becomes a co-learner, rather than a custodian of knowledge. Hence, a learning community of learning environment enables the teachers and learners to learn from one another. Such package will also enable the teachers to design learning environments that incorporate as many different forms of experiences as possible-social, cultural, physical in working towards the desired outcomes.

The ministry of education (MOE) also stands to benefit from the study. As a sub-system designed with the responsibility of creating the needed manpower of any given country, it strives to provide qualitative education to her citizenry. Therefore CTL in social studies will serve as a reference material to the ministry of education and policy maker

CTL in social studies instruction will be of significance to the instructional designers in that it will not only ensure the statement of objectives, but also include making such objectives known to the learners before hand. It will also help in establishing templates on which lessons are anchored, real-life experiences that relates to the lesson, and learning principles.

Scope of the Study

The main focus of this study was on contextualized learning instructional method. The study was delimited to Ikot Ekpene and Abak Local Government Area, Akwa Ibom North West of Akwa Ibom State, Nigeria. Four public and four private co-educational junior secondary schools from the area were used. Two hundred and twenty five (225) JS3 social studies students were used for the study, while eight (8) social studies teachers (4 from public and 4 from private) were used in teaching the students 5 topics for a period of six weeks concurrently using the two methods of contextualized and teacher centered methods

Area of Study

The study covers 4 public and 4 private secondary schools in Ikot Ekpene and Abak Local Government Areas under Akwa Ibom North West. The schools includes State College, Ikot Ekpene (Urban Public), State Secondary Commercial School, (urban public), palmgrove Christian Seminary, Utu Abak (Urban private)

Community Secondary Commercial School, Ikot Inyang, Ikot Ekpene (Rural Public)

Central Comprehensive Secondary School: Afaha Obong, Aba (Rural Private) Secondary Commercial School, Ndon Ide Ikot Ekpene (Rural Public)

Maria Brown Comprehensive Secondary School Ikot Edong, Abak (Rural Private) Secondary Commercial School, Ndon Ide Ikot Ekpene (Rural Public) and Maria Brown Comprehensive Secondary School Ikot Edong, Abak (Rural Private)

Research Design

The study adopted a quasi-experimental design of non-randomized pre-test, post-test control group. This design involves the administration of pre-test and post-test to two intact group of experimental and control. This design was adopted because of the use of intact class in the study in order to control and eliminate Multiple Treatment Interference (MTI)

Population of Study

The population for this study covered students of the eight (8) secondary schools in Ikot Ekpene and Abak local government areas of Akwa Ibom State. This was made up of six thousand, eight hundred and sixty eight (6,868) JS3 students representing 95% of the total population of the students in the concerned local government areas.

Sample and Sampling Technique

A stratified proportionate sampling technique was used to select 225 JS3 Social Studies students from four (4) public and four (4) private co-educational secondary schools both in Ikot-Ekpene and Abak L.G.A. of Akwa Ibom State based on location, 4 urban and 4 rural and gender male and female. A random sampling technique was used to designate two schools from each of the locations (urban and rural) as “experimental” and “control” respectively.

Instrument used for data collection

The instrument used for the collection of data for the study was Social Studies Achievement Test (SSAT). The SSAT was developed by the researcher and consisted of fifty (50) multiple choice items and intended to determine students’ academic achievement in Social studies. There were 4

options of choice for each item of the question. The SSAT was used as Pre-test, reshuffled and used as post-test on all study groups.

Students in the experimental group were taught with contextualized instructional method (CLM) while same topics were taught to control groups using Teacher Centred Method (TCM) for six weeks.

Validity of the Research Instrument

Copies of the SSAT were given to subject specialist especially social studies teachers as well as experts in educational measurement and evaluation for vetting. The specialist and experts vetted the SSAT in terms of face validity, plausibility, content validity, simplicity of vocabulary, sentence structure and the relevance to the content. The SSAT used was based on the input in terms of correction effected and comments by the measurement experts and subject specialist.

Reliability of Instrument

The reliability of the SSAT instrument for this study was conducted using test re-test method on thirty (30) students randomly selected from the research population who were not part of the sample of the study. The scores were analyzed using the Pearson Product Moment Correlation (PPMC) statistics with a reliability coefficient of 0.83

Procedure for Data Collection

The researcher personally administered the social studies Achievement Test as pre-test to both experimental and control groups. After completing the instrument, the researcher collected them back immediately and their performances were scored in percentages using the marking guide prepared for the study. Adequate time was given for the completion of the test.

Method of Data Analysis

The data were analyzed with reference to the research questions and hypotheses by using differential analysis including mean, standard deviation, t-test (independent and paired) and two way analysis of covariant.

Results

Table 1: Mean and standard deviation of CLIM on public and private school students' mean achievement

School type	N	Pre-test		Post-test		Mean Gain
		Mean	SD	Mean	SD	
Public	86	25.12	4.89	35.24	5.87	10.12
Private	65	27.08	4.25	39.66	5.53	12.58

From table 1, students in private schools had a mean gain of 12.58 while those in public schools had a mean gain of 10.12. This indicated a higher mean achievement by private school students than their public school counterpart by a mean gain difference of 2.46. Hence CLIM had influenced students' mean achievement in social studies based on their schools ownership to the merit of private school students.

Table 2: Mean and standard deviation of CLIM on male and female students' mean achievement

Gender	N	Pre-test		Post-test		Mean Gain
		Mean	SD	Mean	SD	
Male	88	25.48	4.87	37.67	6.29	12.19
Female	63	26.63	4.43	36.41	5.83	9.78

From table 2, the mean gain of male student is seen higher than that of their female counterparts with a mean gain difference of 2.41. This means that CLIM had influenced students' mean achievement in social studies based on their gender which is favorable to the male students.

Table 3: Mean and standard deviation on the mean achievements of male and female students in CLIM and TCM groups.

Group	Gender	N	Pre-test	SD	Post-test	SD	Mean gain
			Mean		Mean		
CLIM	Male	88	25.48	4.87	37.67	6.29	12.19
	Female	63	26.51	4.30	36.41	5.83	9.90
	Total	151	25.91	4.65	37.15	6.11	11.24
TCM	Male	20	24.80	4.58	30.90	6.12	6.10
	Female	54	25.48	3.71	29.35	4.09	3.87
	Total	74	25.30	3.94	29.77	4.72	4.47
Total	Male	108	25.35	4.80	36.42	6.77	11.07
	Female	117	26.03	4.05	33.15	6.19	7.12
	Total	225	25.71	4.43	34.72	6.66	9.01

From table 3, it is clear that for the CLIM group, the pre-test and post-test means scores for the male students are 25.48 and 37.67; this offered a mean gain of 12.19.

The mean scores of the female students taught with CLIM were 26.51 and 36.41 respectively for pre and post test. This gave rise to a mean gain of 9.90. Based on their mean scores, it is deduced that the male had a higher mean gain than their female counterparts with a difference of 2.29. Then considering the group irrespective of their gender, for the CLIM group their mean scores are 25.91 and 37.15 respectively for pre-test and post-test, which gave rise to a mean gain of 11.24 by the CLIM students in general.

In another dimension, considering the TCM group, Table 3 shows that the mean scores of the male students are 24.80 and 30.90 for their pre and post test respectively while the mean gain yields 6.10. Then the mean scores of the female students in TCM group are 25.30 and 29.77 respectively for their pre and post tests and a corresponding mean gain of 4.47 for the students taught with TCM. So those in CLIM had a higher mean gain than the TCM group with a difference of 6.77.

An objective assessment of Table 3 indicates that when the students were considered only on the basis of their gender irrespective of groups, the male students mean scores are 25.35 and 36.42 for pre-test and post-test respectively giving a mean gain of 11.07. The female students had mean scores of 26.03 and 33.15 respectively for their pre and post-test giving a mean gain of 7.12. This means that the male students generally outperformed their female counterpart with a difference of 3.95.

Table 4: Mean standard deviation and independent t-test analysis of CLIM on public and private school students.

Ownership of schools	N	Pre-test		Post-test		df	t-cal	Significance
		Mean	SD	Mean	SD			
Public	86	25.12	4.48	35.24	5.87	149	4.70	0.000
Private	65	27.08	4.25	39.66	5.53			

Result in table 4 showed that the calculated t-value of 4.70 was obtained at a degree of freedom 149 and 0.000 level of significant. This is less than 0.05 the probability level for this study ($P < 0.05$). Therefore null hypothesis 3 (H_{03}) for this study was rejected at 0.05 alpha level as there was a significant difference in students' mean achievement in favor of the private school students.

Table 5: Mean, standard deviation and independent t-test of CLIM on male and female students' mean achievement

Gender	N	Pre-test		Post-test		df	t-cal	Significance
		Mean	SD	Mean	SD			
Male	88	25.48	4.87	37.67	6.29	149	1.25	0.214
Female	63	26.63	4.43	36.41	5.83			

Result in table 5 revealed that the t-calculated (t-cal) value of 1.25 was obtained at the degree of freedom 149 and at a significant level of 0.214. This is greater than 0.05 probability level for the study ($P > 0.05$). Based on this finding the null hypothesis 4 (H_{04}) for this study was not rejected at 0.05 confidence level. This showed that there was no significant difference of CLIM on the mean achievement of students in social studies based on their gender.

Table 6: Summary of two way analysis of covariate (group & gender) on the mean achievements of students.

Source of Variance	Sum of Squares	Df	Mean Score	F	Significance
Pre-test (covariate)	2521. 75	1	2521. 75	120.003	0.000
Group	1628. 68	1	1628. 68	77. 50	0.000
Gender	175. 33	1	175. 33	8.34	0.000
Group & gender	0.006	1	0.006	0.000	0.986
Error	4623. 08	220	21 .014		
Total	9939.36	224			

From Table 6, the calculated F-value for the group is 77.50 obtained at the degrees of freedom of 1 and 220 at 0.000 ($p < 0.05$). Hence the treatment group significantly influences the mean achievement of the students in favor of the CLIM group.

Furthermore, Table 6 shows that for the gender, the calculated F-value 8.34 was obtained at the degrees of freedom 1 and 220 at 0.00 level of significance ($p < 0.05$) which is lower than 0.05, the chosen level of probability. Thus the mean achievements of the students differ significantly based on their gender, in favor of the male.

It is also shown in table 6 that the calculated f-value for interaction 0.0 was obtained at the degrees of freedom 1 and 220 at 0.986 ($p > 0.05$), which is greater, than 0.05, the chosen level of probability. Thus, null hypothesis was not rejected implying no significant interaction between treatment groups and gender on the mean achievement of students in social studies existed.

Major findings

- i. School ownership does affect mean achievement of students when taught using the same method of teaching
- ii. School ownership does not interact with gender to affect mean achievement of students
- iii. There was no significant interaction effect between the treatment group, school ownership and gender on the mean achievement of the students. Hence the null hypotheses were not rejected at 0.05 alpha level

Conclusion

In the present study, it can be concluded that contextualized learning method is more facilitative than the Teacher Centered Method in terms of students' achievement. Also, location of schools had reasonable effect on students' mean achievement when taught with similar teaching method.

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