TEACHING ENVIRONMENT AND STUDENTS’ ACADEMIC ACHIEVEMENT IN SOCIAL STUDIES IN SECONDARY SCHOOLS IN CROSS RIVER STATE, NIGERIA

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Abstract

This study examined teaching environment and its relationship with students’ academic achievement in Social Studies in Cross River State, Nigeria. The researchers adopted ex-post facto research design for the study. The population is the study comprised 15,301 JSS III students and samples of 1,200 students were selected through stratified random sampling technique from the three educational zones in the State Secondary Education Board. The researchers collected data with learners environment structured questionnaire developed based on the a five-point likert scale which reliability estimate ranged from 0.7 to 0.8 and achievement test scores adopted from junior secondary school certificate examination from the State ministry of Education in 2012. Pearson Product Moment Correlation (PPMC) was used to analyze data collected. The hypotheses were tested at .05 level of significance and 1198 degree of freedom to ascertain the extent of relationship that exists between these variables and students’ academic performance. The result showed a negative relationship between teachers’ effectiveness in the evaluation of students and students’ academic achievement in Social Studies. Also, the result showed a negative relationship between physical layout of the classroom and students’ academic achievement in Social Studies. It was recommended that teachers’ effectiveness in students’ evaluation and physical layout of the classroom should be encouraged if students’ academic achievement in Social Studies must improve.

Teaching environment and its relationship with the achievement of students’ in Social Studies has been a matter of concern for educationists, students, government and the general public. This might be because of its recent introduction into the Secondary
School curriculum and the discouraging performance of students compared to their performances in Business studies. Teaching environment comprised so many sub-elements, but this study has limited it to teachers’ effectiveness in students’ evaluation and the physical layout of the classroom. Research findings according to Yimaz (2009), has shown that students typically have a negative attitude towards school. Experience has shown that most students complain about their scores in examination and also the physical layout of the classroom in which learning takes place.

Basically, a Social Studies teacher is expected to be a facilitator of learning and must be competent in the evaluation of student’s performance as well as in creating an encouraging, physical layout of the classroom to make the teaching and learning environment more conducive for the learners. Classrooms need be decorated with the required teaching and learning materials and the utilization of this may facilitate learning (Foote, 2011). Adaralegbe (1980) defined social studies as the totality of experiences based on man’s interminable problem in given environments that are normally responsible for man’s web of interactions. In the same dimension, Ekpenyong (2005), McFarland (2004) and the Board of Directors of National Council for Social Studies (2004) summarily described Social Studies as an individual’s ability to cope with various life situations to promote citizenry and civilizations.

These two variables teacher’s effectiveness in evaluation of students and layout of the classroom are necessary for effective teaching and learning of Social Studies. The question of whether they are related to students’ performance in Social Studies formed the focus of this research study.

Theoretical Background

The researchers found it important to have an insight into the background of some theories that support the research study and where the basis of the problem was identified and hypotheses formulated. The researchers therefore examined the Systems theory since the study had to do with relationships and interactions between and among variables within the social system, in this context, the school. Kimbrough and Nunnery (1983) were concerned with the administration of complex organizations saw an organization as a system.

Bertalanfy (1968) is generally considered as the father of the general system theory whose ideas was proposed in 1947. Inyang (2008) saw a system as a set of interrelated parts that operate as a whole to achieve common goals. A system therefore comprises components that are interrelated and interdependent and tied together in time and space, (Kimbrough and Nunnery, 1983, Peretomode, 1999).

A system may be characterized as open or close (Inyang, 2008). All organizations (including the school) are open systems because their survival depend on interactions with inputs from external environment. These inputs include raw materials, human resources and financial resources that may be transformed into outputs. The
external environment reacts to these outputs through a feedback loop and this becomes an input for the next circle of the system. This is shown in Fig 1.

![Diagram](attachment://diagram.png)

**Fig. 1: The Open System Process**  
Source: Management Theory, Principles and Practice Inyang (2002: 112)

The school is an example of a social system. A social system according to Parson (1951) is a plurality of individual actors interacting with each other in a situation, which has at least a physical or environmental aspect. A social system consists of inputs, a processing unit, outputs, feedback and environment.

The implication of the theory is very important to this study because the efficiency and effectiveness of input, process and output are the areas on which this research is focused. Moreso, the theory is very relevant to this study because it deals with the relationship and interactions between and among inputs to be transformed into outputs. It is through the feedback medium (as seen in Fig 1) that the environment (parents, teachers, students, public) complains about the outputs (poor academic performance in Social Studies) that even formed the basis for this study. The study sought to examine the relationships that exist between teachers effectiveness in student’s evaluation, physical layout of the classroom and student’s achievement in a given subject – Social Studies.

Considering the systems theory, it sounds logical to expect variations in inputs to be reflected as variations in output. Specifically, do input variables such as teachers effectiveness in students evaluation and physical layout of the classroom relate to system output such as achievement of students in social studies? If, for example, teachers are found to score high in his effectiveness in student’s evaluation, will this also result in a high score in student’s achievement?
Statement of the Problem

The comparative poor academic achievement of students in Social Studies examinations probably caused by teachers ineffectiveness in the evaluation of students and unfriendly classroom layout/appearance in which the students have their studies formed the problem of this study. As seen in table 1, examination results 2010-2012 showed that 48, 49, and 42 percents of candidates who sat for JSS III Social Studies examination were successful. Udonwa (2001) and Essien (2004) asserted that without effective evaluation of students by the teachers and a conducive physical layout of the classroom for students to provide a continual support and encouragement, there will be failure and the students self-esteem may be undermined. This could be traced to the feedback channel in the system theory which guided this study and from which the hypotheses formulated were drawn. The study therefore attempted to answer the following questions:

i) Has teachers’ effectiveness in students’ evaluation any significant relationship with students’ achievement in Social Studies?

ii) Has physical layout of the classroom any significant relationship with students achievement in Social Studies?

Table 1
Summary of Result of JSS III Students from 2010-2012 in Social Studies Examination

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage pass</th>
<th>Percentage fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>48</td>
<td>52</td>
<td>100</td>
</tr>
<tr>
<td>2011</td>
<td>49</td>
<td>51</td>
<td>100</td>
</tr>
<tr>
<td>2012</td>
<td>42</td>
<td>58</td>
<td>100</td>
</tr>
</tbody>
</table>


Purpose of Study

The purpose of the study was to examine the relationship between teaching environment and academic achievement of students in Social Studies. The specific objectives were:

i) to examine the relationship between teachers’ effectiveness in evaluation of students and students’ achievement in Social Studies.

ii) to assess whether there is any significant relationship between physical layout of classroom and students’ academic achievement in Social Studies.

Research Questions

The following research questions were formulated to guide the study.

i) To what extent does teachers’ effectiveness in evaluation of students relate to their academic achievement in Social Studies?

ii) To what extent does physical layout of the classroom relate to the academic performance of students in Social Studies?
Research Hypotheses

The following hypotheses were formulated in pursuance of the objectives of the study.

i) There is no significant relationship between teachers’ effectiveness in evaluation of students and students’ academic achievement in Social Studies.

ii) Physical layout of classroom does not significantly relate to students’ academic achievement in Social Studies.

Literature Review

Teacher’s effectiveness in students’ evaluation and physical layout of the classroom are all considered during the teaching-learning process. In all facets of education, including curriculum development and classroom instructional process, evaluation is an integral part that is often indispensable, (Uche and Umoren, 1998, Uche, 2004).

Metzger (2007) stressed that aspects of evaluation is an integral part of learning and monitoring because it involves giving feedback on students concerning their process. According to Bassey (2002), research studies have revealed negative or no relationship between grades and student’s ratings while others have found positive relationship. The evidence therefore has been conflicting. Moreover, in his research, Bassey (2002) had a result which revealed that there is a significant moderate relationship between teachers’ effectiveness in students evaluation of instruction (SEI) in Mathematics and Mathematics achievement of students in Southern Cross River State.

Udonwa (2001) and Inyang-Abia (2003) asserted that evaluation after a lesson is essential if the teacher intends to improve the quality of teaching experience offered. Thus, teachers could use students evaluation to determine the expected students results in public examinations and to assess the student’s personal qualities. Enukoha and Umoren (2006) identified two broad kinds of evaluation as formative and summative. These take the form of continuous assessment, rating scale, checklist, questionnaire, and other forms of examinations.

Students’ evaluation makes the students active rather than passive in the class. According to Esu (2004), effective evaluation enables the teacher to assess himself, his performance and success and helping students to learn Ogbonna (1994) saw evaluation as an instrument used in modeling classroom activities so as to bring a change of behaviour in the production of learning outcomes. Ogunyimi (2004) opined that evaluation helps to diagnose the hazards of systems for their ultimate survival. Obanya (2002) and Okorodudu (2002) also summarized that evaluation is concerned with securing evidence on the attainment of specific objective of instruction.
Physical layout or appearance of the classroom, according to Akpan (2006) is one of the most important variables of classroom climate. According to Cohen and Marion (1981), the use of wall displays in the classroom is very important and affects learning. In Social Studies classroom, for example, posters can create the atmosphere of a different society, culture or different country. This is in line with the National Policy on Education (FRN, 2011) the National Education goals include the acquisition of appropriate skills and the development of mental, physical and social abilities and competencies as equipment for the individual to live in and contribute to the development of his society.

Cooper (2002) asserted that an effective classroom is attributable to its physical layout because a task orientation atmosphere and encourages social and emotional needs of the students. Moreover Edunoh (2002) and Essien (2004) submitted that students’ performance suffers if the physical conditions are below standard and the regulations contained are necessary for effective performance.

Accordingly, classroom layout involves the arrangements of the furniture, desks, tables, cardboard etc and should be attractively arranged to encourage students learning (Isangedighi, 2003) Uwatt (2004) and Inyang-Abia and Esu (2004), also explained that a good layout of the classroom facilitates effective communication and hence contribute to students achievement. Avery (2003) and Ani (2003) explained that a good and effective layout of the classroom summarily has the advantages of assisting in the ease and efficiency of getting work done and intercommunication between teachers and students where need arises Avery (2003) emphasized that a good layout of the classroom makes the work of a teacher easier and hence improves students’ academic performance. He advocated for a larger scale classroom floor for the display of maps, cardboards, and charts, tables and gang-ways, for teachers supervision.

Design and Methodology

The researchers adopted ex-post facto design for the study because the researcher had no control of the independent variable (teachers’ effectiveness in students’ evaluation and physical appearance of the classroom (Kerlinger, 1973). The population of the study comprised 15,301 JSS III students and a sample 1,200 students were selected through stratified random sampling technique from the three Educational zones in the State Secondary Education Board (SSEB) (see table 2) Out of this population, 6,586 (43.7%) were males while 8715 (56.3%) were females. The researchers collected data with Teaching Environment Structured Questionnaire (TESQ) developed on a five point Likert scale model reliability estimate ranging from 0.7 to 0.8 and achievement test scores extracted from Junior Secondary School Certificate Examination (JSSCE) result from the State Ministry of Education 2012. Pearson Product Moment Correlation (PPMC) was used to analyze data collected. The hypotheses were tested at .05 level of significance and 1198 degree of freedom to ascertain the degree of reliability that existed between those variables.
Results and Discussion

The data collected were analyzed using the Computer Software Statistical Package for the Social Sciences (SPSS) release 11.00. The results of data analyses were presented hypothesis by hypothesis

Hypothesis One

There is no significant relationship between teacher’s effectiveness in the evaluation and students of student’s academic achievement in Social Studies.

Independent Variable: Teachers’ effectiveness in the evaluation of students.

Dependent Variable: Students’ achievement in Social Studies

Statistical Analysis Technique: Pearson product moment correlation coefficient (r)

The results are shown in table 3

Table 3
Pearson Product Moment Correlation of Scores on Teachers’ Effectiveness in Evaluation of Students and Students’ Achievement in Social Studies. N = 200

<table>
<thead>
<tr>
<th>Variables</th>
<th>( \sum x^2 (\sum y)^2 )</th>
<th>( \sum xy )</th>
<th>r</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation effectiveness</td>
<td>56510.479</td>
<td>-3832.188</td>
<td>-.052</td>
<td>1.802*</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>97547.492</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*P < .05, df = 1198, critical value 1.96

As shown in table 3, the calculated r-value is -.052. This means that there is a negative relationship between teacher’s effectiveness in the evaluation of students and student’s academic achievement in Social Studies. However, the observed negative relationship is not statistically significant because the t-value equivalent of the observed r-value; which is 1.802, is less than the critical t-value of 1.96 at .05 level of significance and 1198 degree of freedom. Therefore the null hypothesis is not rejected.

Hypothesis Two: The physical layout of the classroom does not significantly relate to students’ academic achievement in Social Studies.
Pearson Product Moment Correlation was also used for testing of the hypothesis and the data analysis is shown in table 4.

**Independent Variable:** Physical layout of the classroom

**Dependent Variable:** Students’ academic achievement in Social Studies.

**Statistical analysis:** Pearson Product Moment Correlation Coefficient (r)

<table>
<thead>
<tr>
<th>Variables</th>
<th>$\sum x^2$ ($\sum y^2$)</th>
<th>$\sum xy$</th>
<th>r</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical layout</td>
<td>20555.747</td>
<td>-2974.130</td>
<td>-.066</td>
<td>2.289*</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>97547.492</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*P < .05, df = 1198, critical value 1.96

The results in table 4 show that the calculated r-value is -.066. This shows that there is a negative relationship between the physical layout of the classroom and students’ academic achievement in Social Studies. The negative relationship implies that as the physical appearance of the classroom improves beyond a reasonable standard, the academic achievement of students decline. Also the observed relationship is statistically significant since the t-value of 2.289 is greater than the critical t-value of 1.96 at .05 significance levels and 1198 degree of freedom. The null hypothesis is therefore rejected.

**Summary of findings**

The summary of results were as follows

1) There is no significant relationship between teachers’ effectiveness is evaluation of students and students’ academic achievement in Social Studies.

2) The physical layout of the classroom is significantly negatively related to students’ academic achievement in Social Studies.

**Discussion of Findings**

The result showed that there is no significant relationship between teachers’ effectiveness in evaluation of students and students’ academic achievement in Social Studies. However, the data collected and analyzed indicated that there exists insignificant negative relationship between teachers’ effectiveness in the evaluation of students and students’ academic achievement in Social Studies. Uche and Umoren (1998) and Metzger (2007) agreed that evaluation of students is very necessary in the academic achievement of students, since it involves giving of feedbacks to students concerning their progress.
This result could be due to the students’ inability to utilize the advantage of knowledge of result to enhance their achievement. The result partially agrees with the finding of Bassey (2002) who discovered that there is no significant relationship between students’ evaluation of instruction (SEI) and students’ academic achievement in Mathematics in Cross River State. The study area, number of sample and the subject under study are believed to be the variables that are responsible for the contradiction in the result. The major difference between Bassey’s (2002) finding and the finding of this study is that in this study, the insignificant relationship is negative. This negative relationship could be explained probably by the fact that many teachers do not use the result of evaluation for feedback and remediation. As such, students perceive evaluation as a threatening process in the teaching and learning situation.

This result does not seem to be in line with that of Esu (2004) who confirmed that without effective evaluation of students by the teacher, it could affect the academic achievement of students. Of course, for this to be achieved, both the government and educational bodies should ensure that teachers have the expertise and professionalism to use the proper test materials and evaluation instruments for the exercise. This result may also be affected by the interrelationship between students’ evaluation and other variables within the sub-system.

Based on the result, it could be inferred that, rather than influence academic achievement of students, the aspect of evaluation mostly is used to ascertain the level of achievement like grading, placement, certification etc. In view of this, Ogbonna (1994) highlighted that evaluation of students provides adequate information for grading and promoting students, to motivate the students to learn and for certification. On the other hand, the result is consistent with the fact that evaluation of Social Studies, which mostly deals with values, emotions, feelings etc, is a little more difficult than evaluation of students in other subjects. No wonder Inyang-Abia and Esu (2004) lamented that there are problems associated with instructional evaluation of students in Social Studies because of its nature.

**Hypothesis II**

The result showed that physical layout of the classroom significantly relate to students’ academic achievement in Social Studies. Based on the .066 r-value, the result showed a significant negative relationship between the physical layout of the classroom and students’ academic achievement in Social Studies. Thus, as physical layout of the classroom is haphazardly done, students’ academic achievement in Social Studies declines. In line with this result, Cohen and Manion (1981) explained that the use of wall displays in the classroom is very important and influences learning. Similarly, the proper arrangement of seats, tables and resource areas lead to discovery and exploratory learning. The Federal Government of Nigeria (FRN, 2011) in her National Policy on Education (NPE) also emphasized the acquisition of appropriate physical equipment and skills and their subsequent physical layout and display in the classroom.
Moreover, this finding is in line with that of Cooper (2002) who asserted that an effective classroom is attributable to its physical layout because of its task-oriented atmosphere and at the same time its encouragement of social and emotional needs of the students. There is also an agreement of this study with Edunoh (2002) and Essien (2004) who submitted that students’ performance suffer if the physical conditions are below standard. The result is also in consonance with those of Avery (2003), and Uwatt (2004) who explained that a good layout of the classroom necessitates productivity and achievement. The result is logical because a good physical layout or appearance of the classroom from ordinary experience, assists in the ease and efficiency or getting work done and facilitates teacher’s supervision of the students. Again in line with this study, Ani (2003) concluded that classroom layout or appearance should be balanced and pleasing so that it can stimulate ideas and responses.

Conclusion

Based on the findings, it was concluded that teachers’ effectiveness in the evaluation of students has a negative relationship with the students’ achievement in Social Studies. Secondly, that physical layout of the classroom contributes to students’ achievement in Social Studies.

Recommendations

Based on the findings of the study and the conclusions made, it is recommended that:

i) Both the government and educational bodies should ensure that teachers are trained to acquire the expertise and professionalism to use the proper test materials and evaluation instruments & technique/methods for the exercise if students’ achievement in Social Studies must improve.

ii) An encouraging physical layout or appearance of the classroom should be maintained as this tends to improve students’ academic achievement in Social Studies.

References


