

Influence of School Environmental Factors and Teachers' Effectiveness on Public Secondary Schools Teaching and Learning Activities in Ekiti State

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Abstract

The study examined school environmental factors and teacher effectiveness in public secondary schools in Ekiti State. The study adopted a descriptive survey research design. The research instrument used for data collection was the "Teacher Self Report Inventory" (TSRI), with a reliability value of 0.85. The population of the study was that which represented all the teachers in public secondary schools in Ekiti State. From 1563, teachers teaching English Language, Mathematics, and Biology in the public secondary schools of Ekiti State were selected using Random Sampling, Stratified Sampling, and Purposive Sampling Techniques. One research question and one hypothesis were formulated. Data collected for the study were analyzed using descriptive statistics for

the research questions while an Analysis of Variance (ANOVA) test was used to determine the validity of the hypothesis. The hypothesis was tested at 0.5 level of significance. Only 7.3 per cent of Ekiti State's public secondary schools have adequate facilities. A substantial combined influence of school environmental variables on teacher effectiveness was also found ($R = 0.460$, $R^2 = 0.212$, $F_{(4, 315)} = 20.803$; $P < 0.05$). Also, there was a significant combined influence of school environmental factors. The study concluded that teachers in Ekiti State Public Secondary School worked in an ineffective school environment. It is recommended that the government should invest more in the education sector to ensure adequate provision of educational facilities in all their schools for teachers to be effective.

Keywords: School Environmental Factor, School Tone, Secondary School, School Facilities, Students Behaviour

Word Count: 231

Introduction

The learning process and overall performance of students are influenced by a number of factors. Ajayi and Akinsanya (2016) opined that these factors can have both positive and negative effects, and they are divided into three categories: hereditary and physiological factors, as well as environmental factors. For the purposes of this study, an in-depth examination of how school environment-related factors influence secondary school teaching and learning on the teacher effectiveness was conducted. Ntibi and Edoho (2017) stated that, learning environment is the type of environment in which an individual interacts with other students at school. The school environment is a relatively stable, the characteristics of a school that is perceived by the teachers and students, influences their actions, and is based on the school's collective perceptions of behaviour.

Mupa and Chinooneka (2015) believed that a genuine, engaged, and supportive teacher and principal will create an open school environment, because where there is conflict, the parents will have to keep their children indoor or send them to another school where there is peace. The condition of school may have effect on the level of teacher effectiveness and students' patronage, educators and

parents have a variety of options for improving the school environment, including increased parents and community involvement because environmental factor is seen as embodiment of all that surround and interact with teaching and learning (Ismail 2019). The teaching-learning process is influenced by the school tone. School tone is the general discipline in the community i.e. the atmospheric condition above determined by the way and manner in which the principal, teaching staff and non-teaching staff and students relate with one another. According to Ntibi J. E. and Edoho E.A. (2017), the overall tone of the school is set by the Principal and the assistant principal. The only way to effectively establish discipline in schools is to consistently follow through on the action plan. When a community's economic situation is poor the condition of the school will also be poor. The economic state of the community will determine whether or not the community will support or not support the school in the areas of physical facilities. The school environment such as classroom tables and books has a direct impact on students' academic performance and will make the teacher to put in extra effort before the students can understand the teaching and learning.

Prathyusha (2018), and Usman (2016) both stated that the quality of leadership in a school has a significant impact on the school's success or failure, a school's existence, stable environment, and livelihood are derived from the community, which supplies the school with its material and human resources. The school environment is one factor that affects both the teacher and student's academic achievement. For example, the situation in Osun State secondary schools in Vanguard newspaper of 7th June, 2016 was reportedly not conducive for effective teaching and learning as a result of religious conflicts. Abdolreza (2016) opined that the teaching-learning process is influenced by the school's location whether urban or rural, and that when a school is built near market center, the noise from the market will distract the learners from concentrating. Olatunbosun (2016) stated that for the school to have a positive literacy environment, parents should endeavour to provide adequate and relevant learning materials for their children. In some cases, parents from low economic status are unable to afford books, computers, and other relevant

learning materials for their children and wards to create a positive literacy environment for the students.

According to Job (2017), an effective teacher is one who consistently and regularly conducts a teaching and learning interaction to the satisfactory achievement of interest as well as the value of the interest groups. Owoeye and Yara (2015), reported that the quality of instruction delivered by teachers and the academic performance of any school are dependent on several factors of which institution facilities are paramount. The lack of adequate infrastructures in our higher education has posed serious setback in the achievement of higher education goals. The lack of good buildings or funds to rehabilitate collapsed structure poses threat to the system performance and its sustainability hence education to some extent is falling due to low standard. Oredein and Akinkuade (2021) stated that students who were taught in modernised buildings scored consistently higher across a range of standardised tests. Students in modern schools with adequate facilities outperformed students in older schools with inadequate learning facilities. (Sleka and Cox 2017, Inuwa and Danrimi 2017) the researchers reported that the working condition of urban teachers is marginal and would not be tolerated by any other profession. Overcrowding causes a variety of issue, and the findings indicate that students in overcrowded schools and classrooms do not perform as well on achievement tests as students in non-overcrowded schools. Overcrowding caused stressful and unpleasant working circumstances for teachers. Between 1990 and 1996, New York City public schools were severely overcrowded throughout the city and it called for some studies to be done in order to investigate the impact of overcrowding. Danrimi (2017) revealed, the need for the availability of instructional materials in the school system to boost teachers' job performance would invariably enhance academic performance of the students. The school teaching and learning infrastructure refers to school buildings and other facilities such as chairs, pupils' desk, and white/chalkboards that contribute to a positive learning environment. Quality of school buildings, furniture and school materials will determine teachers' effectiveness and students' learning outcomes. Afemikhe (2019), posited that teacher effectiveness is also influenced by the climate and culture of a school, how you deal with

students is influenced by the atmosphere and culture of the school where you work. Usman (2016) Opined that, principals and teachers are to collaborate to create a school climate that stimulates student learning, promotes order, and engages parents. The norms, attitudes, and goals that represent the school's instructional and social missions are embodied in the environment of the school.

This study premised the system theory. Micheal and Onyinye (2016) stated that the system theory is based on the concept that each member of the system performs different functions in order for the whole to survive. Each component of the system interacts with and is dependent on the other components and systems in the environment. Rather than the unchanging property of object, the theory is primarily concerned with problems of interactions, structures, and interdependence. He also agreed that a system can be divided into subsystems; for example, the education system can be divided into primary, secondary, and postsecondary education, with secondary education divided into junior secondary school and senior secondary school. The development of social system theory led to the application of system theory in educational management, or simply put, in the school system. System theory as applied to the education system describes how education inputs are transformed into outputs through the conversion process. Adelodun (2016) stated that there are two types of systems: closed and open. A closed system is one that does not interact with or exchange information with its surroundings. An open system can receive information from the outside and also send its product to the outside environment. The open system is built on this foundation. The schools are reliant on the environment for their survival, collecting inputs from it and returning the output to it. The conversion process is critical to the open system's existence. The inputs-process-output efforts determine the production process. The input is human and material resources, including students who are 'raw materials' to be processed, and the output is school leavers and graduates who have learned relevant values, skills, competence, and knowledge from the processor (the teacher).

Statement of the Problem

The performance of students especially in core subjects has not been encouraging over the years in our secondary schools. This poor performance could indicate that teachers have lost their effectiveness. It appears that the environment and general working conditions do not motivate teachers to do their jobs. Another issue identified by the researcher is the alarming rate at which students flee from the classrooms of some teachers, possibly due to a poor teacher-student relationship with them. Some teachers are so hostile that students are discouraged from attending their class. Some of them struggled to manage their classes, while others struggled to motivate students to learn in their subject areas. This could be one of the reasons why most students prefer to attend classes taught by teachers who have a positive relationship with their students. As a result, the purpose of this study is to evaluate the impact of environmental factors on secondary school teachers' effectiveness in Ekiti State, Nigeria.

The aim of this study is to investigate the influence of school environmental factors (such as school tone, school facilities, parent/community involvement, and student behaviour) and teachers' effectiveness on public secondary schools in Ekiti State.

Research Questions

For the purpose of this research, the following research questions were raised;

1. What is the level of teachers' effectiveness in public secondary schools in Ekiti State?
2. Is the school environment conducive for effective teaching and learning in Public Secondary Schools teaching and learning activities in Ekiti State?

Hypothesis

Based on the problem of this study, one hypothesis was generated;

H₀I: There will be no significant combined influence of school environmental factors (school tone, facilities, student behaviour, Parents/ community involvement), and teacher effectiveness on public secondary school teaching and learning activities in Ekiti State.

Research Design

A descriptive survey research method was used in this study. It was a descriptive study since the goal was to describe and analyze present issues, conditions, and attitudes between the independent variable (school environmental elements in public secondary schools) and the dependent variable (teacher effectiveness in public secondary schools). Also, because it allows a researcher to acquire the opinions of a representative sample of the target group in order to generalize to the full population of the study, it is used as a survey.

Population of the Study

The target population consists of all teachers teaching three key courses, in all public senior secondary schools in Ekiti State, Nigeria. There are 1563 teachers teaching the three courses in Ekiti State public senior secondary schools, as at the time of this study. This consisted 278 Biology, 614 English, and 571 Mathematics teachers respectively. This shows that there are teachers teaching more than their subject of professionalism. It will lead to poor delivery of subject. (Source: Ekiti State Ministry of Education, School Services, 2020).

Sample and Sampling Techniques

Samples for the study consisted of 315 teachers who were selected from 105 public secondary schools in Ekiti State. Random sampling techniques were used to select 105 public secondary schools from three senatorial districts of Ekiti State to take care of the variables.

Three teachers were purposively chosen from each of the selected 105 public schools making total of 315 teachers. The rationale for selecting 3 teachers per school was based on the years of experience of the teachers.

Research Instrument

Teachers Self-Report Inventory (TSRI) was used as the research instrument for the study, having three sections (A, B and C). Section A elicited bio data information from respondents while section B consisted of 38 items, soliciting information from teachers (self- rating) with four points of Likert scale options of Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1). The reliability of the

instrument used for the study was determined using Test Retest Method. The instrument was administered twice on 50 teachers who were not part of the sample within an interval of two weeks. The scores obtained were subjected to statistical analysis involving Pearson Product Moment Correlation at 0.05 level of significance. The instrument yielded reliability coefficients of 0.85 which was considered high enough for the study.

Method of Data Analysis

Data collected were analysed using both descriptive and inferential statistics.

Descriptive statistics of frequency counts, percentages, and mean were used to analyze the respondents' personal data. Bar charts were used for result presentation of the analyzed demographic data. Descriptive statistics of mean, standard deviation and standard error of the mean were used to analyze the independent variables (School environmental Factors) and the dependent variables (Teachers' Effectiveness) considered for this study. Descriptive statistics of mean and standard deviation were also used to answer the research questions using a standard reference mean score of 2.50 to draw the conclusion. Hypothesis was analyzed using inferential statistics. The hypothesis was tested at 0.05 level of significance.

Results and Discussion

Research Question 1: Level of teachers' effectiveness in public secondary schools in Ekiti State.

Table 1: Mean and Standard Deviation indicating the level of teachers' effectiveness in Public Secondary Schools in Ekiti State

What is the level of teachers' effectiveness in Public Secondary School in Ekiti State?	Mean \pm	SD
Preparation of Lesson	3.39	0.722
Presentation of Lesson	3.00	0.723
Teacher Assessment	3.14	0.790
Classroom Management	3.07	0.741
Weighted Mean	3.15	

Source: Researcher's Field Survey (2021)

Note: M = Mean; SD = Standard Deviation; n = Number of respondents

Standard Reference Mean = 2.50; Mean Response Rating Classification: High = 3.00 – 4.00; Moderate = 2.00 – 2.99; Low = 1 – 1.99

Using the data in Table 1, it was clear that teachers in Ekiti State's public secondary schools had high level of effectiveness in the areas measured: lesson preparation, presentation, teacher assessment skills, and classroom management. Teachers in Ekiti State's public secondary schools were expected to be highly effective, as evidenced by the high weighted mean ($M = 3.15$).

Ekiti State Public Secondary School has experienced teaching staff, according to the findings of the study. This suggests that teachers' effectiveness in the teaching and learning process has been influenced by their level of experience. This is consistent with the findings of a study, which showed that students taught by teachers with more experience performed better. While it is true that "experience is the best teacher," it is also true that having an experienced teacher is crucial if you want to achieve effective teaching¹⁵.

Research Question 2: School environment conduciveness for effective teaching and learning in Public Secondary Schools in Ekiti State as presente in Table 2.

Table 2: Mean and Standard Deviation describing the school environment of Public Secondary School in Ekiti state.

To what extent is the school environment conducive for effective teaching and learning activities on teacher's characteristics in Public Secondary Schools in Ekiti State?	Mean	SD
School Tone	2.44	0.661
School Facilities	1.73	0.583
Parent/Community Involvement	1.84	0.636
Students' Behaviour	1.82	0.577
Weighted Mean	1.96	

Source: Researcher's Field Survey (2021)

Note:

M = Mean; SD = Standard Deviation; Standard Reference Mean = 2.50; Mean Response Rating Classification: High = 3.00 – 4.00; Moderate = 2.00 – 2.99; Low = 1 – 1.99

Table 2 showed that the mean scores of 2.44, 1.73, 1.84 and 1.82 respectively for school tone, school facilities, parents/community involvement and students' behaviour were low implying that teachers'

characteristics as regards the school environment and the other areas observed were not good in public secondary school in Ekiti State. Overall, the weighted mean obtained is moderate ($M = 1.96$), thus showing that the school environment is not so conducive for effective teaching and learning activities in Public Secondary Schools in Ekiti State.

Hypothesis:

There will be no significant combined influence of school environmental factors such as (school tone, school facilities, student behavior, and parents Community involvement) and teacher effectiveness in Public Secondary Schools in Ekiti State.

Table 3: Combined Influence of school environmental factors and teacher effectiveness on Public Secondary School in Ekiti State.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.460 ^a	0.212	0.201	0.16918

- a. Predictors: (Constant), School Tone, School Facilities, Parent / Community Involvement, and Student Behaviour

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.382	4	.595	20.803	.000 ^b
	Residual	8.872	310	.029		
	Total	11.254	314			

- a. Dependent Variable: Teachers' Effectiveness
b. Predictors: (Constant), School Tone, School Facilities, Parent / Community Involvement, and Student Behaviour

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.840	0.070		40.301	0.000
	School Tone	0.019	0.028	0.040	0.689	0.491
	School Facilities	0.229	0.033	0.475	6.869	0.000
	Parent/Community Involvement	-0.076	0.031	-0.141	-2.464	0.014
	Student Behaviour	0.004	0.039	0.007	0.103	0.918

a. Dependent Variable: Teachers' Effectiveness

School environment has a significant impact on the effectiveness of teachers in Ekiti State's public secondary schools, according to the findings of this study. School environmental factors such as school facilities and parent/community involvement are most statistically significant with 0.000 and 0.014 respectively. To support this finding, Tofi and Onuminnya (2019) conducted an empirical investigation, and it was found that students who were taught in modernised buildings with adequate facilities outperformed those who were taught in old and outdated facilities.

Conclusion

Based on the outcomes of this study, it can be concluded that teachers in Ekiti State secondary schools have low levels on environmental factors (such as school infrastructure and parent/community involvement) which also played a significant role in the effectiveness of teachers in Ekiti State's public secondary schools. It is recommended that government should invest more on education sector to ensure adequate provision of educational facilities in all their schools for teachers to be effective. Principal as a leader and supervisor of a school should cultivate good leadership behaviour in order to improve the school and increase productivity and efficiency of the teachers he or she must adopt a style that motivate teachers effectiveness'.

Parents/Community should be involve in the establishing school polices and procedure. Parents should actively participate in the school activities through parent/teachers association. Students are to obey the school rules and regulations and respect their teachers and should be well disciplined.

Recommendations

- I. Based on the findings of this study, the following are recommended:
 - i. Government should make available all the needed facilities for effective teaching and learning
 - ii. The head of the Secondary school (Principal) should make the school environment conducive for learning.
 - iii. Parents should be involve in the school activities e.g. Formation of parents/teachers association, visitation for open days to check their children class work

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