

## Attendance and Academic Performance of Students in Secondary Schools: A Correlational Approach

Enamiroro Patrick Oghuvbu

*Department of Educational Administration and Policy Studies, Delta State University,  
Abraka, Nigeria*

*E-mail: enamiroro2001@yahoo.com*

**KEYWORDS** Attendance. Academic. Performance. School

**ABSTRACT** This study identified average percentage of attendance, academic performance and the correlation between attendance and academic performance of students in secondary schools. A checklist was used to collect 2860 students' percentage scores in attendance and academic performance from 58 secondary schools, used in this study. Three research questions were raised and answered using percentage mean and linear regression equation. Two hypotheses were formulated and tested using Pearson  $r$ . The study revealed that; the mean score of students in attendance was 68% and academic performance 66%. It also revealed a fair positive correlation between attendance and academic performance. It showed the coefficient of determination  $r^2 = 0.22$ , an indication that 22% of students academic performance was influenced by attendance in secondary schools in Delta State, Nigeria.

### INTRODUCTION

A school is set up for the main purpose of bringing students from different families together under one roof-the classroom. Effective teaching and learning cannot take place without the coming together of the teacher and the learners – students. In order to check students' commitment to receiving instruction from the teachers, an administrative record is designed and used on daily basis, i.e. the attendance register. This record is utilized by the form teachers and supervised on weekly basis by the school head. The attendance register is also supervised on term or annual basis by the supervisors from the Ministry of Education and other Professionals particularly in education on unscheduled visits. Parents also used the attendance register to supervise the movement of their children occasionally. The attendance register is mostly concerned with school/class attendance. Dedicated teachers, also take students attendance before teaching their subjects to ascertain the number of students who received their lesson. Hence, attendance is an important administrative records used by parents and school authority to monitor, control, supervise students activities in schools. A student that is not regular in school, face learning problems, resulting from late-coming to school, truancy, inability to read and not consulting with the teacher (Onomuodeke 1995: 8)

School and home factors affects student

attendance. The social status and educational level of parent influence school attendance. Geographical location of school, students' attitude towards school and subjects, inadequate supervision of students' activities by teachers and parents and poor teaching methods, lack of facilities affects students' school attendance (Oghuvbu 1999; Alio 2003: 66-69). Students developed negative attitude towards school resulting into poor attendance because of non-employment of school leavers, repetition of class and insecurity (Okwelle 2003: 30-35). Students' age, family commitments, change of jobs, change of working hours and health factors, students with greater motive, without conflict of interest are more regular in school (ChiuMochi 1993).

On the role of gender in child schooling, Okpupara and Chukwuone (2007) identified that female headed households are more likely to have higher attendance in school whereas educated fathers have strong impact in increasing the probability of child school attendance than mothers. The study also revealed that school attendant of girls is significantly influenced by age whole age is not significant for boys. School administrators and teacher in Delta State positively keep and utilizes effectively students records on attendance, because of the important of the attendance register in the control of discipline and promotion of academic achievement of students (Oghuvbu 2006).

On the importance of attendance register,

Nwadiani (1994) stated that school head and teachers should have accurate information of all the activities in the school for effective and easy decision-making, aids educational grant procurement and also to satisfy legal requirement and continuous assessment.

### Statement of the Problem

The researcher has investigated series of administrative problems affecting students' academic performance. Some identified factors include poor instructional quality, students' negative attitude to school, overcrowded classrooms, poor facilities in schools (Oghuvbu 1998, 2000 and 2003). From the experience of the researcher, student attendance is low in rural and highly populated urban schools. Teachers are in school, while most learners, students are at home. During examination period, there is 100% attendance in school. Examination-oriented attendance student, by nature depends on the knowledge of the regular attendance students or enter examination hall with prepared materials which are types of examination malpractice. In recent times, rural, riverine students perform high in external certificate examinations in which continuous assessment is part of the overall grade. This unscientific performance calls to mind certain questions. Does attendance in school and at lesson has no influence on students' academic performance? What is the correlation between attendance and academic performance of students in secondary schools in Delta state, Nigeria?

### Purpose of the Study

The study identified the correlation between attendance and academic performance of students. It also analysed the influence of gender and school location on attendance and academic performance of students in secondary schools in Delta State, Nigeria.

### Research Questions

The study provided answer to the following questions.

1. What is the average percentage score of students in attendance and academic performance in secondary schools in Delta State?
2. Is there a difference in the percentage average score of students in attendance and academic

performance among the three senatorial districts in Delta State?

3. What is the regression equation of attendance on academic performance of students in secondary schools in Delta State?

### Research Hypotheses

The following hypotheses formulated were tested in this study:

1. There is no significant relationship between attendance and academic performance of secondary school students.
2. School location does not significant influence the relationship between attendance and academic performance of secondary school students.

### METHODS AND PROCEDURES

The design of this study was ex-post-facto in nature and followed the descriptive research format. Independent variable is attendance and the dependent variable is student's academic performance in secondary schools.

**Population and Sample:** The students in the 398 secondary schools in Delta State constitute the population of the study. 2860 students were selected from 58 secondary schools i.e. 50 students from 56 schools and 30 from 2 schools used in this study.

The instrument for data collection was a checklist designed to collect students' attendance score for two years and academic performance also for two years. Post-graduate students resident in the selected school help in the data collection. Descriptive statistics mean percentages and regression equation were used to answer the three research questions and Pearson r was used in the analysis of the two hypotheses at 0.05.

**Collection of Data:** Each student's attendance and average scores for the two years was covered to 100% filling the checklist. In converting attendance the formula used:

Total No. of time students was present for the period / Total No. of time school opened for the period x 100/1

### RESULTS

The results of the data analysis are presented according to research questions and hypotheses.

**Research Question 1:** What is average

percentage score of students in attendance and academic performance in secondary schools in Delta State?

**Research Question 2:** Is there a difference in the percentage average score of students in attendance and academic performance among the three senatorial districts in Delta State?

From results in table 1, student in Delta North Senatorial District score the highest in attendance 74.91%, followed by Delta South 69.56% and the lowest 62.80% Delta Central. It showed a slight difference among the three senatorial districts. Students in Delta North and South are more regular in school than Delta Central. On academic performance, student in Delta South scored the highest with 68.4% followed by Delta North 65.97% and the lowest Delta Central 63.94%. From this result, attendance influences academic performance to some extent.

**Research Question 3:** What is the regression equation of academic performance on attendance?

Academic performance =  $53.50 + 0.192 \text{ attendance}$  i.e.  $y = 53.50 + 0.192x$

For example, if a student scored 60% in attendance i.e.  $x = 60$ , then academic performance  $y = 53.50 + 0.192 \times 60 = 53.50 + 11.52 = 65$ . If a student score 65% in academic performance i.e. ( $y = 65$ ) then attendance score ( $x$ ) =  $65 = 53.50 + 0.192x$ .  $65 - 53.50 = 0.192x$ .  $0.192x = 11.52 = x = 11.52/0.192 = 60\%$ .

From this equation, increase in attendance score could also increase in academic performance.

The scattered diagram of attendance on academic performance according to school percentage mean score showed the fairly positive correlation between attendance and academic performance.

**Hypothesis 1:** There is no significant relationship between attendance and academic performance of secondary school students.

Since calculated  $r = 0.47$ , it shows a positive fair correlation. Also calculated  $r$  is less than critical  $r$  value  $0.47 < 0.08114$ . This revealed that attendance affect academic performance. The coefficient of determination ( $r^2$ ) is 22%. An indication that only 22% of students' academic performance was influenced by attendance in secondary schools in Delta State.

**Hypothesis 2:** School location does not significantly influenced the relationship between attendance and academic performance of secondary school student in Delta State.

The results in table 2, revealed fair positive correction between attendance and academic performance in the three Senatorial District of Delta State. However, Delta South has a higher correction of 0.59 with coefficient of determination ( $r^2$ ) of 0.35 (35%). An indication that 35% of student's academic performance is influenced by attendance. Delta South followed by Delta Central with  $r^2 = 0.56$  (31%) and Delta North with the lowest  $r$  of 0.44 with  $r^2 = 0.1936$  (19%). School location has little influence on the relationship between attendance and academic performance of secondary school students in Delta State, Nigeria.

**Table 1: Percentage score in attendance and academic performance according to Senatorial District**

Senatorial district	Total score attendance	Total score in exams	Total no. of students	Percentage average attendance	Percentage average academic score
Delta North	58430	51453	780	74.97	65.97
Central	78509	79925	1250	62.80	63.94
Delta South	57736	56760	830	69.56	68.4
Grand Total	194675	188138	2860	207.27	198.3
Overall mean	68	66		68	66
Percentage Score					

Source: Computed from fieldwork 2007.

**Table 2: Summary of Pearson r on the relationship between attendance and academic performance.**

Variable	N	Summation	Sum of squares	"AP	DFr	Cal. r	Crit. r	r <sup>2</sup>
Relationship	2860	"A =197626 "P=191048	"A <sup>2</sup> =19890490 "P <sup>2</sup> =13900557	14401008	2858	0.47	0.8114	0.22122%

Source: Computed from fieldwork 2007

**Table 3: Summary of Pearson r on the relationship between attendance and Academic performance based on school location.**

Variable	Location	N	Summation	Sum of squares	"AP	DFr	Cal. r	Crit. r	r <sup>2</sup>
Relationship	North	780	A =58430 P=51453	A <sup>2</sup> =6695228 P <sup>2</sup> =5904587	49148028	778	0.44	0.8114	0.1936 (19%)
	Central	1250	A=78509 P=79925	A <sup>2</sup> =6230278 P <sup>2</sup> =3291830	5879867	1248	0.56	0.8114	0.3136 (31%)
	South	830	A =57736 P=56760	A <sup>2</sup> =3249420 P <sup>2</sup> =4478250	4188912	828	0.59		0.350 (35%)

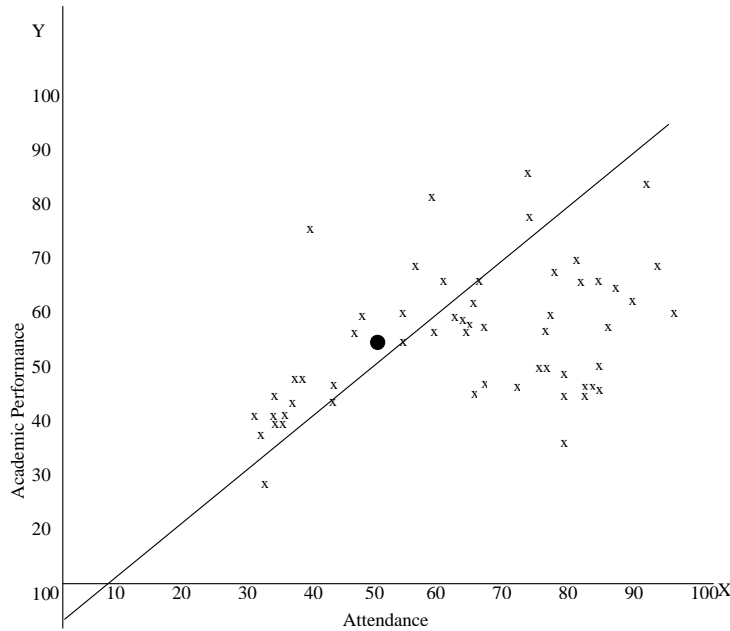
Source: Computed from fieldwork 2007

On rural, semi-urban and urban schools, results derived from data use in tables 1 and 2 showed that in urban schools, Pearson r is 0.523 (r<sup>2</sup> = 0.27 i.e. 27%), semi-urban r = 0.50 (r<sup>2</sup> = 0.25 i.e. 25%), rural r = 0.60 (r<sup>2</sup> = 0.36 i.e. 36%). There is positive fair correction in urban, semi-urban and rural schools. However, there is higher correlation in rural school with r = 0.60 with coefficient of determination r<sup>2</sup> = 0.36, which showed that 36% of students academic performance was influenced by attendance (Table 3, Fig. 1).

**DISCUSSION**

The study revealed fairly positive relationship between attendance and academic performance of students in secondary schools in Delta State.

It shows that 22% academic performance was influence by attendance. In rural areas influence of attendance on academic performance is higher than urban and semi-urban schools. During the course of this study the researcher interviewed some students in urban schools who said that their parents employed the service of private specialist teacher for home study. Others said they attend private evening class –lesson to enhance their academic performance. This may be the reason for higher performance in Delta North and South where most of the schools used were located in cities with college of educations. The study also showed that other factors influences students’ academic performance since the relationship between attendance and academic performance is not significant but positively



**Fig. 1. Scattered diagram on attendance and academic performance**

correlated. Since the percentage mean scores is not significantly larger than that of academic performance, an increase i.e. positive improvement in attendance could increase student's academic performance. These findings are consistent with those of Oghuvbu (2006) Nwadiani (1994). The computed regression equation,  $y = 53.50 + 0.192x$  academic performance on attendance also revealed positive correlation between attendance and academic performance.

### CONCLUSION AND RECOMMENDATIONS

The relationship between attendance and academic performance of students in secondary schools is fairly and positively correlated that is attendance influences academic performances. Twenty-two percentage academic performances is influence by attendance. There is a difference in the relationship between attendance and academic performance among urban, semi-urban and rural schools. An increase in attendance score will also increase academic performance as shown from the results of this study. School administrators should supervise adequately the keeping and utilization of attendance registers for effective control of student for higher academic performance. This is possible because, attendance records will help parent, ministry of education officials and researchers identify other factors affecting students' academic performance and discipline in schools.

### REFERENCES

- Alio BC 2003. Obstacles to Effective Secondary School Mathematics Education: The Challenge of Mathematics Educators. *Journal of Research Development NARD*, 1(1): 66- 71.
- Chiu Mochi 1993. A study of Factors Affecting Attendance at Adult Education Short Courses in China. en@fed.cuhk.edu.hk( Retrieved December 18, 2007).
- Nwadiani Mon 1994. Managing Pupils Attendance Data for Computerization: A Paper presented at the NERA-Computerization of Educational Data Conference. University of Benin 21- 24 June.
- Okwelle PC 2007. Strategies for Eliminating Wastages in Vocational and Technical, Education for Sustainable Technological Development in Nigeria. *Journal of Research in Education*, 4(2): 30-36.
- Oghuvbu EP 1998 Classroom Management Problems in Urban Primary Schools in Delta State. *West Africa Journal of Educational Research*, 2(2): 159-164.
- Oghuvbu EP 2000. Problems Affecting Heads of Primary Schools in the Central Senatorial District of Delta State. *Journal of Education and Society*, 3(1): 80-85.
- Oghuvbu E.P 2003 Teacher Evaluation of Principals' Administrative Effectiveness in Delta State Secondary Schools. *West African Journal of Educational Research*, 6(1): 20-27.
- Oghuvbu EP 2006. Data Inquiry and Analysis for Effective Administration: A Comparative Study of Private and Public Secondary Schools. *Journal of Social Science*, 13(3): 205 - 213.
- Okpukpara BC, Chukwunone NE 2007. *Child Schooling in Nigeria: The Role of Gender in Urban, Rural North and South Nigeria. A Study on School Attendance Performance in Nigeria* Founded by African Research Consortium, Abuja, pp. 1-6.
- Onouwodeke MA 1995. The Management of Students' Learning Problems. *Delta Journal of Educational Development, Abraka*, 3(2): 81 - 90.