AN ANALYSIS OF SCHOOL LOCATION, SCHOOL FACILITIES AND RESOURCE UTILIZATION ON STUDENTS' ACADEMIC PERFORMANCE IN SENIOR SECONDARY SCHOOL CERTIFICATE EXAMINATION RESULTS IN OGUN STATE, NIGERIA

Ajayi, Kassim O.

Tai Solarin University of Education, Ijagun, Ijebu-Ode, Ogun State, Nigeria Department of Educational Foundations and Instructional Technology <u>ajayiko70@gmail.com</u>

Akinsanya, Omolade O.

Tai Solarin University of Education, Ijagun, Ijebu-Ode, Ogun State, Nigeria Department of Educational Management

Abstract

The area where a school is located is expected to affect the students' achievement either positively or negatively due to the fact that the location is linked with teachers' retention and provision of necessary school facilities. Thus, distribution of teachers and facilities in the rural schools are not comparable with the urban schools. In most cases, teachers prefer to stay in the schools in urban areas because of the benefits and comforts of the city which include good roads, satisfactory means of communication, availability of books and teaching materials. This study examined the effects of school location, school facilities and resource utilization on students' academic performance in Ogun State senior secondary schools in Nigeria. The sample of the study was made up of 700 respondents from 50 senior secondary schools from 5 local government areas in Ogun State, Nigeria. The sample of the study was selected using the multi-stage sampling procedure. At first, five local government areas (LGAs) were selected through a ballot sampling technique while proportionate sampling technique was used to select fifty senior secondary schools from ninety-one schools in the selected LGAs in the state that had presented candidates for SSCE/WAEC. Simple random sampling technique was then used to select ten (10) teaching staff and three non-teaching staff with the principals of each school being selected. All together, a total of 5 LGAs, 50 senior secondary schools and 700 participants were sampled for the study. An instrument titled 'School Location and Resource Utilization Questionnaire' (SLRVQ) was developed by the researchers with a reliability of 0.76. Data were analyzed using t-test, correlation coefficient and ANOVA. Five null hypotheses were generated and one of the findings revealed that human resources were more available in urban areas than in the rural areas. It was therefore recommended that lots of schools in the rural areas should be improved upon, so that every child irrespective of his or her location will have access to good and quality education in terms of facilities, environment, human and materials resources to ensure better academic performance of the students in Ogun State.

Keywords: School location; Academic performance; Resource utilization; School facilities

Introduction

The area where a school is located is expected to affect the students' achievement either positively or negatively due to the fact that the location is linked with teacher retention and provision of necessary school facilities. Location is the environmental condition around a school which could be urban or rural (Ezike, 1997). Ezike (1997), further asserts that the school location is seen in terms of city (urban) and less city (rural). According to McGrill and Karu (2007), urban environment can be conceptualized as that which has high population density, containing a high variety of beautiful common place views, whereas rural environment is characterized by low population density containing a low variety and isolated place views. According to them, many good teachers do not find it satisfying when they are required to live a rural area; and transportation problem arises for adequate provision and supply of school facilities. Thus, distribution of teachers in the rural school is not comparable with the urban schools. They said further that the number of teachers in rural school is usually low because teachers do not readily accept postings to rural areas. This is because rural communities are characterized by low population, monotonous and burdensome life. Most teacher prefer to stay in the schools in urban areas because of the benefits and comforts of the city which include good roads, satisfactory means of communication, availability of books and teaching materials (Okonkwo, 2000). Therefore, the students in the rural area tend to be disadvantaged in many cases as highly qualified teachers prefer to stay in the city.

Boyland and Meswan (2008) reported that rural schoo1s were inferior and lacking in the range of facilities with high staff turnover and suffered from lack of continuity in their curriculum. Obe (2004) observed a significant difference in rural-urban academic performance of 480 primary six school finalists on the aptitude subtests of the National Common Entrance Examination into secondary schools and concluded that children from urban school were superior to their rural counterparts. Owoeye (2002), opined that there was a significant difference between academic performance of students in rural and urban area in public examination. Daramola (2010), investigated the influence of location of school and sex differences on the knowledge of basic Physics possessed by entering form III students in Kwara State secondary schools and found that urban students obtained a mean score which was significantly greater than that obtained by non-urban students. This confirms the disadvantage of students in rural areas, and therefore it is necessary that something be done to upgrade what amenities and facilities that are provided for such students. In another related study. Okonkwo (2000), found that location of a school, the type of school (single sex or mixed), qualifications and experience of the teachers can affect the performance of Junior Secondary School one (JSS 1) students in mathematics.

Onocha (1985), carried out a study into the pattern of relationship between home and school factors and pupils' learning outcomes in Bendel primary science project. He constructed a causal interaction model between six-school-related variables (school location, class size, teachers' qualification, sex of the teacher, availability and use of science equipment and teachers' attitude towards science), and pupils' achievement in science. He found out that teachers' attitude toward science, school location, availability and use of science equipment and teachers' of magnitude exerted positive and significant direct effects on science achievement. Gana (2007), asserted that the quality of facilities in schools depends on the rural / urban location of the school; while Joycee (2009), also collaborated this assertion that the causes of mass

failure in secondary schools can be traced to insufficient teachers, poor facilities and resources, poor counseling in schools, large number of students in each class and location of school. Ajavi and Ogunyemi (1990) and Gana (2007) in their different studies on the relationship between academic performance and school location revealed that, there was no significant different between academic performance of students in urban and rural schools. According to Bartholomaeus (2002), students in rural communities are looked down upon because of their attitude to schooling, poor behaviour and lack of academic ability. These negative discourses, according to him existed among teachers, parents, the community and some students and influence the interactions between students and teachers. This is a rural disadvantage. School located in urban areas receive better attention and therefore are better positioned to attract motivated students and teachers who exhibit the readiness to take academic seriously (Bates, 2003).

Apart from school location, one other factor that can affect the performance of students in schools is the availability and utilization of resources. According to Makinde (2007), non-availability of resources in the schools does affect the teachers' job performance and consequently, level of students' academic performance. She observed that most secondary schools have inadequate facilities to support the increase in school population. Oni (1988) equally agreed that many secondary schools are bedeviled by the problems of inadequate resources which include lack of textbooks, inadequate chairs and tables, poorly equipped libraries, lean education budgets, and other educational facilities. Gbadamosi (2001), found that there were disparity in resource availability and utilization between rural and urban schools in Ogun state secondary schools and this eventually affects the students' academic performance in the state. According to him, schools were better staffed both in quality and quantity in urban areas as more teachers preferred to stay in urban areas because of the social amenities available there. He further explained that the presence of public libraries in the urban centres also made the urban students more accessible to library books. He therefore submits that rural schools used to utilize the available resources judiciously than the urban schools. This he explained that in rural schools where there were not many activities that might distract the attention of the students such as recreational centre, students spends their time studying and this makes them to settle down to their studies and thus utilize more academic resources available to them effectively.

Akinwonmi (2006), pointed out that poor performance in Nigerian secondary schools could be associated with inadequate and differential distribution of resources/facilities in the secondary schools. Makinde (2007), also observed that most of the textbooks, computer laptops and instructional materials distributed to schools were kept in the principal's office. Hence, the resources were not utilized or underutilized and this could negatively influence the poor performance of the students. Ndukwu (2002), pointed out that inadequate staff in terms of teaching and supporting personnel, has always been a major constraint to the successful academic performance of students in rural areas in Oyo State. His findings revealed that there was a wide gap between the demand and supply of qualified teachers in the urban areas of the state than in the rural areas. This to a large extent affects the performance of the students in the rural areas of the state. This implies that resource constitutes a major strategic factor in organizational functioning. Consequently, the study on resource utilization in educational organization becomes a major concern of education planners and administrators.

Since education became free in Ogun state, many secondary schools were established in order to meet the demand of education in the state. The number of new schools in both the rural and urban areas became more than double Akinwonmi (2006). This situation increased the state government's financial burden without increasing her resource capacity to meet this cost. Thus, there is a plot of public outcry on the quality of secondary education that is currently being offered in the state. It is a widely held view that the quality is low, and that this is perhaps because the resource which should normally go along with the secondary education programme are inadequate and the quantity that is even available is not well utilized.

According to Gbadamosi (2001), resource utilization in secondary school education is the level of use of the resources and it is measured in terms of resources provision in secondary\ schools. This provision is again determined by the quality of resource items that are physically available in schools. Bartholomaeus (2002), referred to resources utilization as the number of times a resource can be used in a

week compared to the number of times it could be used as the "use or utilization factor" and it is expressed as a percentage. High "use factor" means maximum use of resources, these create problem of scheduling while low 'use factor" reflect the opposite. He therefore proposed that schools have to strike a compromise between high and low "use factors" by adopting "use factors" of between 70 and 85 percent. Operational definition of "resource utilization" in this study emphasized the quality of resource provided for in the secondary schools rather than the "use factor" proposed by Daramola (2010). From the operational definition therefore, educational resources are over utilized when they are in short supply and this has a negative effect on teaching and learning situation. When there is understaffing, for instance, teacher-student ratio is higher than the norm of teaching-learning efficiency. Thus, effectiveness becomes greatly reduced. Following Daramola (2010) line of argument, this is where there is high "use factor". Under utilization of resource is also manifest in several ways, e.g; when laboratories, students' chairs and tables and other physical and material resources are not in regular use or when secondary school teachers have an average of 12 teaching periods per week as opposed to a norm between 25 and 30 periods. In this situation, educational resources can be described as being underutilized. This situation has a serious financial implication for the government that provides the resources.

Numerous studies have shown positive correlation between location and students' academic performance (Warwick, 2003; Makinde, 2007; Falayajo and Makoju, 1997; Onwuakpa, 2008; Lawani, 2004; Orji. 2004; Ndukwu, 2002). Some studies also found differences in achievement between urban and rural location in favour of urban locations while some had contrary views, that is; in favour of rural location (Gana, 2007; Orji, 1998). Still, some others did not find any urban-rural achievement gap (Ajayi and Ogunyerni, 1990). Studies have shown that inadequate resources in secondary schools also affect the students' academic performance negatively (Oni, 1988; Gbadamosi, 2001; Akinwonmi, 2006). The interest of the researchers is to examine the influence of school location, school facilities and resources utilization in the secondary schools and how they affect students' academic performance in senior secondary schools in Ogun State, Nigeria.

Statement of the Problem

In spite of the efforts made by teachers to enhance students' performance in Senior Secondary Schools, students still perform poorly during examination. It is feared that school location, facilities, resources, students' attitude or teachers' characteristics among others could be the cause of students' poor performance in secondary schools. As a result of this, the researchers found it necessary to carry out further research to confirm or annul the protracted issue of the influence of school location, school facilities and resource utilization on students' academic performance in senior secondary schools in Ogun state, Nigeria.

Research hypotheses

In carrying out this study, the following research hypotheses were tested:

- **Ho**₁: There is no significant difference in the availability of human resources between rural and urban secondary schools in Ogun State.
- **Ho**₂: There is no significant difference in the utilization of resources between rural and urban secondary schools in Ogun State.
- **Ho**₃: There is no significant difference in the availability of physical resources between rural and urban secondary schools in Ogun State.
- **Ho**₄: There is no correlation in the performance of the students between the year 2009 and 2013.
- **Ho**_{5:} There is no significant difference in the performance of the students from the year 2009 and 2013 in Ogun State senior secondary schools based on school location.

Methodology

Research design

This study is a descriptive research and a sample survey research design was adopted for the study. This is because the study sought to determine the students' achievement (dependent variable) using school location and resource utilization (independent variables). This type of research design was chosen because the manifestations of the variables of the study had already occurred.

Population

The target population for this study comprised all the state government owned senior secondary schools in Ogun State, Nigeria.

Population Sample

There are 20 local government areas (LGAs) in Ogun State which have been divided into three senatorial zones. The distribution of the LGAs and the senior secondary schools in the three senatorial zones are as follows: there are six LGAs with 82 senior secondary schools in Ogun Central Senatorial Zone (OCS), there are nine LGAs with 118 senior secondary schools in Ogun East Senatorial Zone (OES), and there are five LGAs with 72 senior secondary schools in Ogun West Senatorial Zone (OWS). In all, there are three senatorial zones, 20 LGAs with 272 senior secondary schools in Ogun State, Nigeria. Two thousand four hundred students from 60 selected schools in nine local government areas within Ogun State, Nigeria were involved. The distribution is shown in Table 1.

S/N	Zone	Selected L.G.A	No of SSS in selected LGA	No of selected SSS in selected
				LGA
1	OCS	Abk. South	20	20/91 x 50 = 11
2	OES	ljebu-North	19	19/91 x 50 = 10
3	OES	Odogbolu	17	17/91 x 50 = 9
4	OWS	Ado-Odo/Ota	22	22/91 x 50 = 13
5	OWS	Yewa-South	13	13/91 x 50 = 7
	TOTAL		91	50

Table 1: Distribution of used LGA and Senior Secondary Schools

Sample and Sampling Technique

The sample of the study was made up of seven hundred (700) respondents from fifty (50) senior secondary schools from five (5) local government areas in Ogun State, Nigeria. The sample was selected using multi-stage sampling procedure. At the first stage, five local government areas (LGAs) were selected through a ballot sampling technique while proportionate sampling technique was used to select

fifty senior secondary schools from the ninety-one schools in the selected local government areas in the state that had presented candidates for SSCE/WAEC. Simple random sampling technique was then used to select 10 teaching staff and 3 non-teaching staff with the principals of each school being selected. All together, a total of 5 LGAs, 50 senior secondary schools and 700 participants were sampled for the study.

Instrumentation

The study made use of a set of self-developed questionnaire for the data collection. The instrument was titled "Location of School and Resource Utilization Questionnaire (LSRUQ)". The instrument consists of two sections A and B. Section A dealt with personal data while section B was designed to elicit information on the topic. The instrument was pilot tested on three public secondary schools that were not part of the real study sample and a reliability coefficient of 0.83 was recorded using crombach alpha reliability. Again, the SSCE/WAEC results of all the students in Ogun State senior secondary schools between the year 2009 and 2013 were collected from the participating schools in the State.

Data Collection Procedure

The questionnaire were distributed to all the selected teaching staff, non-teaching staff and the principals of the participating schools by the researchers and four trained research assistants. Thereafter, the researchers and their research assistants retrieved the instrument after completion by the respondents. Data collection lasted for 14 working days.

Data Analysis

The data collected were analyzed using t-test, Pearson Product Moment Correlation Coefficient (PPMCC) and ANOVA.

Results and Findings

Ho₁: There is no significant difference in the availability of human resources between rural and urban secondary schools in Ogun State.

Variables	Ν	Mean	SD	Df	Т	sign
Rural	350	15.71	3.045	698	-5.556	0.00
Urban	350	18.85	3.155			

Table 2: T-test analysis of the availability of human resources between rural and urban areas

Result

Table 2 shows that the p value was 0.00 implying that there existed no significant difference in the availability of human resources in rural and urban areas. However, there is significant difference in the availability of human resources between rural and urban areas. The mean values, 15.71 for rural and 18.85 for urban indicates that human resources are more available in urban areas than the rural.

Ho₂: There is no significant difference in the utilization of resources between rural and urban secondary schools in Ogun State.

Table 3: T-test analysis of the utilization of resources between rural and urban areas

Variables	Ν	Mean	SD	Df	t	Sig
Rural	350	5.40	1.899	698	1.289	0.201
Urban	350	4.99	1.436			

Result

Table 3 shows the t-value 1.289 which is not significant at 0.05, P<0.05. Therefore, there is no significant difference in the utilization of human resources between rural and urban areas. The mean value, 5.40 for urban areas and 4.99 for rural areas indicated that utilization of resources is more in urban areas than in the rural areas.

Ho₃: There is no significant difference in the availability of physical resources between rural and urban secondary schools in Ogun State.

Table 4: T-test analysis of the availability of physical resourcesbetween rural and urban areas

Variables	Ν	Mean	SD	Df	t	Sig
Rural	350	20.40	3.852	698	-4.542	0.00
Urban	350	23.79	4.529			

Result

Table 4 shows that at 0.05 level of significance, the t-value -4.542 is significant, P<0.05. Therefore, there is significant difference in the availability of physical resources between rural and urban areas. The mean values, 23.79 for urban and 20.40 for rural indicates that physical resources are more available in urban areas than the rural.

Ho₄: There is no correlation in the performance of the students between the year 2009 and 2013.

Table 5: Correlation	analysis in th	e performance	of	the	students
between the year 200)9 and 2013				

	2009	2010	2011	2012	2013
2009 Pearson correlation	1	.775**	.310	.426	.522*
Sig. (2 tailed)		.000	.184	.061	.081
N	20	20	20	20	20
2010 Pearson correlation	.775**	1	.632**	.269	.475*
Sig. (2 tailed)	.000		.003	.252	.034
N	20	20	20	20	20
2011 Pearson correlation	.310	.632**	1	.483*	.496*
Sig. (2 tailed)	.184	.081		.031	.026
N	20	20	20	20	20
2012 Pearson correlation	.426	.269	.522*	1	.672*
Sig. (2 tailed)	.061	.252	.081		.001
Ν	20	20	20	20	20
2013 Pearson correlation	.522*	.475*	.496*	.672**	1
Sig. (2 tailed)	.081	.034	.026	.001	
N	20	20	20	20	20

** Correlation is significant at the 0.01 level (2- tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Result

Table 5 shows that there is correlation in the performance of the students between year 2009 and 2010 and between 2009 and 2013. Also there is correlation between 2010 and 2011; and between 2010 and 2013. There is also correlation between 2011 and 2012 and 2011 and 2013.

Ho₅: There is no significant difference in the performance of the students from the year 2009 to 2013 in Ogun State senior secondary schools based on school location.

Table 6: Comparison in the performance of the students from year2009 to 2013

	Sum of	Df	Mean	F	Sig.
	Square		Square		
Between	3415.075	4	853.779	4.490	0.002
Group	18062.493	95	190.132		
Within	21477.568	99			
Group					
Total					

Result

Table 5 reveals that the F-value, 4.490 is significant at .05. (P<0.05), It follows that there is significant difference in the performance of the students from year 2009 to 2013. The tables bellow showed where the difference lies.

Table 6: Scheffe^a

		Subset for alpha = .05		
Year	Ν	1	2	
2013	20	1.3280		
2010	20	10.7640	10.7640	
2009	20	13.6370	13.6370	
2012	20		16.9968	
2011	20		17.2619	
Sig.		.102	.696	

Means for groups in homogeneous subsets are displayed a. Uses Harmonic Means Sample Size = 20.00

From Table 6, all the means of years 2013, 2010 and 2009 are together. This shows that there is no significant difference among them. Also, the means for 2010, 2009, 2012 and 2011 are together and it signifies that

there is no significant difference in their means. Significant difference occurred between year 2013 and 2011, and 2013 and 2012 as their

means were not found together in the same column. The chart below explains it better.

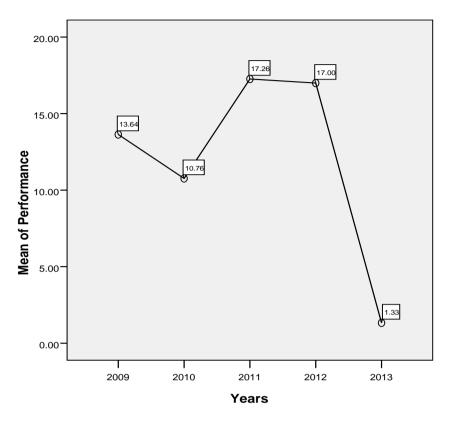


Fig. 1: Mean of performance of students based on school location

The chart in Fig. 1, shows that the performance was best in year 2011 (mean = 17.26), followed by year 2012 (mean = 17.00), followed by 2009 (mean = 13.64), then 2010 (mean = 10.16) and year 2013 the least (mean = 1.33) based on school location.

Discussion of Findings

The result from Table 2 of the study indicates that at 0.05 level of significance, the t-value -5.556 is significant, P<0.05. This implies that there is significant difference in the availability of human resources between rural and urban areas. The mean values. 15.71 for rural and

18.85 for urban indicates that human resources are more available in urban areas than in the rural. This finding collaborated with the findings of McGrill and Karu (1997), who asserted that many good teachers do not find it satisfying when they are required to live in a rural area. They concluded that distribution of teachers in the rural schools is not comparable with the urban schools. The result of the study also agree with the findings of Ndukwu (2002), who found that most teachers prefer to stay in the schools in urban areas because of the benefits and comforts of the city which include good roads, satisfactory means of communication, availability of books and teaching materials than staying in the rural areas.

Table 3 of the study showed that the positive t-value (1.289) is not significant at 0.05. (P<0.05). This indicates that there is no significant difference in the utilization of human resources between rural and urban areas. However, the mean values 5.40 for urban and 4.99 for rural indicates that utilization of resources is more in urban areas than in the rural. This is in contrast with the findings of Gbadamosi (2001), who found that there were disparity in resource availability and utilization between rural and urban schools in Ogun state secondary schools and this eventually affects the students' academic performance in the state. According to him, schools were better staffed both in quality and quantity in urban areas than the rural areas because of the social amenities available there. He further explained that the presence of public libraries in the urban centre also made the urban students more accessible to library books. He therefore submits that rural schools used to utilize the available resources judiciously than the urban schools. This he explained that in rural schools where there were not many activities that might distract the attention of the students such as recreational centre, students spends their time studying and this makes them to settle down to their studies and thus utilize more academic resources available to them effectively. This was supported by the findings of Joycee (2009), who asserted that the causes of mass failure in secondary schools can be traced to insufficient teachers, poor facilities and resources, poor counseling in schools, large number of students in each class and location of school.

Table 4 of the study also showed that at 0.05 level of significance, the t-value -4.542 is significant, P<0.05. This implies that

there is significant difference in the availability of physical resources between rural and urban areas. The mean values, 23.79 for urban and 20.40 for rural indicates that physical resources are more available in urban areas than in the rura1 areas. The finding was supported by Boyla and Meswanm (2008) and Ndukwu (2002).

Again, Table 5 showed that there is correlation in the performance of the students between year 2009 and 2010 and between 2009 and 2013. It also indicated that there is correlation between 2010 and 2011; and between 2010 and 2013. There is also correlation between 2011 and 2012; and 2011 and 2013.

Finally, in comparing the performance of students from year 2009 to 2013 in the selected local government areas, Table 6 of the study revealed that the F-value (4.490) is significant at 0.05, (P<0.05). It follows that there is significant difference in the performance of the students from year 2009 to 2013. This was supported by Obe (2004), Bates (2003), Ndukwu (2002) and Gbadamosi (2001).

Conclusion

This study was shown that from various studies examined the opinions and findings of researchers vary on how school location and resources influence the students' learning outcomes. While some maintain, yet this study also showed that school location, facilities and resource utilization played a significant role in the cognitive attainment and performance of students in senior secondary schools in Ogun state, Nigeria. It is therefore important for the stake holders in the education sectors to jointly work together in improving the lots of schools in the rural areas so that every child irrespective of his or her location can have access to good and quality education, in terms of facilities, environment, human and material resources to ensure better academic performance of the students. This is because, with favourable teaching conditions, teachers will not reject their posting to rural schools. Also, if infrastructural materials and amenities are provided in the rural areas as they are in the urban schools, both the students and teachers will be encouraged.

Recommendations

Based on the findings of this study, the following recommendations were made:

- i. Infrastructural materials and equipments must be made available by the government as they are in the urban schools to encourage both the students and teachers in the rural schools.
- ii. Schools in the rural areas should be improved upon by the government in terms of teaching conditions and facilities so that teachers will not reject their posting to the rural schools.

References

- Ajayi, K and Ogunyemi, B. (1990). The relationship between Instructional Resources and Socio-Economic Status in selected population of High School – Dissertation Abstract International vol. 25, No. 2. 22-33.
- Akinwonmi, O. O. (2006). Differential distribution and utilization of Educational resources and academic performance in secondary schools in Ogun State. Unpublished PhD Thesis, Olabisi Onabanjo University, Ago-Iwoye
- Bartholomaeus, P.A. (2002). School and Community Roles and Responsibilities. Paper presented at the annual conference of the Australian Association for Research in Education held at the University of Queensland, Brisbane Queennsland from 1st to 5th December, 2002.
- Bates, J.T. (2003). 'Portrait of a Successful Rural Alternative School'. Rural Educator 14/3: 20 – 24.
- Boyland C. and Meswan D. (2008). Long staying rural teachers who are to blame? Australian Journal of Education, 42(1): 213 223.
- Daramola, L.R. (2010). Allocation of resources to education in less developed countries. Journal of public economics, 14(2), 133-146.
- Ezike, B.U. (1997). The Effect of Resource Distribution and Utilisation on the Performance of students in Chemistry. M.Ed Dissertation, University of Ibadan.
- Falayajo, W and Makoju, G.E. (1997). Pro-type of National Assessment for Nigeria. Monitoring of Learning Achievement Project. Paper Presentation for Educational Assessment in Africa. Abuja 22-26 September.
- Gana, E.S. (1997). Effects of using Visual Designed Training Models on the Learning of mathematics of JSS unpublished PhD Thesis, University of Ibadan.

- Gbadamosi, L. (2001). Rural-urban disparity in resources availability, utilization and students' academic performance in Ogun State secondary schools, uniqwa research chronicle . A Research Journal of the University of the North QwaQwa Campus, 3(2), 7-10
- Joycee, H.S. (2009). Adjusting educational plan targets to meet financial constraints in education programmes and projects. Journal of educational studies, 87(1), 106 117.
- Lawani, L.A. (2004). A casual mode4l of Home and school factors as determinants of primary school pupils' achievement in English language and Mathematics. Unpublished PhD Thesis, University of Ibadan.
- Makinde, S.O. (2007). Effects of environmental variable on students' performance in Yoruba in selected secondary schools in Ogun State. M.Ed Dissertation, University of Ibadan.
- McGrill, W and Karu, R (2007). Urban environment. Journal of Environment and Behaviour. Vol. 3, no. 3.
- Ndukwu, P.N. (2002). School and teacher factors as determinants of classroom material resources utilization in preprimary schools in Lagos State. Unpublished PhD Thesis, University of Ibadan.
- Obe, E.O, (2004). Urban-rural and sex difference in scholastic aptitude on primary school finalists in Lagos State. Education and Development, 41(2): 123-134.
- Okonkwo, J.I. (2000). The re-allocation of resources and school facilities in a declining situation in Nigerian secondary schools. West African Journal of Education, 21(1), 18-29.
- Oni, J.O. (1988). Relationship between the availability of resources and students' academic performance in Ogun State secondary schools, Unpublished M.Ed Dissertation, University of Ibadan.
- Onocha, C.O (1985). Pattern of relationships between home and school factors and pupils' learning outcome in Bendel Primary science project. Unpublished PhD Thesis, University of Ibadan, Ibadan.
- Onwuakpa, F.I.W. (2008). An evaluation of some school quality indicators in Imo state secondary schools. An unpublished in PhD Thesis, University of Ibadan.
- Orji, A.B. (1998). Effects of problem solving and concept mapping instructional strategies on students' learning outcomes in Physics. PhD Thesis, University of Ibadan.

- Orji, A.B. (2004). Personal and school factors and determinants of students' perception of Teaching Effectiveness in Nigeria in Colleges of Education, unpublished PhD Thesis, University of Ibadan.
- Owoeye, J.S. (2002). The effect of interaction of location, facilities and class size on academic achievement of secondary school students in Ekiti state Nigeria. PhD Thesis, University of Ibadan.
- Warwick, B.E. (2003). How in the World do Students read? IEA study of Reading Literacy, Hamburg.