

SCHOOL PLANT MANAGEMENT AS CORRELATE OF STUDENTS' ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN AKWA IBOM STATE

Udofia, Uwem Nyong¹, Prof. Nnennaya Ibiam²

Department of Educational management, Michael Okpara University of Agriculture,
Umudike, Abia State^{1,2}

Email: uwemudofia40@gmail.com

Abstract

This study determined the relationship between effective school plant management and students' academic performance in secondary schools in Akwa Ibom State, Nigeria. The study adopted a correlation survey research design. A sample of 1822 respondents which comprised 84 principals and 1738 teachers, was drawn from a population of 6073 respondents in the public secondary schools in Akwa Ibom State using the multi-stage sampling technique. The instruments for data collection were the School Plant Management Questionnaire (SPMQ) and the Students' Academic Performance Questionnaire (SAPQ) which were all developed by the researcher. Three experts validated the instruments, and the stability and internal consistency of both instruments were assessed using the Pearson Product Moment Correlation and Cronbach Alpha statistics. The stability coefficients for the School Plant Management Questionnaire (SPMQ) and School Academic Performance Questionnaire (SAPQ) were 0.867 and 0.914, respectively, while the internal consistency coefficients were 0.888 and 0.903, respectively. Data collection was facilitated by three research assistants. The study employed Pearson product-moment correlation to address the research questions and linear regression analysis was utilized to examine the research hypotheses guiding the study at 0.05 level of significance. The findings showed that: the provision, utilization, and maintenance of administrative facilities respectively significantly and to a high extent relate to students' academic performance in public secondary schools. The study concluded that school plant management significantly relates to students' academic performance in public secondary schools. Based on the results it recommends that the government and principals should ensure that there is effective management of school plants in order to enhance students' academic performances in secondary schools.

Keywords: Academic performance, Administrative facilities, School facilities, School plants, School plants management.

Introduction

Education institutions are established for effective teaching and learning through effective utilization and management of school plant, it follows that all the resources (materials and human) of the organization must be effectively harnessed, managed, controlled and directed towards the performance of the pre-determined goals and objectives of the institution. The Educational institution in order to achieve these objective, provides relevant facilities in the schools. School plant in the idea of Nwankwo (2014) is all the structures and facilities put on the school ground. It includes the fixed and mobile structures and materials in the school such as the classroom, buildings, laboratories, library

and their equipment, recreational facilities, machines and tools etc. School plant in this discourse may be defined as school buildings such as administrative facilities, instructional facilities, laboratory, offices, library, and equipment. School plant also consist of everything within the school premises which includes the site, building equipment and all essential structures, permanent and non-permanent as well as the whiteboard, charts, and books required for effective teaching and learning (Ololube & Amanchukwu, 2015).

Educational facilities are provided for optimal use in the attainment of set objectives in schools. When any facility is overused or stressed, its durability is shortened. Similarly, when they are underutilized, they will not meet the objectives they were set for and will become counterproductive. For this reason, it is advocated that school plants should be maximally used to bring forth effective results in line with stated objectives. Adeboye (2012) noted that in managing school plants, caution should be taken in their usage in order not to underutilise or overutilise them to meet the expected objectives of why they were procured. Aloga (2014), asserted that when a class is overcrowded, the desks and seats will be overstressed and will break down easily and influence effective teaching and learning in the classroom. Such classes also become stuffy and ill-ventilated. This situation affects the health of the teachers and students. Stuffy and smoky classes reduce the quality and quantity of air intake by students which tends to lower studying and learning symptomized by constant tiredness, yawning, and feeling of dizziness or sleeping during classes (Okoyes, Alao & Abosi, 2012).

School plants could be classified into administrative facilities and instructional facilities. Administrative facilities in the context of this study refer to the facilities in secondary school such as buildings occupied by the principal, teachers, and staff. According to Evertson (2011), the concrete organization of the teachers and non-teaching staff in administrative facilities is a critical factor in promoting learning activities. A well-designed administrative facility promotes academic management. Blatchford, Edmonds, and Martin (2013), in their study of administrative facilities and staff behaviour, observed that staff in a well-organized facility used more time for learning activities such as reading, writing lesson notes, marking students' work, and brainstorming among the staff. Cakmak (2019) in a study of influence of administrative facilities on teacher's performance, observed that teachers perform better in spacious facility than in poor environment.

Management is viewed as the act of getting people together to accomplish desired goals and objectives using available resources efficiently and effectively (Adekunle, Subair & Olugbenro, 2012). School plant management according to Agboola (2015) should ensure that facilities are kept in good condition and are properly utilized to achieve the purpose for which they were meant. Ogbodo in Udom (2015) classified school plant management into three activities namely: procurement (availability), utilization (usability) and maintenance (renovation). This classification is adopted in this study and all availability/procurement, utilization and maintenance are of interest of this research work. School plant management basically involves two functions which all go to provide a favorable environment for teaching and learning. These are the operation and maintenance of school plant functions. Maintenance of school plant, on the other hand, involves the keeping of the school building, equipment, furniture and the like at their original or best condition of completeness and efficiency, through regular repair of the moveable asset and if necessary, replacement of the whole item or part thereof (Mkpa, 2010). The interior and exterior of the whole building all fall under this function.

Provision of school plant in the context of this study has to do with the availability of the degree or state or quality of supply of equipment, facilities, amenities, and infrastructure, human and material resources for use in a school environment. It is the process of making available the instruments and facilities needed in a school plant for effective and efficient performance of human and material resources which in turn enhances teaching and learning process (Olagboye, 2018).

Provision and maintenance of facilities are the primary responsibility of the government and the school leadership, as such, principals must be fully concerned with the physical environment and other facilities around the school. In the submission of Ogene (2015) school facilities are mostly provided by government, community, and grants from agencies. He added that most public secondary schools in south south region in Nigeria were built by non-governmental agencies. When school plant is adequately provided, the next management level is to ensure that the facilities are effectively utilized. However, the Government of Akwa Ibom State in particular had in the last decade made tremendous impact in providing this level of education with some school plants for effective teaching and learning and even went further to declare free and compulsory education to every Akwa Ibom child. Nevertheless, most schools especially in the rural areas have little or no such educational plants (Akpan, 2010).

According to Tella (2018), the number of factors that could influence school facility utilisation are Awareness on the part of users, availability of the facility in terms of quality and quantity for the learners; and Skills of the users on the facilities. The researcher added that the school head has the responsibility of ensuring that the school plant is put into proper use. In other words, to ensure that every plant serves the purpose for which it was meant effectively.

To this end, Alonsabe (2011) observed that it is a common sight to find some useful, audio-visual scientific equipment and other materials in some school stores that have not been put into use for years. Often, facilities and equipment given to schools are left to rot away in containers without being put to use. This has been the case with introductory technology equipment and computers given to most schools by the government. To put school facilities and equipment to proper use, Alonsabe (2011) has suggested that the head teacher should do the following; prepare a list of teaching equipment and materials and make it available to subject teachers, as well as, ensure that they sign to collect and make use of it regularly. Making staff aware of newly acquired equipment and training staff on the use in workshops or demonstrations to teachers in relevant subject areas are where necessary. Such training programmes could be organized through visits to classrooms regularly to ensure that equipment is put to use properly.

Maintenance in this study is defined as the act of keeping school plant facilities in good condition by checking or repairing them regularly. Maintenance is therefore, defined as any action taken to keep facilities in good working condition for as long as possible without failing to restore it to its operational state after a failure occurrence (Okorie, 2014). Maintenance of facilities implies activities put in place to restore the physical conditions of facilities. Amanchukwu (2015) stated that school plant maintenance is all activities embarked upon with a view to sustaining initial use value of the school plant. School plant maintenance refers to the process of keeping school facilities in a condition close to their original state. Uko (2015), noted that a major problem facing schools today is that facilities are not properly maintained. The physical appearance of most schools' speaks volume of

the poor status of infrastructure. Ogundele (2015), noted that most school buildings are in varying levels of dilapidation and disrepair. Most schools' buildings are without roofs and create an unhealthy environment for teaching and learning. Lack of maintenance of school plant in the Nigerian education institutions is a recurring decimal and the sooner attention is paid in that area the better for the managers of education.

The term performance is the ability of the child or students to retain and be able to transfer acquired knowledge in the appropriate situation. Performance of a student is ascertained in the group of subjects taken (Owoyemi, 2010). Students' academic performance represents the outcome that indicates the extent to which a student has accomplished specific goals that were the focus of activities in instructional environments, specifically school, college, and University. Academic performance may be measured through examinations or continuous assessments. Students' performance in Adeyemi (2018) in a finding on the influence of classroom space on the quality of output in secondary schools revealed that schools having a well space classroom obtained better result in the secondary school's certificate examination (SSCE) than schools having an un-spaced classroom.

High level of students' academic performance may not be guaranteed where school plants such as classrooms, libraries, technical workshops, and laboratories are lacking (Aja, 2013). Ajaji (2010) observed that "most secondary schools have poor school building structure, classes extremely hot in hot weather and very damp during the rainy season, teaching equipment of all sorts in short supply and inadequate school plant maintenance. Unfortunately, through the researcher's observation, it has been observed that some public secondary schools in Akwa Ibom State have leaking roofs, broken windows, poor equipped laboratories and libraries, dilapidated buildings, blown-off roofs, cracked decaying walls, sagging roofs, and some teaching equipment in short supply. Situations such as these may not be seen as appropriate for yielding high academic performance in the secondary school environment. Corroborating these,

It is against this background that this study investigated how school plant management relates to students' academic performance in Akwa Ibom State. In other words, the study determined the relationship between school plant management and students' academic performance in Akwa Ibom State.

Purpose of the Study

The purpose of this study is to determine the relationship between school plant management and students' academic performance in public secondary schools in Akwa Ibom State. Specifically, the study sought to:

1. determine the extent of the relationship between school plant management in the provision of administrative facilities and students' academic performance in public secondary schools in Akwa Ibom State.
2. find out the extent of the relationship between school plant management in the utilisation of administrative facilities and students' academic performance in public secondary schools in Akwa Ibom State.
3. ascertain the extent of the relationship between school plant management in the maintenance of administrative facilities and students' academic performance in public secondary schools in Akwa Ibom State

Research Questions

To achieve the purpose of this study, the following research questions were asked:

1. To what extent does the provision of administrative facilities relate to students' academic performance in public secondary schools?
2. To what extent does utilization of administrative facilities relate to students' academic performance in public secondary schools?
3. To what extent does maintenance of administrative facilities relate to students' academic performance in public secondary schools?
4. What is the joint relationship between school plant management and students' academic performance in public secondary schools?

Research Hypotheses

The following null hypotheses were tested at 0.05 level of significance to guide this study.

- H0₁:** There is no significant relationship between provision of administrative facilities and student's academic performance in public secondary schools.
- H0₂:** There is no significant relationship between utilization of administrative facilities and student's academic performance in public secondary schools.
- H0₃:** There is no significant relationship between maintenance of administrative facilities and student's academic performance in public secondary schools.

Methodology

This study determined the relationship between effective school plant management and students' academic performance in secondary schools in Akwa Ibom state Nigeria. The study adopted a correlation survey research design. A sample of 1822 respondents which comprised 84 principals and 1738 teachers drawn from a population of 6073 respondents in the public secondary schools in Akwa Ibom state using multi stage sampling technique. The instruments for data collection were School Plant Management Questionnaire (SPMQ) and Students' Academic Performance Questionnaire (SAPQ) which were all developed by the researcher. The instruments were validated by three experts, two in Educational Administration and Planning and one in measurement and evaluation, all in College of Education, Michael Okpara University of Agriculture, Umudike, Abia State. The stability and the internal consistency of the two the instruments were determined using Pearson product Moment Correlation and Cronbach Alpha statistic respectively which yielded coefficients of 0.867 and 0.914 for the stability of SPMQ and SAPQ respectively and 0.888 and 0.903 for the internal consistency of SPMQ and SAPQ respectively. Three research assistants helped in data collection. Out of the 1822 copies of the two instruments administered respectively, 1709 copies of each of the instruments representing approximately 94% rate of return were used for data analysis. Pearson product moment correlation was used to answer the seven research questions raised for the study while linear regression analysis was used to test the seven null hypotheses that guided the study at 0.05 level of significance. The findings showed among others that: the provision, utilization and maintenance of administrative facilities respectively significantly to a high extent relate to students' academic performance in public secondary schools, while the provision, utilization and maintenance of instructional facilities respectively significantly to a very high extent relate to students' academic performance in public secondary schools. The study concluded that school plant management significantly relate to students' academic

performance in public secondary schools. Based on the results and conclusions from the study, it was recommended that Government and Principals of secondary schools should ensure that there is effective management of school plants in order to enhance students' academic performances in secondary schools.

Results

The results of the study were presented in tables and based on the research questions and the hypotheses that guided the study.

Research Question 1

To what extent does provision of administrative facilities relate to students' academic performance in public secondary schools?

Table 1: Correlation Matrix of Relationship between provision of Administrative Facilities and Students' academic performance in public secondary schools

		PAF	SAP
PAF	Pearson	1	.715
	Sig (2-tailed)		.000
	N	1709	1709
	R ²	(0.511) 51.1%	
SAP	Pearson	.715	1
	Sig. (2-tailed)	.000	
	N	1709	1709

PAF= Provision of Administrative Facilities, SAP= Students' Academic Performance

Data in Table 1 show a correlation (r) value of 0.715 which is positive and within the coefficient limit or range of 0.61-0.80 indicating high extent relationship. This result shows that the provision of administrative facilities to a high extent relates to students' academic performance in public secondary schools. The coefficient of determination (R²) of 0.511 indicates that 51.1% of the students' academic performance in public secondary schools could be accounted for by the provision of administrative facilities.

Hypothesis 1

There is no significant relationship between provision of administrative facilities and student's academic performance in public secondary schools.

Table 2: Regression Analysis of Extent of Relationship between provision of Administrative Facilities and Students' academic performance in public secondary schools

Model	Sum of Squares	Df	Mean Square	F	Sig.	Decision
Regression	6323.144	1	6323.144	502.236	.000 ^b	S
Residual	21512.416	1708	12.588			
Total	27835.560	1709				

Data in Table 2 reveals a significant probability (P) - value of 0.000 which is less than the alpha value of 0.05. Since the P-value is less than 0.05 alpha value, the hypothesis of no significant relationship was rejected and the alternate upheld. Therefore, there is a

significant relationship between provision of administrative facilities and student's academic performance in public secondary schools.

Research Question 2

To what extent does utilization of administrative facilities relate to students' academic performance in public secondary schools?

Table 3: Correlation Matrix of Relationship between utilization of Administrative Facilities and Students' academic performance in public secondary schools

		UAF	SAP
UAF	Pearson	1	.783
	Sig (2-tailed)		.000
	N	1709	1709
	R ²	(0.613) 61.30%	
SAP	Pearson	.783	1
	Sig. (2-tailed)	.000	
	N	1709	1709

UAF= Utilization of Administrative Facilities, SAP= Students' Academic Performance

The data in Table 3 reveals a correlation value of 0.783 which is positive and within the coefficient limit or range of 0.61-0.80 indicating high extent relationship. This result shows that the utilization of administrative facilities to a high extent relates to students' academic performance in public secondary schools. The coefficient of determination (R²) of 0.613 indicates that 61.30% of the students' academic performance in public secondary schools could be accounted for by the utilization of administrative facilities.

Hypothesis 2

There is no significant relationship between utilization of administrative facilities and student's academic performance in public secondary schools.

Table 4: Regression Analysis of Extent of Relationship between utilization of Administrative Facilities and Students' academic performance in public secondary schools

Model	Sum of Squares	Df	Mean Square	F	Sig.	Decision
Regression	7239.642	1	7239.642	355.686	.000 ^b	S
Residual	34764.729	1708	20.354			
Total	42004.371	1709				

Data in Table 4 reveal a probability (P) - value of 0.000 which is less than the alpha value of 0.05. Since the P-value is less than 0.05 alpha value, the hypothesis of no significant relationship was rejected and the alternate upheld. Therefore, there is a significant relationship between utilization of administrative facilities and student's academic performance in public secondary schools.

Research Question 3

What extent does maintenance of administrative facilities relate to students' academic performance in public secondary schools?

Table 5: Correlation Matrix of Relationship between maintenance of Administrative Facilities and Students' academic performance in public secondary schools

		MAF	SAP
MAF	Pearson	1	.721
	Sig (2-tailed)		.001
	N	1709	1709
	R ²	(0.520) 52%	
SAP	Pearson	.721	1
	Sig. (2-tailed)	.001	
	N	1709	1709

MAF= Maintenance of Administrative Facilities, SAP= Students' Academic Performance

Data in Table 5 reveals a correlation coefficient of 0.721 which is positive and within the coefficient limit or range of 0.61-0.80 indicating high extent relationship. This result shows that the maintenance of administrative facilities to a high extent relates to students' academic performance in public secondary schools. The coefficient of determination (R²) of 0.520 indicates that 52% of the students' academic performance in public secondary schools could be attributed to the maintenance of administrative facilities.

Hypothesis 3

There is no significant relationship between maintenance of administrative facilities and student's academic performance in public secondary schools.

Table 6: Regression Analysis of Extent of Relationship between maintenance of Administrative Facilities and Students' academic performance in public secondary schools

Model	Sum of Squares	Df	Mean Square	F	Sig.	Decision
Regression	8769.533	1	8769.533	397.549	.001 ^b	S
Residual	37677.118	1708	22.059			
Total	46446.651	1709				

The data in Table 6 indicates a P-value of .001 which is less than 0.05 alpha value. This implies that the hypothesis of no significant relationship earlier stated was rejected and alternate upheld. Therefore, there is a significant relationship between maintenance of administrative facilities and student's academic performance in public secondary schools.

Discussion

The findings of the study were discussed below and based on the major findings of the study.

Results from the study showed in Table 1 that the provision of administrative facilities in the form of the provision of classrooms for teaching the students, laboratories for conducting different experiments, libraries with books and journals, offices for staff to carry out their functions as well as sports grounds for staff and students to use among others significantly to a high extent relate to students' academic achievement. The results agreed with Aja (2013) who opined that high level of students' academic performance may not be guaranteed where school plant such as classrooms, libraries, technical workshops and laboratories are lacking.

It was found from the study on Table 4.3 that utilization of administrative facilities in the form of classrooms for effective teaching and learning by the teachers and students respectively, effective use of laboratories for conducting different forms of researchers and experiments by teachers and students, use of school stores for safe-keeping office equipment and other materials for future use among others, significantly to a positive high extent relate to students' academic performances. The results agreed with Adeboyeje (2010) who maintained that when school plants are put into use for the purpose(s) for which they are provided, academic activities will no doubt improve to a greater extent.

The results revealed in Table 5 indicated that when administrative facilities are well-maintained, students' academic performances will be enhanced. The result is not surprising, because damaged and dilapidated facilities that are not well maintained even if put into use in the schools, cannot yield good results of enhancing students' academic performances. This result corroborated Amanchukwu (2015) who opined that well-maintained that facility assures effective usage for effective instructional deliveries. The result equally support Alonsade (2011) who blamed poor performances of students in some school subjects to that of too many dilapidated facilities in the schools that suffered poor maintenance by the concerned authorities.

Conclusion

This study examined the relationship between school plant management and students' academic performance in public secondary schools in Akwa Ibom state Nigeria. Based on the analysis carried out and the results of the study, it could be concluded that school plant management significantly relate to students' academic performance in public secondary schools in Akwa-Ibom state.

Recommendations

Based on the findings and conclusions of the study, the following recommendations were made.

1. Government and School management should ensure adequate provision of administrative facilities to secondary schools.
2. Principals and other school management should devise strategies that will ensure adequate utilization of the available of the administrative facilities in secondary schools.

3. Government should provide adequate training and re-training programmes to Teachers and other school managements on maintenance practices of some of the damaged and dilapidated facilities in schools.

References

- Adeboye, R. A. (2010). A practical approach to effective utilization and maintenance of physical facilities in secondary schools. In J. O. Fadipe & E. E. Oluchukwu (Eds). *Educational planning and administration in Nigeria in the 21st century*. Ibadan: NIEPA.
- Adedeji, U. D. (2021). Provision and Utilization of instructional facilities as correlate of effective teaching in public secondary schools in Ekiti State, Nigeria. *JOHAN Academic journal of interdisciplinary studies* 2 (2), 41-46
- Adekunle, A. A, Subair E. R. & Olugbenro, N. T. (2012). Provision and management of school facilities for the implementation of UBE programme. *Proceedings of the 2011 International Conference on Teaching, Learning and Change*. Retrieved August 08, 2015 from [http://www.hrmars.com/admin/pics/157 .pdf](http://www.hrmars.com/admin/pics/157.pdf).
- Adeyemi, C. A. (2021). Availability and utilization of school facilities on students' academic performance in secondary schools in Ogun state. *The ESSAN journal of interdisciplinary studies* 2 (2), 63-67
- Adeyemi, C. A. (2021). Availability and utilization of school facilities on students' academic performance in secondary schools in Ogun state. *The ESSAN journal of interdisciplinary studies* 2 (2), 63-67
- Agboola, P.P (2015). Revenue generation and management in schools. In Akpa, G. O. (ed) *the 21st Century Principal in Nigeria*. Jos. Ichejum Publishers.
- Ajayi, J. F. (2010). *Issues in school management*, Lagos: Bolabay Publisher.
- Akpakwu, C.T.(2012). School plant Utilization and maintenance in university demonstration schools in South east, Nigeria. Unpublished M.Ed thesis Ebonyi state University, Abakaliki.
- Akpakwu, C.T.(2012). School plant Utilization and maintenance in university demonstration schools in South east, Nigeria. Unpublished M.Ed thesis Ebonyi state University, Abakaliki.
- Akpan, R. J. (2011). *School Plant Management in Nigeria*. Uyo: MEF Nigeria Limited.
- Aloga, S. O. (2014). *Administration: Concepts and practice*. Port Harcourt. Bas Joe
- Alonsabe, O.B.A (2011). Demographic and Personality Correlates of Principals' Performance in the Management of Secondary School in South-South, Nigeria. *www.visuallibrary, university of Nigeria, Nsukka*.
- Amanchukwu, R. N, & Olulube, N. P. (2015). Managing school plant for effective service delivery in public secondary schools in Rivers State of Nigeria. *Human Resource Management Research*, 5(4), 95-102.
- Amanchukwu, R. N. (2015). Indiscipline as a Contributory Factor to the Falling Standard of education In Nigeria. *Issues on Development: A Multi-disciplinary International Journal on Sustainable Development*, 6(4),
- Blatchford, T.C., Edmond, V.D & Martins, M.P. (2013). Administrative facilities in schools. Retrieved from www.jprstu.edu.com march 11, 2019.
- Blatchford, T.C., Edmond, V.D & Martins, M.P. (2013). Administrative facilities in schools. Retrieved from www.jprstu.edu.com march 11, 2019.
- Cakmak, K. (2019). School size, school climate, and student performance. *School Improvement Research Series*. Retrieved March 26, 2003 from

- Evertson, R. (2011). Classroom Organization. Retrieved 3rd August, 2016 from: [www.education.com/mb.ca/k12/specedu/doc](http://www.education.com/mb.ca/k12/specedu/documents/entertainment)um entshtm l.
- Mkpa, T. (2010). Small is too big: Achieving a critical anti-mass in the high school. In: J. Honnlet (ed.) Source book on school and district size, cost, and quality. Minneapolis: Oak Brook Educational Laboratory.
- Nnadi, A.N. (2017). *Administering education in Nigeria: Problems and prospects*. Enugu: Heinemann Education Books (Nig.) Ltd.
- Nwankwo, J. B. (2014). Personal background and administrative effectiveness of primary school head — teachers in Cross Rivers State, Unpublished M. Ed Thesis University of Calabar, Calabar.
- Obi, P. N. (2016). The educational administration and management. In: G. O. Unachuckwa and P.N Okorji (ed), Educational Management: A Skill building Approach. Awka: Rex Charles and Patrick Limited 3-33.
- Ogene, J. B. (2015). *Issues in school management*, Lagos: Bolabay Publisher.
- Ogundele, M. O. (2015) Recreational facilities and secondary school students' academic performance in Kwara State, Nigeria. Journal (f Vocational Education & Technology 9 (2)
- Okenwa, B. C. N. (2014). Provision, utilization and maintenance of technical education. Olagboye. A. A, (2018). *Promoting school plant maintenance culture in the Nigeria school system. Ondo - Nigeria: (NIEPA)*.
- Ololube, N. P. & Amanchukwu (2015). *Understanding teachers 'professional competencies for education effectiveness*. Owerri: Spring Field Publishers
- Owoeye, S. (2011). *Challenges of educational planning in the 21st Century*. Port Harcourt: Ben Ray.
- Sita, N. (2010). Classroom Interaction Characteristics in a Geography Class. *An Unpublished Master Degree Dissertation of the University of Diponegoro, Semarang*.
- Tella A. (2018). Teacher Variables as Predictors of Academic Achievement of Primary School.
- Udo, I. P. (2017). *The need for effective facility management in schools in Nigeria*. New York Science Journal, I (2), 10-21.
- Udom, G. (2015); *Educational administration and planning*. Calabar: University of Calabar Press.
- Uko, E. S. (2015). Principalship and effective management of facilities in secondary schools in Cross River State, Nigeria. *International Journal of Academic Research and Reflection*, 30), 15-23.
- Ukpong, D. B. (2014). The need for effective facility management in schools in Nigeria. *New York Science Journal*, I (2), 10-21.