

Relationship between Availability and Planning of Facilities in Schools and Students' Academic Achievement in Senior Secondary Schools in Adamawa State

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Abstract:- This study investigated the relationship between availability and planning of facilities in schools and students' academic achievement in senior secondary schools in Adamawa state. The purpose of this study is determine the relationship availability and planning of facilities in school and students' academic achievement in senior secondary schools in Adamawa state, two research questions and two hypotheses guided the study. The study adopted correlational survey design which was carried out by the use of questionnaire tagged "availability and planning of facilities in schools' questionnaire" (APFSQ) designed by the researcher and pro forma to elicit students' academic achievement. The instruments were validated by experts and were pilot tested to determine their reliability. The reliability coefficient of 0.82 was determined using cronbach's alpha coefficient. The population of the study comprised 337 principals and 5128 teachers and 134,346 in all the senior secondary schools within the five education zones of Adamawa State. The sample size of 166 principals, 365 teachers and 531 senior secondary school students which were statistically determined using Taro Yamane formula for finite population. Descriptive statistics of mean, and standard deviation was used to answered research questions while the null hypotheses were answered using linear regression analysis. All the hypotheses tested at 0.05 level of significance were rejected. Based on the data collected and analysed statistically, all the results of the finding revealed that there is a significant relationship between the availability, planning of facilities in schools and students' academic achievement in senior secondary schools of Adamawa state. Based on the findings it was concluded that, availability and planning of facilities in school have contributed to students' academic achievement in senior secondary schools of Adamawa state. Among the recommendations, facilities in school should be provided to enable students' and teachers to concentrate on their job for effective delivery.

Keywords: - Availability, Planning And Students' Academic Achievement.

I. INTRODUCTION

The task given to a government and school management of secondary schools is vital for the realization of educational developmental goals since principal are involved in the implementation of educational policies and programmes. One of the primary functions of secondary school principals is management and maintenance of facilities in schools. Principals' management of facilities in schools is an integral part of the overall management of the school. The actualization of the goals and objectives of education require the availability and planning of the facilities in schools. Furthermore, advances in science and technology, necessitate that the school manager should adopt modern methods of facilities management (Ogie, 2015). This will improve the quality of teaching and learning. A direct relationship exists between the quality of facilities in schools provided and the quality of the products of the school. The physical environment of a school is a major determining factor in the attainment of its objectives.

Others hold that inadequate facilities in schools can have adverse effect on students' achievement (Jackline & John, 2014). The question is – what are facilities in schools? Facilities in schools refer to Planning of facilities in schools and instructional material equipment. Human resources include teachers, store attendants, librarians and library attendants, laboratory assistants to mention but a few. Planning of facilities in schools and instructional materials equipment on the other hand, comprise classrooms, staff rooms, administrative blocks, dormitories, libraries, laboratories, examination halls, teachers' quarters, text books, audiovisual materials and items of furniture, laboratory chemicals and equipment.

Availability of facilities in schools in our senior secondary schools are prerequisite for effective teaching and learning which in effect will manifest in better academic achievement of students. The facilities in schools should be adequately provided spacious and properly ceiled to ensure conducive atmosphere for effective teaching and learning. Akinsolu, (2012) on the other hand, asserted that no matter the strength of manpower resources in the

system, educational process must require conducive physical accommodation, libraries, furniture, and play ground in support noted that for effective teaching and learning situations, planning of facilities in schools and educational goals should be viewed as being closely interwoven and interdependent. In other words, poor performance of students in secondary schools has direct correlation with non-availability of facilities in schools. The problem generated by non-availability and planning of facilities in schools in secondary schools can no longer be dismissed with a wave of hand (Uwazurike, 2010).

Availability of facilities in schools in our senior secondary schools are prerequisite for effective teaching and learning which in effect will manifest in better academic achievement of students. These classrooms should be adequately ventilated spacious and properly ceiled to ensure conducive atmosphere for effective teaching and learning. Lyons (2012) agree with the above assertion and state that school building should be a stimulating agency and that the classroom with an adequate space and equipment will help teachers concretize teaching and may promote the growth of learning. United Nations Educational, Scientific and Cultural organization (UNESCO) having seen the effect adequate and conducive classroom has on teaching and learning and the realization of the school objectives stipulated twenty-five pupils per class with an equivalent number of desks and chairs healthily arranged in rows. The implication of this is that non-availability or inadequate classrooms have an adverse effect on teaching and learning and invariably on students' academic achievement. Uko and Ayuk (2014) states that of classroom accommodation in many Nigerian secondary schools, Adamawa State inclu"lack sive, pushes the teachers to teach under unhealthy environment. Uko also observe that this type of condition can never augur well for effective teaching and learning.

Planning of facilities in schools and academic achievement of students having earlier noted that in senior secondary schools planning include, the school head, the teacher, and other non-tutorial staff of the school, it is essential to see the principals as the main focus or determinant of students' academic achievement. Also the teacher is seen as the lifeblood in every school system in general and especially in secondary school system in particular. In 1969 at the Nigerian National curriculum conference, the importance of the principals within the school organisation was highlighted. Principals' was described as "the key man in the entire educational programme". It was also observed that the quality of his training makes the great result of his job as a principal. Adeyinka (2007) states teaching can be a way of sharing power, of convincing people to value what you value or to explore the world with you or through you. This definition can be viewed as simplistic and ambiguous as to mean several other things like cheating instead of teaching.

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teacher, the school head and other non-tutorial staff of the school, it is essential to see the teacher as the main focus or determinant of students' academic achievements. The teacher is seen as the lifeblood in every school system in general and especially in secondary school system in particular. In 1969 at the Nigerian National curriculum conference, the importance of the teachers within the school organization was, highlighted. Teacher was described as "the keyman in the entire educational programme". It was also observed that the quality of his training "makes or mars the end result of his job as a teacher". What is then teaching? Adeyinka (2007) states "Teaching can be a way of sharing power, of convincing people to value what you value or to explore the world with you or through you. This definition can be viewed as simplistic and ambiguous as to mean several other things like cheating instead of teaching.

Adeyemi (2008) defines teaching as a noble profession, a service profession, a satisfactory profession, a rewarding profession, partly because it is specialized knowledge, techniques, skills, requirements and reinforcements and partly because it is a life career and a call which should attract people, not for what they get out of it but mainly for what they put into it".

As a result of this acute shortage of teachers' showing his disappointment stated "all along and up till today, a bachelor's degree is accepted as a qualification for teaching at any level without prior professional training or teaching experience". This employment of unqualified or untrained teachers appeared to be one of the major contributors to poor academic achievement of students in secondary schools, most of them do not regard teaching as their real job and they still look for other jobs and moreover, they do not acquire the prerequisite knowledge of methods of teaching in which case they cheat instead of teaching. Abiodun (2008) state that "excellence in teaching in the year 2000 and beyond demands not just an average teacher who can communicate merely the subject matter but a qualified teacher who will teach and not cheat". They added that poor teacher merely tells and cheats while his students merely listen; but telling is not teaching". They concluded, "we are badly in need of great teachers who are able to stimulate or motivate and reinforce the child to think rationally, feel correctly as a child, speak wisely as a child and live usefully as a child; so that when he grows into a man, he will think, feel, speak and live similarly as a man" Abdulkareem (2011) states that "from such excellent teaching, pupils students will catch the fire and excitement of thinking and creating which in turn will benefit them now and in future".

On the other hand, some of the qualified teachers live teaching to more lucrative jobs. The condition of teaching service and the general treatment for teachers need much to be desired. Salaries are not paid as and when due and because of that some teachers engage in other businesses so as to make ends meet. Some teachers come to school and refuse to teach on the ground that they are hungry (that is that they are not paid). Generally, because of the ill

treatment meted to teachers, there are disrespect and disregard for teachers. All these seem to have adverse effect on the academic achievement of students in secondary schools especially in Adamawa state. The president of Education International Asiyai (2012) in the comet stated that: "Whether in the United States, United Kingdom, Ireland, Nigeria or elsewhere, teachers are leaving the profession for several Universal reasons among which are poor working conditions poor salaries and lack of respect and appreciation for the work that teachers do." The shortage occasioned by the outage would "worsen" unless all teachers, not a few are paid the professional salaries they deserve. Over the years, teachers have to go home with a salary for less than their other professionals thereby forcing them to hold second jobs to simply make ends meet. in Post Express agrees with the above assertion and requests that:

So, since, the instrument of evaluating the quality of facilities in schools in senior secondary schools is students' performance in West African school certificate examinations (Lynons, 2012). The facilities in schools play vital role in the actualization of educational goals and objectives by satisfying the physical and emotional needs of students and teachers of the school. Their availability, adequacy and relevance influence efficiency and high productivity. It has always been realized that facilities in schools are very important in the development of education in Adamawa State and Nigeria at large.

➤ *Statement of the Problem*

There are mostly negative challenges to students' when facilities in schools are not properly planned. In Adamawa state majority of the students in public secondary schools perform poorly in West African senior school certificate examinations (WASSCE). This situation makes it impossible for the attainment of the goals of national policy. For instance, there are many secondary school dropouts today who can never enter into any tertiary institutions or fit anywhere in the society. All the above problems are as a result of poor achievement of students, which appears deep rooted in inadequacy or poor management of facilities in schools inherent in most of our secondary schools today. It's therefore necessary for Adamawa state government to provide enough facilities in schools in public secondary schools in order to upgrade education system and educational output.

➤ *Objectives of the Study*

The specific objectives are to determine the relationship between;

- Availability of facilities in schools and students' academic achievement
- Planning of facilities in schools and students' academic achievement.

➤ *Research Questions*

The following research questions guided this study.

- To what extent are facilities in schools available for students' academic achievement?
- To what extent are facilities in schools planned for students' academic achievement?

➤ *Research Hypotheses*

The following null hypotheses are formulated and tested at 0.05 level of significance.

- **H01:** There is no significant relationship between availability of schools' facilities and students' academic achievement.
- **H02:** There is no significant relationship between planning of facilities in schools and students' academic achievement.

II. METHODOLOGY

The study adopted correlational survey design which was carried out by the use of questionnaire tagged "availability and planning of facilities in schools questionnaire" (APSFQ) designed by the researcher and pro forma to elicit students' academic achievement. The instruments were validated by experts and were pilot tested to determine their reliability. The reliability coefficient of 0.82 was obtained using cronbach's alpha method. The population of the study comprised 337 principals and 5128 teachers and 134,346 in all the senior secondary schools within the five education zones of Adamawa State. The sample size of 166 principals, 365 teachers and 531 senior secondary school students which were statistically determined using Taro Yamane formula for finite population. Descriptive statistics of mean, and standard deviation was used to answered research questions while the null hypotheses were answered using linear regression analysis.

III. FINDINGS

This chapter presents data analysis, results and discussion of the findings. The data collected were organized and analyzed to answer the research questions and also test the hypothesis that guided this study.

❖ *Data Analysis and Presentation of Results*

Two research questions were raised and answered using descriptive statistics of mean and standard deviation. Two hypotheses were formulated and tested at 0.05 level of significance using regression analysis.

➤ *Research Question 1*

To what extent are facilities in schools available for students' academic achievement in senior secondary schools in Adamawa state?

Items	N	Mean	Std. Deviation	Remark
Classrooms	531	2.25	1.318	LE
Dormitories	531	2.34	1.328	LE
Library	531	2.92	1.427	ME
Laboratory buildings	531	2.34	1.206	LE
Staff rooms	531	2.79	1.348	ME
Teachers quarters	531	2.14	1.170	LE
Exams halls	531	3.04	1.071	ME
Audio visual materials	531	2.21	1.298	LE
Workshop equipment's	531	2.24	1.250	LE
Chalk boards	531	3.30	1.438	ME
GRAND MEAN	531	2.56		

Table 1:- Mean and Standard Deviation for the Extent of Facilities in schools Available for Students' Academic Achievement

The descriptive statistics in table 1 shows the mean and standard deviation of responses to the facilities in schools available is low. The table indicates the result by the grand mean of 2.56.

➤ *Research Question 2*

To what extent are facilities in schools planned for students' academic achievement in senior secondary schools in Adamawa state?

	N	Mean	Std. Deviation	Remark
Classrooms	531	3.56	1.099	HE
Dormitories	531	2.76	1.463	ME
Library	531	3.03	1.439	ME
Laboratory buildings	531	2.87	1.593	ME
Staff rooms	531	2.26	1.285	LE
Teachers quarters	531	2.42	1.192	LE
Exams halls	531	3.22	1.415	ME
Audio visual materials	531	2.60	1.339	ME
Workshop equipment's	531	3.82	1.152	HE
Chalk boards	531	2.39	1.346	LE
GRAND MEAN	531	2.89		

Table 2:- Mean and Standard Deviation for the Extent of Facilities in schools Planned for Students' Academic Achievement

The descriptive statistics in table 2 above shows the mean and standard deviation of responses to the facilities in schools planned is low. The table indicates the result by the grand mean of 2.89.

➤ *Research Hypothesis 1*

- **H01:** There is no significant relationship between availability of schools' facilities and students' academic achievement.

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	30.896	1	30.896	.138	.010 ^b
Residual	118258.520	530	223.551		
Total	118289.416	531			

a. Dependent Variable: ACHIEVEMENT
b. Predictors: (Constant), AVAILABILITY

Table 3:- Linear Regression on Availability of Facilities in schools and Students Academic Achievement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.016 ^a	.026	.363	14.952

a. Predictors: (Constant), AVAILABILITY

Table 4:- Model Summary of Linear Regression on availability of facilities in schools and Students Academic Achievement

The linear regression tables show that there is significant difference between the various R values, $F = 0.138$ (df 1, 530), $P > 0.05$. Since the computed p-value (0.01) is less than 0.05 level of significant, therefore the null hypothesis is rejected. This means that availability of facilities in schools has predictive ability on students' academic achievement in Adamawa state. Furthermore, the adjusted R-square value (0.363) indicates that, 36.3% of the students' academic achievement in this study was accounted by the availability of facilities in schools.

➤ *Research Hypothesis 2*

- **H02:** There is no significant relationship between planning of facilities in schools and students' academic achievement.

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	.606	1	.606	.027	.026 ^b
Residual	118288.810	530	223.608		
Total	118289.416	531			
a. Dependent Variable: ACHIEVEMENT b. Predictors: (Constant), PLANNING					

Table 5:- Linear Regression on Planning of Facilities in schools and Students Academic Achievement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.002 ^a	.150	.189	14.954
a. Predictors: (Constant), PLANNING				

Table 6:- Model Summary of Linear Regression on Planning of Facilities in schools and Students Academic Achievement

The linear regression tables show that there is significant difference between the various R values, $F = .27$ (df 1, 530), $P > 0.05$. Since the computed p-value (0.02) is less than 0.05 level of significant, therefore the null hypothesis is rejected. This means that planning of facilities in schools has predictive ability on students' academic achievement in Adamawa state based on this study. Furthermore, the adjusted R-square value (0.189) indicates that, 18.9% of the students' academic achievement in this study was accounted by the planning of facilities in schools.

IV. CONCLUSION

On the basis of finding of the study it was concluded that relationship between availability and planning of facilities in school contribute to secondary school students' academic achievement in senior secondary schools in Adamawa state.

RECOMMENDATIONS

Based on the outcome of the study, the following recommendations were made.

- School authorities should ensure adequate budgetary provisions for facilities and instructional materials in schools for periodic maintenance, continuity and planning of facilities in schools.
- The government and school management should ensure regular planning of facilities in schools promptly.

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