Appraising the State of Maintenance and Management of Available Secondary School Facilities on Students' Academic Performance in Cross River State, Nigeria

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Abstract

The study appraised the maintenance and management of available secondary school facilities in Cross River State. The Government of Cross River State has increased the funding of affordable and qualitative education by about 12.96% in 2012 to 16.83% in its annual budget for 2013 in order to guarantee adequate provision, maintenance, and management of school facilities in her secondary schools, and other institutions of learning so as to foster quality learning, and enhanced student's academic performance. This study sampled 235 stakeholders in Calabar South and North in the state secondary school education, and found that 87.10% of the respondent agreed that there exist a correlation between provision, maintenance and management of school facilities, and students' academic performance. Thus, the study recommended among other things; a sustained increase in annual budgets to ensure adequate and continuous maintenance as well as management of school facilities.

Keywords: Appraising, Maintenance and management, School facilities, Students' performance

1. Introduction

The global challenge to the future of most developing and underdeveloped nations of the world is the provision of qualitative and sustained education to her citizenry. Sustained qualitative education is fundamental to the much needed technological development; a major ingredient to the advancements of the third world nations. Steady decline in the educational performance of students in secondary schools in African nations is evident from cross sectional studies, and this steady decline has being traced to the growing concern about adequate provision, maintenance, and management of school facilities (Godfrey & Chuks, 2010).

A number of school systems, particularly those in urban and high-poverty areas, are plagued by decaying buildings which threaten the health, safety, and learning opportunities of students. Good learning facilities are an important precondition for students learning; provided other conditions are met which support a strong academic program in the school.

A growing body of research has linked student achievement and behavior to the physical building conditions and resultant overcrowding. More so, with the enormous public concern that is placed on high academic achievement, the condition of school facilities is considered a significant factor that does influence learning. As such, regular funding initiative should be developed in order to provide incentive for regular and sustained maintenance of the local school systems.

The Federal Government places great importance on the funding and maintenance of schools; particularly the primary and secondary level of education as well as the tertiary institutions of learning. The Cross River State Government has made very significant contributions toward public secondary schools construction, equipment, maintenance, and management in recent years through the Ministry of Education. In order words, the Cross River State Government is heavily involved in the funding of her secondary school education as such; she has put modalities in place through the Ministry of Education with other stakeholders in education to ensure that her investment into the sector is well cared for and result yielding (Cross River State Ministry of Finance, 2012, 2013). Such strategic directions for development of education include provision and maintenance of quality facilities.

In the words of the state governor during the presentation of the 2013 annual budget:

"Our transformation agenda continues to focus on education as a veritable tool for sustainable socioeconomic transformation of our society. It is in recognition of this vital role that we are determined to increase access to qualitative education for our people, thus laying a solid foundation for a dynamic service-driven economy of the future. ... I am pleased to inform you that our initiatives in the education sector have started yielding dividends as evidenced in the performance of our students in the 2011/2012 May/June WAEC, SSCE Examinations where 56.03% of those who took the examinations had 5 credits including English and Mathematics, while over 80% had 5 credits and above".

In the views of Grasmick, Scott, Rutherford, Meloney, Puddester and Lever, (2005), for schools as well as for all types of facilities; corrective maintenance is necessary in order to address observed deficiencies and preventive maintenance so as to protect against new deficiencies in order to greatly extend the useful life of the structure. By maintaining building structures, the costs of future repairs and major renovation are significantly reduced. Regular maintenance ensures that buildings will remain operational even under adverse weather condition. Most important, a well maintained school facility protects the health and safety of building occupants, as well as the equipments therein.

There is a positive relationship between the quality of a school facility and the quality of the educational activity that takes place within as evident from the study of Craig, (2009). The Cross River State government provides assistance for school construction in the state capital budget but the regular supervision as well maintenance of such school facilities is the sole responsibility of the state ministry of education and the secondary education board. In Cross River State, the schools systems have long-established programs that allow them to identify, prioritize, and execute projects that address corrective maintenance and preventive maintenance tasks. Although schools in the state at some times have suffered at various levels some form of neglect, they are recovering from the history of inadequate maintenance.

The democratic governments of the day are regularly and continually engaged in vigorous accelerated program to develop maintenance management programs that correspond to the number of age of its facilities. (Cross River State Ministry of Education). Therefore, the present study is an appraisal of the effect of maintenance and management of available facilities on secondary school students' academic performance in Cross River State.

2. A brief history of the rationale for secondary school education in Nigeria

In the works of Joshua (2004), the National policy on Education section 4 describes secondary education as follows:

- 1) Secondary education is the education children receive after primary education and before the tertiary stage.
- 2) The broad goals of secondary education shall be to prepare the individual for:
- a) Useful living within the society; and
- b) Higher education
 - In specific term, secondary education shall:
- a) Provide all primary school leavers with the opportunity for education of a higher level, irrespective of sex, social status, religious or ethnic background;
- b) Offer diversified curriculum to cater for the differences in talents, opportunities and future roles;
- c) Provide trained manpower in the applied science, technology and commerce at sub-professional grades;
- d) Develop and promote Nigerian languages, art and culture in the context of world cultural heritage
- e) Inspire its students with a desire for self improvement and achievement of excellence;
- f) Foster national unity with an emphasis on the common ties that unite us in our diversity;
- g) Raise a generation of people who can think for themselves, respect the views and feelings of others, respect the dignity of labour, appreciate those values specified under our broad national goals and live as good citizens;
- h) Provide technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development.

To achieve the stated goals, secondary education shall be of six years duration, given in two stages, - a junior secondary school stage and a senior secondary school stage; each shall be of three years duration (Federal republic of Nigeria, 1998)

- 3) Apart from noting the two broad aims of secondary education in Nigeria, namely preparing the individuals for useful living within the society, and preparing the individuals for higher education, it should be noted also that secondary education is part of the design to achieve the national educational aims and objective (which themselves were developed from the national objectives). These national educational aims and objectives are:
- 1. The inculcation of national consciousness and unity;
- 2. The inculcation of the right type of values and attitudes for the survival of the individual and the Nigerian society;
- 3. The training of the mind in the understanding of the world around; and
- 4. The acquisition of appropriate skills and the development of mental, physical, and social abilities as well as competencies that will equip the individual to live in and contribute to the development of his society (Federal Republic of Nigeria, 1998).

The researchers' concern is to appraise the extent to which maintenance and management of facilities in secondary schools in Cross River State has equipped students with these lofty aims and objectives specific to

secondary education and enhanced their academic performance.

3. Literature review

According to Lowe (1998), a number of studies have shown that many school systems, particularly those in urban and high-poverty areas, are plagued by decaying buildings that threaten the health, safety, and learning opportunities of students. Good facilities appear to be an important precondition for student learning, provided that other conditions are present that support a strong academic program in the school. A growing body of research has linked student achievement and behavior to the physical building conditions and overcrowding.

Cross River State has one of the oldest secondary educational institutions in the country – the famous Hope Waddel Training Institution. This institution was established in 1895 has produced such eminent Nigerians as Dr. Nnamdi Azikiwe, the first governor of the former Eastern Region. It is noteworthy to mention that current demands in the educational sector globally are on institutions like the Hope Waddel Training Institute that has produced high performing students. As such, great importance is laid on the provision, maintenance, and management of available school facilities to enhance learning (Gogfrey & Chuks, 2010).

At the same time, resources for school planning, design, construction, operation and maintenance are constrained. The challenge is to build high quality schools that would function efficiently and stand the test of times. In a work presentation by Craig (2009), it was asserted that focus on the quality of pupil's entire academic experience has led to a greater emphasis on their school life activities and facilities. In response, many learning institutions are renovating, expanding, or creating new buildings that support their goals and objectives.

Lowe (1998) interviewed State Teachers of the Year to determine which aspects of the physical environment affected their teaching the most, and these teachers pointed to the availability and quality of classroom equipment and furnishings, as well as ambient features such as climate control and acoustics as the most important environmental factors. In particular, the teachers emphasized that the ability to control classroom temperature is crucial to the effective performance of both students and teachers.

Nationals and local officials are recognizing that school facilities – the physical buildings – are important to their programmatic success. Many institutions are seeking for new design guidelines and requirements for "high performance" schools whose features promote pupil/teachers health and productivity, cost- effectiveness, and sustainability. School administrator, parents, teachers, and students are focused on meeting new testing standards, which calls for an enhanced learning environment with appropriate technology and comfort control systems. In the articles by Vaughan (2008) and Vandiver (2011), it was emphasized that more than other building types, school facilities whose primary functions is teaching and learning, have a profound impact on their occupants. They believe that the design and layout of school facilities should poses features that will aid learning and teaching. They stress that the design and layout of the learning environment should be taken into consideration in various stages of development.

In a research submission by Odofowokam (2011) and Olaleye (2012), it was noted that over the last two decades, the management of primary education had been experiencing some problems as a result of policy gaps in Nigeria. Schools were not well- maintained and facilities were not adequately provided arising from the fact that management of primary education were used as political football between State Government, Local Government and Federal Government. In a similar research study by Ijaiya (2001), it was opined based on the unstable situation that the worth of any management is established on its ability to produce quality artifacts and satisfy clients and other stakeholders. The tasks of such entity, therefore, include identifying and solving any problem that militates against quality delivery. It is believed that such a problem solving approach should be directed at taking preventive measures against wastage.

In another paper presentation by Burnham (1994), it was posited that prevention is the basis of preventing waste as contested by the advocates of "Quality Assurance management" or "Total Quality Management. A number of other studies have also shown that many school systems. Particularly those in urban and high-poverty areas are plagued by decaying buildings which threaten the health, safety, and learning opportunities of students. Good facilities appear to be an important precondition for pupils learning, provided other conditions are met which support a strong academic program in the school. Thus, growing body of research works has linked student achievement and behaviour to the physical building conditions and resultant overcrowding.

A study of the District of Columbia school system found, after controlling for other variables such as a student's socioeconomic status, that students' standardized achievement scores were lower in schools with poor building conditions. Students in school buildings in poor condition had achievement that was 6% below schools in fair condition and 11% below schools in excellent condition (Edwards, 1992).

4. Purpose of the study

The main aim of this study was to assess the prevailing situation on ground in terms of provision, maintenance and management of available secondary schools facilities in Cross River State, and determine how it is perceived

to influence students' academic performance. In order words, this study sought to find out the extent to which the government through the Ministry of Education and the Secondary Education Board provides, maintain and manage existing facilities as perceived by pupils, parents, teachers, and education staff.

5. Method

This study used the survey research design, and the area of the study was Cross River State. Cross River State is one of the thirty six (36) states of the Federal Republic of Nigeria, situated in the oil-rich South-South Geopolitical Zone. It is bounded on the North by Benue State, on the South by Akwa Ibom State, on the East by Cameroun Republic and on the West by Anambra and Imo State. It has eighteen local government areas and lies between latitude 5° 32' and 4° 27' North of the Equator and longitude 7° 50' and 9° 28' East of the Greenwich meridian. The state has Calabar as her capital city, and is a leading tourist haven in Nigeria, with attractions like the Tinapa, Calabar Export Processing Zone (EPZ), the International Obudu Cattle Ranch, the Old Residency museum, and Agbokim and Kwa waterfalls.

The sample for this study consisted of 235 educational stakeholders in Calabar South and Calabar North in Cross River State secondary school education. The state has a total number of 89 pubic secondary schools out of which 45 were randomly selected and used for the study. The simple random sampling technique was used in order to ensure equal chance of representation. There was no particular consideration to any personal characteristics of the population of study. The instrument for data collection was a 30-items questionnaire designed by the researchers tagged "Instrument for appraising the state of Maintenance and Management of available Secondary School Facilities (IAMMSSF). The instrument after the trial test analysis yielded a Cronbach's alpha reliability coefficient of 0.83, and respondents were asked to indicate their level of agreement or disagreement with rankings from 4 (strongly agree) to 1 (Strongly disagree).

6. Results

The results of data analysis using simple percentage are as shown below:

Respondents	Number distributed	Number retrieved
Pupils	89	89 (100%)
Parents	99	99 (100%)
Teachers	42	42 (100%)
Education staff	5	5 (100%)
Total	235	235 (100%)

Table 2: Respondent percentage opinion on relationship between maintenance and management of school facilities on students' academic performance

Respondents	n	True	Untrue
Pupils	100	74 (31.5%)	15 (6.4%)
Parents	100	85 (36.2%)	14 (6.0%)
Teachers	30	41 (17.4%)	1 (0.43%)
Others	5	5 (2.0%)	
Total	235	205 87.1%	30 12.83%

6.1 From the results of data analysis using simple percentages, the study revealed that stakeholders in the secondary school system are 87.1% in agreement with the fact that maintenance and management of facilities in the schools have a positive impact on academic performance.

7. Conclusion/ recommendations

This study revealed the role of adequate maintenance and management of available school facilities on students' academic performance. Results of data analysis established a correlation between adequate maintenance, and management of available school facilities on improved students' academic performance. The outcome of this current study of which agreed with the works of Odufowokan (2011), Vandiver, (2011), and Olaleye, (2012) should not be ignored.

The importance of adequate maintenance and management of available school facilities in the development of manpower for a nation's economy cannot be over-emphasized in any nations' educational system. The Cross River State Government in particular, and the government of Nigeria in general has demonstrated commitment to enhanced funding by investing financially and materially in education generally, and particularly in the promotion and popularization of the universal basic education in all state of the federation. Budgetary allocation to education is enhanced annually as seen from literature and the positive impact of such gesture is evidenced

from the improved performance of students in external examination like the WAEC and other examination bodies.

Based on these findings, it was recommended that efforts should be made by educational stakeholders in Cross River State and Nigeria at large to develop sustained maintenance and management culture in secondary school learning facilities. Secondly, schools that efficiently maintain and manage provided learning facilities should be encouraged through awards and prizes. More so, officials of the inspectorate divisions of State and Federal Ministries of Education should be more regular and pragmatic in carrying out their duties and giving appropriate feedbacks. Finally, high level of maintenance culture should be inculcated into secondary school students at this stage of their development by school principals, parents and teachers

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