

**Education Facilities Management and Students' Participation in School Activities in
Calabar South Local Government of Cross River State, Nigeria**

Okon, Effionwan E. (PhD), & Asuquo, Michael Ekpenyong, (Ph D)

Department of Educational Management,
University of Calabar
Calabar

Abstract

The study sought to determine the predictive relationship of education facilities' management and students' participation in school activities of Calabar South Local Government, Cross River State of Nigeria. Correlational design was adopted for the study which had a sample of 84 principals in the study area. Multiple regression analysis was used for data analysis and the result showed that management of school facilities in the form of classroom facilities, school library facilities, school laboratory facilities and school sports individually and collectively were significant predictors of students' participation in School-wide activities. It was therefore concluded that management of educational facilities does not only have direct relationship with students' participation in school-wide activities, it is also a significant predictor of students' participation in activities of Nigerian Secondary Schools. Based on this, it was among other things recommended that- the Ministry of Education and school proprietors ensure adequate supply, maintenance and use of facilities in schools. Furthermore, school principals should ensure adequate specification of time in School Time Table for use of Library, sports and laboratory facilities.

Keywords: Education Facilities' Management; Students' Participation, School Activities

Introduction

The development of individuals through the educational system demands that those individuals play active role in the processes and activities that seek to develop them. This is corroborated in the quote attributed to Benjamin Franklin, an American politician who said – tell me and I forget, teach me and I remember, involve me and I learn. Real learning may not happen if students are not actively involved in the process. It is however observable that making them voluntarily participate in school activities to facilitate learning has often been problematic, thus presenting education stakeholders with instructional and administrative difficulties. While many issues are related to the problem of students' participation in school programs, it is however important to note that these may not be unconnected with the quality of facilities present in some schools.

Students with standard facilities according to Senjaya, Kotamena, Ong and Andika (2020) like classroom facilities, good laboratories, and playgrounds stand a better chance of passing examinations and gaining entry into universities than those without these facilities

(Ukpabio, Ukpong, Ojeng, Amalu, & Eteng, 2023; Ukpabio, Ochang, Aniah & Onwochei, 2022; Khalid, Endale & Gao, 2020; Ukpabio, Egwu and Onwochei, 2019; Ramli & Zain2019); Olugbenga (2019) suggested that proper management of school facilities by way of provision, maintenance and usage is a predictor of students' participation in school activities.

Students' participation in school programs is conceptualized by Berti, Grazia and Molinari (2023) as ways in which students take advantage of opportunities offered in schools to actively play a role in activities and decisions that will shape their lives and those of their peers. Such school-wide activities and programme which invite active participation of students include attending classes, doing assignments, participating in sports, debates and other school activities. Some issues are observed to be negatively associated with students' participation in school activities such as psychological disposition, school climate, instructional methodology, teacher incompetence, decision making and other issues.

The psychological disposition of student focuses on issues of shyness and experience of social anxiety and stage fright which act as inhibition to participation (Berti, Grazia & Molinari, 2023; Cordier, Speyer, Mahoney, Arnesen, Mjelvæ & Nyborg, 2021). The reserved nature of some students is also blamed for making them withdraw from actively engaging with other classmates and teachers according to (Academic Entertainment 2022). Sidelining students from participation in decision making processes in schools as held by Makitalo (2016) further discourages students from participation. Teachers are also blamed for lack of students' participation because of absence of creativity, inventiveness and failure to utilize interactive activities in the classroom thus students are not motivated to participate by asking questions, taking notes, doing homework as suggested by Anwer (2019).

Solutions to above, according to Academic Entertainment (2022) include teachers taking time with shy students to know their names and encourage them, and also show excitement and inventiveness in using activity-based learning. The prospect of encouraging participation of student through their involvement in decision making is taken up by Mameli, Molinari and Passini (2019), who introduced the concept of co-responsibility. This principle holds that students' active participation in educational processes and school decisions will make them feel co-responsible with teachers and managers. The prevalence of school climate issues like bullying, cultism and violence in schools may hinder students' participation in school programs for fear of incurring anger and vengeance of bullies among them if they outperform them (Berti, Grazia & Molinari, 2023; Charlton, Moulton, Sabey & West 2021; Voight & Nation 2016).

School facilities are structures that accommodate educational activities including administrative blocks, classrooms, faculty offices, laboratories, cafeterias, gymnasiums, chapels, theater, auditoriums, lecture halls, libraries, and others. The proper management of these resources through acquisition, maintenance, use and the specification of time for their usage is

strategic to school effectiveness in pursuit of educational goals as they directly impact teaching and learning Akpabio (2015). They (school facilities) cover the entire environment of the schools' physical and material resources available to the students and teachers, and are the space interpretation and physical expression of the school curriculum (Ikegbusi, Manafa and Iheanacho 2022; Ikegbusi & Adindu, 2022; Alimi, 2014).

Osaigbovo and Osaigbovo (2021) and (Barron, 2000) in Olugbenga (2019) categorize school facilities into three major components of: Infrastructural facilities, Instructional facilities and School physical environment. Infrastructural facilities include administrative blocks, laboratories, sick bays, music room, school gymnasium, cafeteria and such like. Instructional facilities according the same source are teaching materials and equipment comprising laboratory equipment, introductory technological equipment, wall clocks, televisions, radio, video plates and players, pianos, chalkboard, cardboards and others. School physical environment include: building and parking lot, playground, sport field, agricultural farm, fire extinguisher, school bus and others. Also, school facilities include mechanical material like technological machines, generators, photocopiers, computers, plumbing materials like water taps and others. Educational facilities thus are all physical item within the school premises which include the schools' site buildings and others mentioned above. School facilities management has to do with the practice of co-coordinating the functioning of these infrastructural, instructional and school physical environment components for educational goals attainment as opined by Nweke (2021).

Otchere, Afari and Kudawe (2019) implied relationship between facilities management and students' participation in educational activities by describing educational space as physical space which supports various instructional activities through integrating state of art technology, cost effective and sustainable architectural designs, in harmony with environment and supportive of social participation by providing a healthy, comfortable, secure and stimulating setting for users. School facilities and infrastructure facilitate the educational process (Barrett, Treves, Shmis, Ambasz and Ustinova, 2019), while Akomolafe and Adesua (2016) concluded that there was a significant relationship between physical facilities utilization and students' level of motivation and academic performance in their research into how physical facilities impact students' level of motivation and academic performance in Senior Secondary Schools in South West Nigeria. Institutes Hub (2020) equate school standard and students' output with facilities available in schools.

School facilities management is basically related to application of scientific methods in the planning, organizing, decision-making, co-ordination and controlling of the physical environment of learning for the actualization of the educational goals and objectives according to Akpabio (2015). The same source suggested that school facilities are variously referred to as physical facilities or school plants, and are very important in the teaching and learning

processes. In addition, management of these facilities also entail acquisition, maintenance, use and the specification of time for their usage.

Students' participation in school activities has obviously received little attention in academic considerations. Past researches have observably focused more on students' academic performance and students' attitudes while students' participation in school activities as an educational problem has been under-researched and has therefore suffered neglect in the study area. This research gives priority to the issue of students' participation which is considered a key component to effective learning and good academic performance. The outcome should fill the gap in knowledge as to how the management of specific school facilities like classroom facilities, laboratory facilities, library facilities and sport facilities can predict students' participation in school activities.

Statement of the Problem

Participation of students in school-wide activities like class discussions, note taking in class, debates and sports is critical to school effectiveness, students' academic performance and teachers' job satisfaction. Students who actively participate, for example, in classroom settings are said to perform far better in examinations than those who do not. Cheerful, vibrant students asking questions, contributing ideas is an object of the teachers' delight and dream, but in many cases, it had become their nightmare and frustration because of some students' reluctance or inability in actively participating in classroom and other activities. Many things are said to be responsible for non-participation of students in the classroom or other aspects of school activities.

Among them are the reserved natures of some students, shyness to actively engage with other classmates and teachers for fear of being laughed at if mistakes are made, issues of incompetent teachers who cannot motivate students and students' previous history of having experienced humiliation from a teacher for making a mistake. Furthermore, if school wide practices like bullying, cultism and violence pervade the school climate, then students may still not participate in school programs because of general insecurity. It is also suggested that in coeducational schools, issues of gender differential might pour cold water on students' willingness to actively engage in some activities because they feel they will be caricatured by the opposite sex if mistakes are made. In the case of co-curricular activities like track and field, some students have voiced their reluctance in participating because they perceive themselves as not being physically presentable enough to wear tight fitting outfit which may expose their "ugliness".

Principals and Teachers have the responsibility of managing students and ensuring their participation in school activities. The principal's supervisory duties compel them to prevail upon teachers by encouraging them to take some time with the shy students to know their names and encourage them; show excitement in conducting activities and incorporating fun

into teaching, including group activities and not letting other students make fun of someone for failing. In addition to rewarding and appreciating students' efforts when they participate, teachers need to sharpen their competence and preparations for class in order to stimulate and motivate students to fully participate in school activities. Observations of many circumstances where all the management and instructional remedies for students' participation have been made, and yet the problem continues abound.

It is based on such situations that questions as-can students participate in sporting activities where there are no football fields or even when they are there are not well maintained? Can students participate well in the classrooms when there are no seats or desks to write on? Or can students participate actively in physics class or in ICT class when there are no functional laboratories? Could it be that some students are impaired from participating in school activities because of the absence or inadequacies of facilities critical to participating in such school-wide activities? It is the duty of school management to provide facilities that are critical to students' participation in school activities.

The problem of this study therefore is to ascertain if management of school facilities is a predictor of students' participation in school-wide activities.

Review of Literature

The review of literature was done based focusing on how management of school-based facilities like classroom facilities, library facilities, science laboratory facilities and sport facilities relate to and predict students' participation in School-wide program. School facilities are categorized by Osaigbovo and Osaigbovo (2021) and (Barron, 2000) in Olugbenga (2019) into three major components, comprising infrastructural facilities, instructional facilities and school physical environment. Literature reviewed confirmed that management of these facilities generally, do not only have direct relationship with students' participation in school activities, but they are also predictors of students' participation in school activities

An important facility in schools are classroom facilities. Classrooms are the centers of meeting between students and teachers, and many interactions happen there, and thus it is seen as epicenter for teaching and learning effectiveness in schools. Ford and Alsup (2017) studied the effect a well-planned science classroom facilities and resources has on students' attitude and discovered a significant relationship between the science classroom conditions and students' attitudes. The study also showed that demonstration equipment and physical facilities were the best predictors of effects on students' attitudes. Attitudes, which is how people think, feel and what they intend to do is cumulatively, according to Marcinkowski and Reid (2019) a predictor of behavior. Thus, students' attitude in the classroom as a result of facilities present is a predictor of their behavior of participation in classroom activities (Sauro 2019; Johnson,

Kraft and Papay 2012). Furthermore, technology resources in science classrooms enhanced participation of students according to Ford and Aslup (2016).

The source held that, the presence of technology resources in science classrooms do not only raise students' interest in the science subjects for instance, but also increases their extra-curricular participation in science activities (Butler, Marsh, Slavinsky & Baraniuk 2014; Shieh, 2012). Secondly, the use of Assistive Technology (AT) in the classrooms such as Seat cushions, FM listening systems, Calculators, Writing supports, Graphic organizers, Enlarged paper/workspace, Audio players and recorders and others can enhance inclusivity of participation (Alsolami, 2022; Fernández-Batanero, Montenegro-Rueda, Fernández-Cerero, and García-Martínez 2022), thus positioning education to meet a cardinal principle of Sustainable Development Goals (SDGs) which demands that classrooms play host to able and disabled students' in common instructional pursuit. Teachers need to use a wide variety of instructional materials or teaching aids to foster learning among students (Kochhar 2012, Omabe 2006 & Olumorin, Yusuf, Ajidagba and Jekayinfa 2010); Erdem (2017) opined that the introduction of AT as important classroom facilities will not only enable participation by students with health problem in the academic process, but will also transform and deepen academic engagement, inclusivity and participation (Fernández-Batanero, Montenegro-Rueda, Fernández-Cerero, and García-Martínez 2022).

Libraries play important role in the development of students' reading skills and academic participation as many modern libraries provide access to digital materials such as e-books, research databases, academic journals, and other multimedia resources, and can be accessed anywhere anytime with an internet connection. Ukpabio, Mbon, Ekanem, Ukpong, Okon, Aniah, Omini, Ngaji, Egwuonwu and Egwu (2023) had suggested that Nigerian youths' are avid users of the digital platforms especially the social media, thus implying that digitalized library system which employ the services of the social media may further increase the level of participation by youths in educational processes (Tayo, Adebola, and Yahya, 2019). Pradani (2021) proffered that education is generally built on reading skills, and that reading attitudes, both in the form of speed, interest, frequency and the level of comprehension are determinants of a person's intellectual maturation. Making a student go to the library to read is in itself a participation in academic and school-wide activity. University of North Carolina Wilmington (2022) suggested that libraries encourage strong research habit among students, Ogonu and Owate (2023) went further to suggest that libraries do not only promote participation in educational processes through encouraging the growth of reading habits and research, but that much of the enjoyment individuals get in life is closely related to vocational efficiency and self-education which good reading habits promotes (Sethy 2018).

Furthermore, Sethy (2018) suggested that the role of libraries in swaying youths to participate in the educational process through promoting reading culture is boosted as some libraries provide digital services. Access to library platforms containing resources such as e-

books, journals, thesis, newspapers, magazines, CD(s), DVD(s) may play into the hands of youths as an added inducement. Science laboratories facilitate creation and imparting of knowledge to students, and often serve as the first point of motivational encounter between science students and the scientific world, and they aid participation and development in understanding of the practical and theoretical concepts in education according to Seid, Assefa, Muhammed, Moges, Birhanu, Fentaw Tilwani and Ahmed (2022). Godec., King, Archer, Dawson and Seakins (2018) appear to suggest that engagement of students in laboratories do not only prompt participation, but also serve as a motivation towards science, as well as future scientific orientations and also deepen the intensity of participation.

Akinbobola (2015) remarked that setting up a laboratory as an instructional avenue utilizes the maximum potential of students' participation in the inquiry process, and this is interpreted by the source as holding the greatest impact on modern science teaching; and further playing central role in filling the gap between theory and practice for science students (Duban, Aydoğdu and Yüksel, 2019). Seid, Assefa, Muhammed, Moges, Birhanu, Fentaw Tilwani and Ahmed (2022) emphasized that using the laboratory as instructional platform is based on demonstration methods of teaching which supports learners' participation and construction of their own knowledge in their academic activities. Among some school-related and sport-specific variables that influence students participating in sports and other school activities is availability of safe space and sporting facilities.

Indeed, promoting a sporting friendly school environment by providing facilities and safe space do not only facilitate participation in sport, but also aid academic performance of students as games promote cooperation and good relationship between students, teachers and other academic community members (Sayyd, Zainuddin, Ghabban and Altowerqi, 2021; Milambo & Pacho 2020). Black, Johnston, Propper and Shields (2019) carried out a study on the effect of school sports facilities on physical activity, health and socioeconomic status in adulthood and came to the conclusion that attending a school with inadequate sports facilities does not only deny student active participation in physical activities in school, it also decreases their likelihood of physical activity participation during adulthood. Sayyd, Zainuddin, Ghabban and Altowerqi, (2021) studied the influence of sports facilities and programs on sports participation at Saudi Universities and came to the conclusion that inadequate sport facilities in the universities negatively affected students' participation in sports at Saudi Arabia universities.

Alsahli (2016), while studying barriers to participation in physical activities among Kuwaiti university students also blamed lack of sports facilities and institutional support for setback to female students at a Saudi university as these caused loss of interest by the students in sports. Participation in sporting activities increases effectiveness of participation in academic life because students who participate in sport excel academically over those who do not as explained by Chen, Li., Yan and Ren (2021). This source suggests that the hippocampus:

the complex brain structure which is the center of emotion, learning and memory in children who regularly partake in physical exercise comparative to the sedentary ones develop extra and complex structures which facilitates connection of new neurons with existing ones for increased brain efficiency in learning, memory and thinking (Anand and Dhikav, 2012) It is very obvious from the literature reviewed that management provision of education facilities in the right quantity and quality do not only have a direct bearing on the participation of students in school activities, but they also predict students' participation in School-wide activities in Secondary School

Methodology

The study used correlational research design to establish the relationship between management provision of educational facilities and students' participation in school-wide; and also, to find out if provision of educational facilities is a predictor of students' participation in school-wide activities in secondary schools of Calabar Education Zone. The population of this study comprised all principals of public secondary schools of the study area. The sampling technique adopted for the study was census sampling strategy since it was possible for the researcher to use all of the 88 principals.

The sample of the study was however 84 principals of the study area as four of the questionnaire were not filled to specification. Calabar Education Zone is made up of seven (7) Local Government Areas with the corresponding number of public secondary schools thus: Akamkpa 19, Akpabuyo 7, Bakasi 3, Biase18, Calabar-Municipality 16, Calabar-South 8 and Odukpani 16. Data for the study was generated using an adaptation of School Participation Questionnaire (SPQ) of School of Health Sciences, Queen Margaret University, Edinburgh titled: Management of Educational Facilities and Students Participation in School Programme Questionnaire (EFSPSPQ). The instrument was a 4-point modified Likert type scale ranging from 1 (strongly disagree) to 4 (strongly agree) with 16 items.

The reliability of the instrument was established by using 50 vice principals of the study area, who normally work hand-in-hand with principals in daily running of the schools, but were not part of the study population. The Cronbach alpha reliability test established the internal consistency of the instrument at the coefficient estimates of 0.71- 0.87 which certified the reliable for field use the study. Distribution of the questionnaire was done with the help of three trained and loyal research assistants. Data analysis was done by the use of Simple and Multiple Regression Analyses.

Purpose of the Study

The purpose of this study was to ascertain if management of school facilities is a predictor of students' participation in school activities.

Null Hypothesis

Ho1: Management of educational facilities in form of classroom facilities, library facilities, laboratory facilities and school sport facilities are not significant predictors of students' participation in School-wide activities in Secondary School. The result is presented in Table 1.

Table 1: Multiple regression analysis of the prediction of management of educational facilities in form of classroom facilities, school library facilities, school laboratory facilities, school ICT facilities and students' participation in School programme (N=84)

Model	R	R. square	Adjusted R. Square	Std error of the estimate	
1	.720 ^a	.518	.493	1.97814	
Model	Sum of square	df	Mean square	F	
Regression	331.821	4	82.955	21.200	
Residual	309.131	79	3.913		
Total	640.952	83			
Variables	Unstandardized regression weight B	Standardized regression weight	Beta weight	t	p-value
Constant	.1.508	2.435		.619	.537
Management of classroom facilities	.045	.113	.043	402	.689
Management of school library facilities	-.009	.093	-.009	-	.927
Management of school laboratory facilities	.096	.096	.089	.092	318
Management of school Sport facilities	.771	.085	.720	1.004	.000
				9.087	

* Significant at .05 level.

Table 1 showed that a combination of management of educational facilities management in terms of (classroom facilities, school library facilities, school laboratory facilities, school sport facilities) yielded a coefficient of multiple regression (R) of .518 and a multiple regression R-square (R^2) of .493. The result also showed that Analysis of Variance for the multiple regression data produced an f- ratio of 4, 83=21.200, which was significant at .05 level. Thus when these variables are taken together, they significantly predicted students participation in School programme. This implied that management of classroom facilities, school library facilities, school laboratory facilities, school sport facilities when taken together are significant predictors of students participation in School programme. A multiple R^2 of .493

implied that the independent variables (management of classroom facilities, school library facilities, school laboratory facilities, school sport facilities) was significant at .05 level. This result implied that when the variables were taken individually, it showed that there is a joint and relative effect of management of classroom facilities, school library facilities, school laboratory facilities, school sport facilities and students' participation in School programme in secondary schools.

Discussion of Findings

The hypothesis showed that management of: classroom facilities, library facilities, science laboratory facilities and school sport facilities were significant predictors of students' participation in school-wide activities. The null hypothesis based on these results was rejected and alternate hypothesis upheld. Thus, management of classroom facilities significantly predict students' participation in school activities in secondary schools; management of school library facilities predicts students' participation in school activities in secondary school; management of school laboratory facilities predicts students' participation in school activities in Secondary School and management of school sport facilities predicts students' participation in School activities in secondary school.

This found support in the position of Ford and Alsup (2017) who in studying the effect a well planned science classroom facilities and resources on students' attitude discovered not only a significant relationship, but also concluded that well managed science classroom facilities condition students' attitudes and participation. The study further showed that physical facilities and demonstration equipment in science classroom were predictors of students' attitudes. Students' attitude, defined by Marcinkowski and Reid (2019) as how people think, feel and what they intend to do is understood to mean that students in well equipped classroom are likely to ask questions, take note and listen attentively. Laboratory facilities management was also found to be a significant predictor of students' participation in school-wide activities and this finding had the support in Godec, King, Archer, Dawson and Seakins (2018) which suggested that laboratory engagement for student's prompt participation and also serve as a motivation towards science and future scientific orientations. Further analysis of Table 5 on joints facilities management prediction of students' participation showed that management of sports facilities was a leading predictor of students' participation in school activities. In the Table, Sport had 9.087, with laboratory facilities management with 1.004 coming as second. The least contributor was library facilities management with -092 t-value, while classroom facilities management had .402. This finding comparatively suggests that students' voluntary participation in school wide activities was more in sport and after that science laboratory facilities management. Incidentally, nearly all the public secondary schools in the research area have football field, and many have laboratories. However, the facility that is not found in most of these schools are libraries.

Conclusion

Educational facilities contribute to students' participation in school-wide activities, and the presence of certain facilities are predictors of what activities are most likely to happen in those schools. The proper management of these facilities may create the path for future professional excellence of these students since practice makes perfect. Education does not happen only in classroom or science laboratory but also when children participate in other school sponsored activities. When children, for example, play football or engage in track and field activities, they activate brain cells which relax and prepare them for stress free learning. The best compliment and stimulus therefore for holistic participation of children in education for future excellence is to provide them with the necessary facilities in the right quantity and quality.

Recommendations

Based on the finding of the study, the following recommendations were made:

- 1 The Ministry of Education and school proprietors should ensure adequate supply of necessary facilities to schools, and adequate supervision for maintenance
- 2 School principals should ensure adequate specification of time in School Time Table for use of Library, sports and laboratory facilities.
- 3 School principals should ensure peaceful and socially acceptable school climate where bullying and violence are reduced to barest minimum to aid participation in activities.
- 4 Routine maintenance work should be carried out to keep school facilities in optimum standard.

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