Original Article

SCHOOL ENVIRONMENT AS CORRELATE OF STUDENTS LEARNING OUTCOMES IN ECONOMICS IN IKOM EDUCATION ZONE OF CROSS RIVER STATE, NIGERIA.

Odu Sunday Onabe and Effiom Veronica Nakanda

Department of Social Science Education, Faculty Art and Social Science Education, University of Calabar, Cross River State
Email:
sundayodu017@gmail.com, 08106232066/ nakandaveronica @gmail.com

Abstract

The purpose of this study was to investigate school environment as correlate of students learning outcomes in economics in Ikom Education Zone of Cross River State, Nigeria. To achieve the purpose of this study, one null hypothesis was generated to direct the study. Literature review was done according to the variables under study. Survey research design was adopted for the study. A sample of three hundred and ninety-two (392) respondents were randomly selected for the study. The selection was done through the stratified random sampling technique. The questionnaire was the main instrument used for data collection. The instrument was face and content validated by the three experts in measurement and evaluation in the Faculty of Education, University of Calabar. The reliability estimate of the instruments was established through Split half and Kuder-Richardson 21 reliability methods. The reliability coefficient ranges from 0.73 to 0.83 which was high. Regression Analysis was the statistical analysis technique adopted to test the hypotheses under study. These statistical tools were used because of the nature of the variables involved in the study. Hypothesis was subjected to testing at .05 level of significance with relative degree of freedom. The results of the analysis revealed that, school space planning, school building design, playground planning significantly relate to students' learning outcomes in economics in Ikom Education Zone, Cross River State. Based on the findings of the study it was recommended among others that authorities concerned should implement architectural designs of buildings and spaces for education to ensure students` academic performance.

Keyword: School environment, correlate, students, learning outcomes

Introduction

The continue decline in economics students learning outcomes has attracted attention of scholars, parents, policy makers and planners. Virtually everyone concerned with education, places premium on learning outcomes, the excellent learning outcomes of students is often the expectations of every responsible parent, though students differ in learning, as a function of their prior experiences, personal qualities and social supports (Marit & Bengt, 2023). The latter include the extent that parents and teachers encourage the students to learn through access to resources necessary to elicit and encourage positive learning.

There are number of factors affecting students learning outcomes, school environment being critical in influencing student learning outcomes (Suleman, 2021). School environment refers to the quality and character of school life that makes students, teachers and administrators to work together for the common goal of the school, which is students learning outcomes. This therefore fascinate the researcher to consider other variables under school environment as; class size, space planning, school building design, toilet facility and availability of portable water, student teacher relationship. The school environment can be influenced by such indices as student-teacher relationship, planning, space planning, facilities and playground among others. But these individual indices are not as powerful as the combined effect of all the indices, which is called the school environment.

A good school environment makes students feel socially, emotionally and physically safe in the school, which stimulates learning and increase learning (Umaru, Oti & Egan, 2021). This is because when students feel safe to interact with the environment, students are motivated to learn and achieve academic excellence. Note that the first major purpose of the school is to create and provide an enabling climate that is hospitable for human learning (Barth 2021). All human need safety socially, emotionally and physically. Safety reduces anxiety which is a major factor that affects learning outcomes. Students may not necessarily be exposed to physical violence, but can be exposed to social emotional and intellectual violence.

School plant is an integral element in learning environment because of its direct and indirect roles. Olaniyan and Anthony (2013) assert that school plants are facilities which physically and spatially enable teaching and learning and by extension help in producing desirable results as evidenced by good learning of products of an education. Asiyai (2012) describes school plant as school facilities and permanent structures which include buildings, libraries, chairs, machines, technical workshops, playground and other non-human resources that aid the actualization of teaching and learning objectives. The foregoing definition explains that there is need for these resources to be well planned and maintained. Therefore, if the school plant lacks management, it will surely lack the taste for which it designed to achieved.

School space planning can be classified into direct teaching facilities and non-teaching facilities. Direct teaching facilities are those facilities that have direct relevance on educative process while non-teaching facilities are facilities which have indirect relevance on educative process (Ogunu, 2020). The importance of school space planning is numerous, for instance it helps to protect teachers and students from the sun, heat, rain and cold. It enhances the comfort and safety of teachers and students thereby providing the potential of increasing teachers productivity and students learning outcomes. Onyedeji (2022) posits that the quality of education that students receive bears direct relevance to the space interpretation of the school curriculum. The programmes of the school are expressed through the school site, the buildings, playgrounds, the arrangement and design of the

building (Mgbodile, 2022). To this respect, no school can function effectively without adequate school space planning.

No teacher will go to teach in an atmosphere where neither the teacher nor student is not safe. A school environment that is partly habited by drug addicts or a hide out for criminals will not be convenient for teachers to teach nor for the student to learn as they would be filled with anxiety and fear of being attacked, molested or even be sexually harassed and abused Suleman, 2021). The school instructional materials cannot be secured in an unsafe environment as they will constantly be vandalized. In securing the school environment, secondary schools should have a perimeter fencing of about seven to eight couches from ground level with an iron gate at various entrance and exits, and should be manned at all times by gate men. This will forestall unauthorized access or movements in and out of the school environments. The case of Chibok girls in Maiduguri, Nigeria is enough to destabilize secondary school students in that area from achieving academic excellence because of the fear of being kidnapped in the school as a result of insecurity.

Personal visits to some schools have shown that the school physical facilities have not been in good shape. In some cases, students sit on the ground to receive lessons. Many of the classrooms, laboratories, libraries, playing grounds are in a terrible state of despair. Ahmed (2023) state that in most of the nation's secondary schools, teaching and learning take place under a most unconducive environment, lacking basic materials. These deteriorating conditions have encouraged incessant complaints from students. School environment maintenance in secondary schools is the responsibility of everybody associated with the school such as the principals, teachers, students and the general public.

Water facilities are also necessary requirement for institutions, whether day or boarding system, because the human body needs a certain quality of water daily to keep the body hydrated. As student spends most part of the day in school, there is tendency for students to be thirsty. The student therefor will always go out of the school premises during breaks to get portable drinking water and return after the break period has passed and some may not even come back (Bradley &Sato, 2018). Topics missed when the student were absent owing to unavailability of drinking water supply may not be taught again by the teacher, and thereby affect their level of academic achievement negatively. During the day time when the weather is hot student get thirsty and become restless and at such instance lack concentration in the lesson taught during such times which will also affect their level of achievement negatively.

Students engage in many important social relationships that are also influential within the school environment, such relationships include those with their peers and with teachers. Studies indicate that these relationships influence achievement in the various school domains including social, academic and behavioural arenas. The analysis of the senior secondary certificate examination of Cross River between 2020-2023 shows that below 22% of the students passed with the required five (5) credits including Economics and Mathematics, also between the same period the number that have five credits with Economics is below 20% and the number that have five credits with Mathematics within the same period is below 15%. The analysis above shows that the highest percentage pass with five credits including English and Mathematics is 22%, which is below average, hence the need for intervention (Ameh, 2013).

Meanwhile, grant from the fact that significant efforts including provision of funds for resources, materials and structures have been made by the government in

order to improve the performance of the sector (Suleman (2021). Several studies of student academic achievement have been conducted on such issues like gender difference, teacher's education and teaching styles, class environment, socio economic factors and family education background. In an attempt to proffer solution to the problem of poor learning outcomes of secondary school students in economics, in spite of these interventions, a significant improvement is yet to be achieved. It on this back drops the researcher intend to investigate the relationship between school environment and students learning outcomes in Economics in Ikom education zone of Cross River State.

School environment constitutes important resources for the implementation of educational programme in Nigeria. Its place in the teaching process cannot be over emphasized, for instance, classroom constitute a common ground for sharing learning experiences and for trying out research findings. Play grounds are places for recreation and sports while instructional materials such as teaching aids generally, are facilitators of the teaching learning process.

Despite the above importance of these physical facilities, evidence abound which seems to suggest that there is ineffectiveness in the management of school environment in secondary schools particularly in South –South states of Nigeria. The school administrators appear to pay less attention to school environment management as one of the task areas of school administration. It appears that principals do not motivate teachers and students adequately because they appear to treat the provision of infrastructural facilities like conducive classrooms, comfortable staff rooms, libraries, laboratories and workshop with levity (Idopise, 2024). This affects the productivity of the teachers and the learning of the students. This ineffectiveness is in the form of washed off paints, falling ceiling and roof tops that have suffered from heavy rainfall. Noticeable also are cracked dilapidated

decaying walls, sagging roofs, broken doors, windows and bushy surroundings as common phenomena in secondary schools in Cross River states. Most schools have no doors or window shutters to protect students against hash whether conditions.

The classrooms are overcrowded which do not allow for personal attention of students by the teachers. Some secondary schools have no laboratories and even the schools that have are not provided with the relevant materials and equipment for learning activities that the students can be engaged in. Unfortunately, this situation may be linked to poor students learning outcomes in examination (Ogunsola, Osualale and Ojo, 2023). The poor learning outcomes of secondary school students in economics has persevered for a long time despite efforts by stakeholders to reverse it. It is worrisome to note that secondary schools in Nigeria are not meeting the expected requirement of producing qualitative students who are eligible to seek and gain admission into higher institutions of learning and are also employable upon graduation. This ugly situation actually tends towards threatening the future of the nation. Although a close look at public secondary schools in Ikom education zone reveal a state of general disrepair, inadequate facilities and equipment, poor maintenance culture, there has not been any imperial study to determine the relationship between school environment provision and learning outcomes of secondary school students in economics a negative dimension and as such the problem of the study stated in question form is therefore, as follows: What are the effective practices in the management of school environment in secondary schools in Ikom Education Zone of Cross River State Nigeria?

Literature Review

Ezenwagu, Ughamadu, Moses and Ugwoke (2021) carried out a study titled "School space management as a predictor of entrepreneurial skills acquisition of in-school adolescents in technical colleges in Anambra State, Nigeria". This study aimed at investigating school management as a predictor of in-school adolescents' entrepreneurial skills in technical colleges in Anambra State. The correlational design

was used. The sample size comprised all the 2567 senior secondary 1 and 2 students. The instrument used was questionnaire developed by the researchers and it was face - validated by three test experts. K-r21 statistical analysis which was used in determining the reliability of the instrument gave k-r 21 value of 0.60. Pearson product moment correlation was used to answer the research questions while simple linear regression statistics was used to test the two null hypotheses at 0.05 level of significance. Results: Major findings of the study revealed that there was inverse relationship between school plant and entrepreneurial skills acquisition of male and female in-school adolescents. It was also found that the extent school space management predicts urban and rural adolescents' entrepreneurial skills acquisition is very low. However, there was no significant difference in the relationship between school space management and entrepreneurial skills of male and female, urban and rural in-school adolescents. The study concluded that the Federal Government of Nigeria, through her National Policy on Education stated that one of the specific goals of secondary education is to offer technical skills and vocational skills for students, which can help them to explore in areas of agriculture, business and creativity, the establishment of technical schools in Anambra State must focus on combating unemployment rate among youths.

In another study by Suleman (2021) on space for convenience planning and academic performance of secondary school students in Oyo State, Nigeria. The study adopted the descriptive survey research design of the ex-post facto type and made use of a sample of 1,440 selected through a multi-stage sampling procedure. The two validated instruments used for data collection were space for convenience planning scale (r=0.81) and students' academic performance scale (r=0.70). Three hypotheses were tested at 0.05 level of significance. Data collected were analysed using Pearson Product Moment Correlation (PPMC)

and Multiple Regression analysis. Two, out of the three independent variables, had significant relationship with the academic performance of students. These were toilet facility ($r = 0.336$; $P < 0.05$) and water facility ($r = 0.262$; $P < 0.05$). Also, the independent variables (i.e. the three spaces for convenience planning elements) accounted for 13.9% of the variance in the dependent variable and the joint effect of space for convenience planning is significant on the academic performance of students ($F=78.597$; $df= (1,439)$; $P<0.05$). The study concluded that toilet and water facilities have been adjudged to have contributed immensely to the academic performance of students. Thus, based on the findings, the researcher recommended that provision of adequate toilet and water facilities. However, the study did not explain the procedure for data collection while the present study will explicitly state the procedure that will be followed for data collection.

Odufowokan (2022) on school space planning as correlate of students' academic performance in Southwest Nigeria secondary schools. examines the relationship between school plant planning and students` academic performance in south west Nigeria secondary schools using descriptive survey research design. The sample consists of 1650 respondents comprising 150 school principals and 1500 students. Multistage, stratified and simple random sampling techniques were used to select the sample. Data collected were analyzed using frequency counts, percentages, means and Pearson product moment correlation. Five null hypotheses were tested at 0.05 level of significance. The study revealed that the levels of school plant planning and students` academic performance were relatively close, and as such students` academic performance was significantly related to instructional space planning, administrative space planning, circulation space planning, planning for accessories and space for convenience planning. The researcher recommended

that authorities concerned should implement architectural designs of buildings and spaces for education to ensure students` academic performance. The population from which 1650 respondents was drawn from was not specified.

Asiyai (2022) investigated school facilitates in public secondary schools in Delta State, Nigeria. The purpose of the study was to find out the state of the facilities, the types of maintenance carried out on the facilities by school administrators, the factors encouraging school facilities depreciation and the roles of school administrators in the management and maintenance of school facilities. The study employed the ex-post-facto research design. The questionnaire was the instrument for data collection from 640 respondents selected through stratified sampling techniques from all the 358 public secondary schools in the state. The findings revealed that school facilities in the schools are generally in a state of disrepair. The findings further revealed that the maintenance carried out on school facilities were inadequate or majority of the facilities. The factors encouraging school facilities deprecation included excess pressure on available facilities and delayed maintenance amongst others. The roles of school administrators in the management and maintenance of school facilities included periodic inspection of facilities and decentralization of maintenance. The study recommended that school administrators, teachers and students should develop and inculcate good maintenance culture; government should budget for facilities maintenance and allocate more funds to schools for effective management and maintenance of school facilities.

Agbonye (2023) conducted survey research on school buildings in secondary school in Imo state. The aim of the study was to find out the adequacy in the provision of secondary school buildings in Imo state. Five research questions and four null hypotheses guided the study. Descriptive survey design was adopted for the study. A sample size of six hundred and fifty was selected and used for the study. The instrument used was questionnaire. Mean scores and standard deviation were used to analyze the data and answer the research question while the t-test statistics was used to test the null hypotheses. The result showed that school buildings in Imo state are not meeting up with the population of students and the buildings are not in good condition. The study is related to the present study in the sense that while Agbonye's study investigated the status of school buildings, the present study will go further than just the status. It would proffer strategies for securing school buildings.

Marit and Bengt (2023) examined how playground planning and management determine the evaluation of standard-influenced on students learning outcomes. A longitudinal design of case study was employed to compare two schools in Swedish towns with different site-specific characteristics as regards the surrounding landscape and social connections. The empirical data obtained were used to (i) identify factors affecting playground use for different user groups, (ii) compare the two local contexts and (iii) evaluate how well existing standard-influenced playground provision matches needs and preferences. Users were studied through interviews with school children, questionnaire surveys of preschools and parents, interviews with park workers and GIS mapping of children's homes, while play provision was evaluated through observations of playgrounds and private gardens with play equipment. Differences were found between user groups, as children look for activities and variation, parents for practical and social functions and preschool groups for activities for many children. Between users in the two towns, the social function and the importance of playgrounds appeared to depend on the context, in terms of site-specific physical and social conditions. The differences appeared to affect use and should be given greater consideration in playground planning and management. Adherence to planning standards has resulted in the construction of many playgrounds, but more variation between units and particular qualities are important in attracting users.

Purpose of the Study

The aim of the study was to investigate school environment as correlate of students learning outcomes in economics in Ikom Education Zone of Cross River State. specifically, the study sought to;

1. find out whether school space planning, school building design and playground planning relates to students' learning outcomes in economics in Ikom Education Zone

Hypothesis

1. There is no significant relationship between school space planning, school building design, playground planning and students' learning outcomes in economics in Ikom Education Zone, Cross River State

Methodology

The study employed the survey research design. The area of study is Ikom Education Zone of Cross River State. The zone comprises of six (6) local government areas that makes up Cross River Central, namely: Abi, Boki, Etung, Ikom, Obubra and Yakur local government areas respectively. The population of this study comprises of 5,921 senior secondary II economics students from all the public junior secondary schools in Ikom Education Zone. The students are those currently in the 2023/2024 academic session. The sampling technique that was used for this study was the stratified and simple random sampling techniques. The stratification was based on the educational Zones. The simple random sampling technique was e used in selecting the sample from each stratum. The sample for this study consists of 392 which is 10% of senior secondary II Economics students randomly selected from 18 secondary schools in Ikom Education Zone of Cross River State. The instrument for data collection was a questionnaire tagged: School Environment and Economics Students Learning Outcomes

Questionnaire (SEESLOQ). The instrument has two (2) sections, A and B; Section A comprised of the Bio-data of the respondents such as; gender, school location and age. The section B of the questionnaire consist of 38 items. 18 items were designed to measure the three dimensions of the independent variables, while 20 objective items were designed to measured students learning out come in Economics. The face validity was established by three experts, two in Measurement and Evaluation and one in Economics Education. The content validity of the instrument was established by using the Table of specification or Test blue print. To estimate the reliability of the School Environment and Economics Students Learning Outcomes Questionnaire (SEESLOQ), split half reliability method was employed. Fifty (50) respondents were drawn from the population who are not form the sample of the final study. The reliability index ranged from 0.76 to 0.94 is obtained, it was considered reliable. The questionnaire was administered face-to-face by means of Direct Delivery Method (DDM) whereby all the respondents were contacted directly so as to reduce items not being properly completed. Regression was employed to test the hypotheses.

Hypothesis

There is no significant relationship between school space planning, school building design, playground planning and students' learning outcomes in economics in Ikom Education Zone, Cross River State. The independent variables in this hypothesis are space planning, school building design and playground planning. The dependent variable is students' learning outcomes in economics. Multiple regression analysis was employed to test this hypothesis. The result of the analysis is presented in Table 1.

Table 1: Multiple regression analysis of the relationship between space planning, school building design and playground planning (N=200

Model	R	R. square	Adjusted R. Square	Std error of the estimate		
1	.934(a)	.873	.872	1.12333		
Model	**Sum of square**	**df**	**Mean square**	**F**	**p-value**	
Regression	2799.709	3	933.236	359.519*	.000(a)	
Residual	1007.166	388	2.596			
Total	3806.875	391				
Variables	**Unstandardized regression weight B**	**Standardized regression weight**	**Beta weight**	**t**	**p-value**	
Constant	7.013	.900		7.795	.000	
Space planning	.229	.155	.120	1.481	.139	
School building design	1.550	.329	.813	4.716	.000	
Playground planning	-.134	.291	-.071	-.462	.644	

* Significant at .05 level.

Table 1 showed that a combination of space planning, school building design and playground planning yielded a coefficient of multiple regression (R) of .934 and a multiple regression R-square (R^2) of .873. The result also showed that Analysis of Variance for the multiple regression data produced an f– ratio of 359.519, which was significant at .05 level. Thus when these variables are taken together, they significantly predicted students' learning outcomes in economics. This implied that space planning, school building design and playground planning when taken together are significant predictors of students' learning outcomes in economics. A multiple R^2 of .873 implied that the independent variables Space planning, school building design and playground planning jointly explain 87.3 percent of the variance in students' learning outcomes in economics.

To find out the relative contributions of the individual factors, a test of regression weight was carried out. The result shows that the standardized regression weights (Beta) ranged from- -.071 - .813 and t – ratio from -.462 – 4.716. The Beta weight of one(playground planning) was significant at .05 level, while the other two variables (space planning and school building design) were not significant at .05 level. This result implied that when the variables were taken individually, only one namely; playground planning significantly predicts students' learning outcomes in economics. The result further showed that playground planning (t= 4.716) made the greatest contribution to students' learning outcomes in economics, followed by school building design (t = 1.481), while Space planning (t= -.462) made the least contribution to students' learning outcomes in economics.

Discussion of Findings

The result of the study

revealed that there is a significant relationship between school space planning, school building design, playground planning and students' learning outcomes in economics in Ikom Education Zone, Cross River State. The finding of this hypothesis is in line with the view of Ezenwagu, Ughamadu, Moses and Ugwoke (2021) who revealed that there was inverse relationship between school plant and entrepreneurial skills acquisition of male and female

in-school adolescents. It was also found that the extent school space management predicts urban and rural adolescents' entrepreneurial skills acquisition is very low. However, there was no significant difference in the relationship between school space management and entrepreneurial skills of male and female, urban and rural in-school adolescents. The study concluded that the Federal Government of Nigeria, through her National Policy on Education stated that one of the specific goals of secondary education is to offer technical skills and vocational skills for students, which can help them to explore in areas of agriculture, business and creativity, the establishment of technical schools must focus on combating unemployment rate among youths. Odufowokan (2022) also revealed that the levels of school plant planning and students` academic performance were relatively close, and as such students` academic performance was significantly related to instructional space planning, administrative space planning, circulation space planning, planning for accessories and space for convenience planning. The researcher recommended that authorities concerned should implement architectural designs of buildings and spaces for education to ensure students` academic performance. The population from which 1650 respondents was drawn from was not specified.

Conclusion

Based on the results and findings of the study, the following conclusions were reached; school space planning, school building design, playground planning significantly relate to students' learning outcomes in economics in Ikom Education Zone, Cross River State.

Recommendations

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

1. School authorities concerned should implement architectural designs of buildings and spaces for education to ensure students` academic performance.

2. School administrators, teachers and students should develop and inculcate good maintenance culture; government should budget for facilities maintenance and allocate more funds to schools for effective management and maintenance of school facilities.

3. Government should budget for facilities maintenance and allocate more funds to schools for effective management and maintenance of school facilities.

References

Agbonye, O. A. (2023). School environment and academic performance of standard six students. Journal of Educational and Industrial Studies in the World, 2(3), article 22. Aceesed20/11/2023 from https://files.eric.ed.gov/fulltext/ED542331.pdf

Ahmed, H. A. (2013). An assessment of toilet facilities in secondary schools in Jos North Local Government Area of Plateau State. *Greener Journal of Educational Research, 2* (4), 91 – 94.

Asiyai, R. I. (2022). Assessing school facilities in public secondary schools in Delta State, Nigeria. *African Research Review: An International Multidisciplinary Journal, Ethiopia, 6*(2), 192-205.

Barth, J. (2021). The effect of socio-economic status on academic performance. Spring, Wichita, KS: Wichita State University.

Bradley, D. & Sato, S. (2018). *Creating a warm and inclusive classroom environment: Planning for all children to feel welcom*e. Georgia: University of West Georgia Press.

Ezenwagu, S. A., Ughamadu, U., Moses, O. E., Ugwoke, S. C. (2021). School space management as a predictor of entrepreneurial skills acquisition of in-school adolescents in technical colleges in Anambra State, Nigeria. *Australian Journal of Basic and Applied Sciences,10*(1), 735-743.

Idopise, O. O. (2024). *Classroom management for teachers*. Uyo: MEF Publishing Limited, Nigeria.

Marit, J. & Bengt, P. (2023). Playground planning and management: An evaluation of standard-influenced provision through user needs. *Urban Forestry and Urban Greening, 9*(1),33-42**.**

Mgbodile, J. N. (2022). Socio-psychological environments and learning: A quantities synthesis, *British Educational Research Journal, 1*(8), 27-36.

Odufowokan, B. A. (2022). School space planning as a correlate of student's academic performance in South West Nigeria secondary schools. *International Journal of Business Administration, 2*(2), 41-47.

Ogunsola, E. D., Osualale, N. K.& Ojo O. A. (2023). Influence of school environment on academic achievement of students in secondary schools in zone "A" Senatorial district of Benue State, Nigeria. *International Journal of Recent Scientific Research, 6*(7), 49-54

Ogunu, H. O. (2020). The natural environment as a playground for children: landscape description and analyses of a natural play's cape, landscape and urban planning**.** *Journal of Environmental Psychology, 2*(9), 45-57.

Onyedeji, U. C. (2022). Environmental influence on academic performance of secondary school students in Port Harcourt Local Government Area of Rivers State. Available at http://www.iiste.org/journals/index.../6966.Accessed on May 25, 2024.

Suleman, Y. (2021). Space for convenience planning and academic performance of secondary school students in Oyo State, Nigeria. *Journal of Education and Practice, 8*(13), 11-21.

Umaru, R. J., Egan, H. E.& Oti, G. O. (2021). Effects of group-investigation technique on junior secondary school students' attitudes towards social studies in Jos North, Plateau State. *Journal of African Social Studies, 2*(1), 165-177.