

MANAGEMENT OF EDUCATIONAL RESOURCES AS PREDICTORS OF
SECONDARY SCHOOL EFFECTIVENESS IN CALABAR EDUCATION ZONE OF
CROSS RIVER STATE, NIGERIA

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Abstract

This study investigated management of educational resources as predictor of secondary school effectiveness in Calabar Education Zone of Cross River State, Nigeria. The research design adopted in this study was a correlation design. The population and sample of this study were 97 and 50 public secondary school respectively. An instrument for data collection was developed by the researcher and was entitled; “Management of Educational Resource and Secondary School Effectiveness Questionnaire (MERSSEQ)” To establish the reliability of the instrument, the researchers administered a test 50 teachers who were not involved in the study. The reliability indices of the instrument ranged from 0.82 to 0.88, As such, the instrument was justified suitable to be used for data collection. The data collected were coded and analyzed using simple linear regression. The result of the analysis indicated that management of educational resources in terms of physical and human resources significantly predict secondary school effectiveness in such areas as monitoring of students’ academic progress and conducive teaching and learning environment Calabar Education Zone of Cross River State. Based on the results of the analysis, one of the recommendations was that, principals of public secondary schools should ensure improvement in the management of their respective schools’ physical resources in order to enhance secondary school effectiveness in the area of provision conducive learning environment for effective teaching and learning processes.

Key Words: Educational Resources, Physical Resources, Human Resource, Effectiveness,

Introduction

In comparison with other levels of education (primary and tertiary), secondary education has its own specific objectives to accomplish. These objectives according to Federal Republic of Nigeria, (FRN, 2008) include; provision of the learners with fundamentals knowledge and skills for entrepreneurship, education advancement, inculcating of moral values, self-improvement, and training of man-power in such areas as science, technology and commerce. In view of the above roles of secondary school education in the development individual and socio-economic development in general, Asuquo and Etor (2021) stressed that, school effectiveness should be given priority attention. It should be noted that, in the literature, school effectiveness means different things to different authors and this has led to a global debate around the concept (Okafor & Aruoture, 2022).

Effectiveness as a concept has been viewed differently by various scholars in educational management. For instance, Asuquo & Ekpoh (2021) averred that, school effectiveness has to do with the state at which an educational institution functions efficiently in all areas to attain its specific objectives. It is also viewed as the extent to which every unit within a school, carry out their routine functions that can promote or hinder the attainment of set objectives (Owan, 2019; Asuquo & Etor, 2021). School effectiveness implies a state

where activities within a school system are tailored towards students' development, school growth, and goal attainment and that, an effective secondary school is one that engages in activities according to prescribed patterns, standards, and expectation (Owan, Arop, & Agunwa, 2019). It could be said that, effective school is one with achievement orientation, high students' and teachers' expectations, quality educational leadership, consensus and cohesion among staff, curriculum quality, opportunity to learn, school climate, evaluative potential, classroom climate, effective learning time (classroom management), structured instruction, feedback/reinforcement and parental involvement, are all indicators of an effective school system (Scheerens, 2016; Asuquo & Ekpoh, 2021). By implication, secondary school effectiveness is conceptualized as the state at which secondary school functions properly in all respects to attain its specific objectives.

Specifically, in the context of this work, secondary school effectiveness has to do with quality improvement in such areas as monitoring of students' academic progress and physically conducive learning environment. With respect to monitoring of students' academic progress, it is expected that, teachers must always find out if students understand what they are taught by engaging them in classroom activities, organizing quiz competition for the students among other teaching and learning processes. It is also expected that, secondary school system that is regarded as being effective must have all the necessary school resources needed for effective teaching and learning. This means that, the teaching and learning environment must be conducive physically and socially for all the teachers and the students.

To facilitate effectiveness at the level of secondary school, the federal and the state government has not relented in making efforts towards annual funding of educational sector. In this connection, Ekpoh & Asuquo, (2021) documented that, although may be inadequate, the Nigeria's government has been constantly involved in annual allocation of fund to educational sector to ensure availability of all educational resources that could promote effective monitoring of school programmes to facilitate secondary school effectiveness. In spite of these efforts by the government, it has been observed by the researchers that, many secondary schools are still not regarded as being effective in such areas as monitoring of students' academic progress and physically conducive learning environment. It is assumed that, with effective management of educational resources in terms of management of physical and human resources, secondary school effectiveness in the areas of students' academic progress and physically conducive learning environment may be satisfactorily accomplished to a large extent.

Management of physical resources is the administrative effort to ensure that, such facilities as permanent and semi-permanent resource are provided, adequate and available as well as being effectively utilized for teaching and learning effectiveness. Physical resources in school include school buildings, classrooms, accommodations, libraries, laboratories, furniture, recreational equipment, and other instructional materials. Schools with pleasant physical environment perform better than those where the learning environment is not conducive (Bala, 2022). However, poor management of physical resources in many Nigerian secondary schools has manifested in a situation where classrooms are overcrowded with up to 80 or 90 students which pose a great danger to teaching and learning due to buildings are dilapidated and in most cases, grossly inadequate for the population of the students (Nyamai, Adhiambo & Nduku, 2024). The laboratories are ill-equipped, with inadequate equipment and materials for practical (Maiyeri, Bin, & Liu, 2022). On contrary, Biology laboratories and equipment are largely available in secondary schools in Zaria Educational Zone, Kaduna State, but their utilization is largely on monthly basis which is not healthy for effective teaching and learning especially in practice-based course like Biology (Abdurrauf, Alhassan & Jibril, 2019).

Management of human resources has to do with the process of coordinating workers or workforce in the school system. It means manpower planning in terms of recruiting, hiring, deploying, employees' orientation, placing or allocating, training and development, provision of staff good health and safety, performance appraisal, personnel compensation and employees' motivation and staff promotion. Human resources in organization are the most important assets to run the organizational operational cycle and they are very important organizational element, which must be appropriately managed in order to contribute optimally to the achievement of organizational goals (Haerani, Sumardi, Hakim, Hartini, & Putra, 2020). Human resources management could also entails facilitating personnel competence which involves motivating staff members to carry out or do a job or task based on skills and knowledge and is supported by the work attitude required by the job (Atmadja, Saputra, Tama, & Paranoan, 2021). It has been noted that, the primary objective of management of human resources is to maximize the effectiveness of educational organization by ensuring that teachers are well equipped, motivated to align with the school organizational goal (Sukawati, Gunawan, Ubaidillah, Maulina & Santoso, 2020). Tanjung (2020) has noted that the functions in the management of human resources must be carried out optimally so that the needs relating to the goals of individuals and organizations or institutions can be achieved

As an aspect of secondary school effectiveness as considered in this study, monitoring of students academic progress is the process of assessing students on regular basis to determine if teaching is effective or not. It also refers to the process of ensuring that, every student grows and improves in their academic activities. Another aspect of secondary school effectiveness in this study is conducive learning environment which refers to school environment that supports students' cognitive, affective, psychomotor, emotional and social growth. It is manifested in adequate physical space in terms of classroom layout, furniture arrangement, materials available for use and access to technology. It also refers to a learning environment that allows free and effective impartation and exchange of knowledge, skills and attitude among teachers and the students to achieve the expected educational goals.

Empirically, Onuh, Eziuzo, & Ekweogu (2021) conducted a study on administrators' application of physical resources management strategies for secondary schools' effectiveness in Anambra State. The result revealed that, revealed that, secondary school administrators' did not effectively apply the various physical resources management strategies in terms of the routine, emergency, preventive and corrective management strategies. In another study, Nyamai, Adhiambo & Nduku (2024) found that, while some physical resources like classrooms and science laboratories were adequately utilized, others, particularly ICT resources, were insufficiently available and underutilized. The study also found that effective utilization of physical resources positively influenced learning outcomes, though inadequate resources hindered optimal academic performance. Similarly, in a study by Asuquo, & Ogar-Ikewn (2021), it was found among others that, enhancement of conducive teaching and learning environment, prolonging the life span of school physical resources and securing of school physical resources constituted reasons for physical resource management for school effectiveness. The result also indicated adoption of appropriate types of maintenance, intensive inspection during repairs and replacement of school physical resources, setting up of school physical resource management committee, involvement of community in school physical resource management among others as strategies to enhancing physical resources management for school effectiveness.

In another empirical study with respect to human resource management, Ekwen & George (2018) carried out a study to explore human resources management and school effectiveness in government technical secondary and high schools in Fako Division, South West Region of Cameroon. The finding from the study revealed that, human resources management had a significant impact on school effectiveness and that there existed a strong

relationship between human resources management and school effectiveness. Again, Okafor & Aruoture (2022) examined the influence of resource management on school effectiveness in public secondary schools in Edo South Senatorial District. Specifically, the study sought to determine the influence of financial, human, material, and time resource management on school effectiveness among public secondary schools in Edo South Senatorial District. Although the study by Ekwen & George as well as that of Okafor & Aruoture are similar to this study, they were conducted in Fako Division, South West Region of Cameroon and in public secondary schools in Edo South Senatorial District respectively. Consequently, there is a need for the present study to be carried out to fill the gap in terms of study area.

Statement of the problem

In recent times, the focus on secondary school effectiveness has attracted a lot of attention among researchers all over the world. This may be due to the perceived ineffectiveness of some secondary schools in their activities, programmes and as well as in the general school administration. Many public secondary schools have been observed by the researchers to be ineffective in such areas as monitoring of students' academic progress and provision of conducive learning environment.

From the observation of the researchers, many public secondary schools in the study seem to be lacking engaging students effectively in academic activities. This is evidence in their inability to organize regular quiz competitions for their students. Besides, many public secondary schools appear to be ill-equipped with the necessary facilities and equipment to that could create a conducive teaching and learning environment.

The observed situation in secondary school ineffectiveness is quite worrisome. As such, to dip the discouraging situation in the bud, secondary school administrators are expected to improve upon their management capabilities in the areas of facilities and human resources. Consequently, the aim of this study is to find out if management of educational resources could predict secondary school effectiveness in Calabar Education Zone of Cross River State, Nigeria.

Purpose of the study

The main purpose of this study was to examine management of educational resources and secondary school effectiveness in Calabar Education Zone of Cross River State, Nigeria. Specifically, the study sought to find out whether:

1. Management of physical resources significantly predicts secondary school effectiveness in Calabar Education Zone of Cross River State, Nigeria.
2. Management of human resources significantly predicts secondary school effectiveness in Calabar Education Zone of Cross River State, Nigeria.

Statement of hypotheses

The following null hypotheses were formulated to guide the study.

1. There is no significant relationship between management of physical resources and secondary school effectiveness.
2. There is no significant relationship between management of human resources and secondary school effectiveness.

Methods

The research design adopted in this study was a correlation design. This design was chosen because this research is designed to explore the nature of statistical prediction of management of educational resources on secondary school effectiveness in public secondary schools in Calabar Education Zone of Cross River State, Nigeria. The population of this study was 97 public secondary schools across Calabar Education Zone in Cross River State, Nigeria. The sample of the study was 50 public secondary schools. Questionnaire was designed by the researchers and was used for data collection.

The questionnaire was called Management of Educational Resource and Secondary School Effectiveness Questionnaire (MERSSEQ).

The instrument was validated by three lecturers in the Department of Educational Management and another three lecturers in Test and Measurement of the Department of Educational Foundations, University of Calabar. To establish the reliability of the instrument, the researchers administered a test on 50 teachers who were not involved in the study. Using Cronbach Alpha method, the reliability indices ranged from 0.82 to 0.88 which was regarded as high enough to justify the use of the instrument for data collection. The instrument was administered by the researchers and the research assistants to the respondents in their various schools after due permission from their principals. Data gathered were coded and analyzed using Simple Linear Regression analysis. The section for Educational Resource and Secondary School Effectiveness were responded to by the teachers and students respectively.

The instrument was designed based on four point Likert scale. Each item was required by the respondents to indicate opinion under Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). In rating the scale, positively worded items were rated 4, 3, 2, 1, while negatively worded items were rated 1, 2, 3, 4 respectively. The researchers ensured that face validity was established for the instrument by the two Measurement and Evaluation experts. Corrections were made and effected accordingly. The data collected were coded and analyzed simpler linear regression analysis.

Presentation of Results

Hypothesis one: There is no significant relationship between management of physical resources and secondary school effectiveness.

Table 1; ANOVA of a simple linear regression analysis showing how management of physical resources predicted secondary school effectiveness

Model	SS	Df	MS	F	P
Regression	29014.32	1	29014.32	657.355	.000
Residual	34912.85	791	44.138		
Total	63927.17	792			

a = 13.039; B = 1.303; SE = 0.771; Beta = 0.597; t = 20.946; p < .05

*Significant at p < .05

Management of physical resources does not significantly predict secondary school effectiveness in Calabar Education Zone of Cross River State. In this hypothesis, the variables of interest are management of physical resources considered independent, while secondary school effectiveness is the dependent variable. A simple linear regression analysis was conducted to test the null hypothesis at a significance level of 0.05. The results are summarized in Table 1 which indicates that management of physical resources significantly predicts secondary school effectiveness in Calabar Education Zone of Cross River State as supported by $F(1, 791) = 657.355$, $p < .05$. With this result, the null hypothesis was rejected while the alternate hypothesis was retained. The regression coefficient indicates that a one-unit increase in management of physical resources corresponds to an increase in secondary school effectiveness, assuming that other factors remain constant.

Hypothesis two: There is no significant relationship between management of human resources and secondary school effectiveness.

Table 2: ANOVA of a simple linear regression analysis showing how management of human resources predicted secondary school effectiveness

Model	SS	Df	MS	F	P
Regression	27740.44	1	27740.44	680.547	.000
Residual	32242.61	791	40.762		
Total	63927.17	792			

a = 12.124; B = 1.323; SE = 0.811; Beta = 0.444; t = 21.548; p < .05

*Significant at p < .05

Management of human resources does not significantly predict secondary school effectiveness in Calabar Education Zone of Cross River State. In this hypothesis, the variables of interest are management of management of human resource considered independent, while secondary school effectiveness is the dependent variable. A simple linear regression analysis was conducted to test the null hypothesis at a significance level of 0.05. The results are summarized in Table 1 which indicates that management human resources significantly predicts secondary school effectiveness in Calabar Education Zone of Cross River State as supported by $F(1, 791) = 680.547, p < .05$. With this result, the null hypothesis was rejected while the alternate hypothesis was retained. The regression coefficient shows that a one-unit increase in management of human resource corresponds to an increase in secondary school effectiveness, assuming that other factors remain constant.

Discussion of findings

The discussion of the findings of this study is presented in the following sub-headings:

1. Management of physical resources and secondary school effectiveness

The first finding of this study is that management of physical resources significantly predicted secondary school effectiveness in Calabar Education Zone of Cross River State. Specifically, the finding suggests that as management of physical resources improves, so does the effectiveness of public secondary schools. This means that, the variability in secondary school effectiveness can be attributed to management of physical resources in public secondary school. By implication, proper management of physical resources by the school principals may ensure effectiveness of public secondary schools in such areas as provision of conducive learning environment that supports students' cognitive, affective, psychomotor, emotional and social growth. This means that, where there is proper management of physical resources in secondary schools, secondary school effectiveness may be fostered to create a conducive environment for teaching and learning processes to thrive.

This finding is in support of Nyamai, Adhiambo & Nduku (2024) who found that, effective utilization of physical resources positively influenced learning outcomes and that, though inadequate resources hindered optimal academic performance. The finding is also in line with Asuquo, & Ogar-Ikewn (2021) whose study discovered that, enhancement of conducive teaching and learning environment, prolonging the life span of school physical resources and securing of school physical resources constituted reasons for physical resource management for school effectiveness and that, adoption of appropriate types of maintenance, intensive inspection during repairs and replacement of school physical resources, setting up of school physical resource management committee, involvement of community in school physical resource management among others are strategies to enhancing physical resources management for school effectiveness. Again, teachers' monitoring of students academic progress by assessing students on regular basis to determine if teaching is effective or not and ensuring that, every student grows and improves in their academic activities and career may be attributed to proper management of human resources.

2. Management of human resources and secondary school effectiveness

The second finding of this study is that management of human resources significantly predicted secondary school effectiveness in Calabar Education Zone of Cross River State. Particularly, the finding suggests that as management of human resources improves, so does the effectiveness of public secondary schools. This suggests that, the variability in secondary school effectiveness can be attributed to management of human resources in public secondary school. This means that, qualified and committed teachers will always be ready, available and get motivated to monitor students academic progress in the circumstance where there is proper recruiting, hiring, deploying, teachers' orientation, placing or allocating, training and development, provision of staff with good health and safety, performance appraisal, personnel compensation and employees' motivation and timely staff promotion, the effectiveness of secondary school may be facilitated. This result is in support of a study carried out by Ekwen & George (2018) which indicated that, human resources management had a significant impact on school effectiveness and that there was a strong relationship between human resources management and school effectiveness. The finding of this study is also in tandem with an empirical study by Okafor & Aruoture (2022) that, resource management influenced school

effectiveness in public secondary. This means that, improvement in human resource management is a prerequisite for effectiveness of secondary school system.

Conclusion

Prediction of public secondary school effectiveness in such areas as monitoring of students academic progress and conducive learning environment by management of educational resources in terms of management of physical and human resources in Calabar Municipality in Cross River State was the focus of this study. The findings of the study indicated that management of educational resources are significant predictors of public secondary school effectiveness.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. Principals of public secondary schools should ensure improvement in the management of their respective schools' physical resources in order to enhance secondary school effectiveness in the area of provision conducive learning environment for effective teaching and learning processes.
2. The government and the secondary school principals should ensure that there is improvement in the management of human resources so as to motivate teachers to monitor students academic progress.

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