Resource Adequacy in Boarding Secondary Schools in Cross River State, Nigeria

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Abstract

This paper examined resource adequacy in boarding schools in Cross River State of Nigeria. Two research questions were posed to guide the investigation. Descriptive survey design was adopted. Purposive and proportionate stratified sampling techniques were adopted to choose a sample size of 266 from the population of forty two (42) boarding secondary schools with 833 teaching and non-teaching staff in Cross River State. A questionnaire titled "Adequacy and Management of Resources in Boarding Secondary Schools Survey Questionnaire" (AMRPBSSQ) was used in data gathering. This instrument was used in addition to an observation schedule and checklist to determine the degree of adequacy of resources in line with educational specification. To answer the research questions, ratios, percentages and bar chats were used. The results of the analyses revealed, among others, that there are resource inadequacies in the two categories of boarding schools. Based on the findings, it was recommended among others that setting up boarding schools should be contingent on fulfilling all educational specifications for takeoff as provided by the outcomes of education diagnosis.

Keywords: resource, adequacy, boarding, schools, management

Introduction

The survival and maintenance of educational institutions are contingent on the nature of its resources. In Nigeria and particularly in Cross River State, resources (human or material) have been identified as very significant for school effectiveness; this implies that school's goal attainment is dependent on the nature of educational resources. Educational resources are therefore expected not only to be available but also sufficient in quantity.

This however appears not to be the case in many schools in Cross River State. It is even worse off when juxtaposed by school type, boarding or non-boarding.

Existing literature tends to reveal that in the post-colonial times, the boarding option was most favoured by parents owing to their background for evangelization and teaching methods; this has implications for the nature of educational resources that were available at that time. Two decades after independence witnessed the growth and development of public boarding schools in Nigeria. This development too, has its own implications for manpower availability and usage in these categories of schools. Apart from manpower as a major resource, there is also the need for the provision of material resources to aid in the accomplishment of goals of manpower skills. Therefore combining manpower and material resources has remained fundamental for the achievement of educational goals overtime. Beyond this, the question that comes to mind is the extent of resource sufficiency that will guarantee school effectiveness; this is the crux of this study.

The educational system that was introduced to Nigeria by the early missionaries and colonial masters was a boarding school system. The schools were for few indigenous learners, for the purpose of educating and employing them to carry out essential duties for the colonial administration. The boarding school system continued from then till date at Federal, State, organizational and private levels. But the Nigerian government seems unable to manage and maintain the tempo handed down to them by the missionaries and colonial masters. The Government converted many of the boarding schools to grammar and secondary schools (Okpo, 1996). In this present democratic era, the government of Nigeria has been converting and renovating some state public secondary schools and establishing new public boarding schools. The purpose may not be all political but because of unavailability and mismanagement of resources for secondary education in Nigeria, including Cross River State.

The preferred set of boarding schools in Nigeria appears to be those privately owned, particularly the faith based schools. In such schools, more time and effort are invested in developing these schools to make learning robust, convenient, and engaging. Contemporary public boarding schools are seriously challenged and appear nothing to write home about; they tend to be wearing out on every side, from the infrastructure to the teachers' qualifications and educational standards. Less is given into the education system, and this makes private boarding schools an option to consider. Due to the extra efforts of creating a conducive environment for learning for the students, private boarding schools are often worth the higher fees. The boarding facilities are well-established to complement

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educational standards. They are always clean, healthy and properly maintained. In addition, the radius per child is reduced and conforms to UNESCO standard to create access.

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Furthermore, in some boarding schools, they almost never go wrong with giving adequate and consistent meals that are healthy and well-seasoned meals. Students feed at least three times daily while some schools also serve in-between meals as well. Good private boarding schools in Nigeria have high educational standards and assurance of good educational facilities with exceptional and highly qualified teachers. They also provide textbooks and additional reading materials to improve the learning process of their wards. It is interesting to note that some private schools offer discounts for siblings. A parent with two or more children attending the same school is likely to get discount.

So far, the Cross River State Government is working hard to establish boarding secondary schools in which one is proposed for each of the eighteen Local Government Areas, just like the case of model secondary schools. The establishment of Teachers' Continuous Training Institute (TCTI) has equally assisted to continuously prepare and retrain teachers to provide quality pedagogical input in those boarding schools. The state Universal Basic Education Board has recruited for positions in these schools especially, the newly built one in Kakum in Obudu, Cross River State, Nigeria. For the boarding school system in Cross River State, as established, to be successful, there is need to check the adequacy of educational resources such as human, financial, instructional materials, physical facilities and time needs, so as to determine whether they are sufficient to run the system for long period of time or not. There is the need to re-emphasize on the optimum and efficient managerial policies on resources utilization in the schools that would be productive to the boarding school system.

Moreover, there is need to determine the adequacy and management of the various resources such as the teaching and non-teaching staff strength, funding, staff remuneration, food supply, power supply, portable water, quality bedding, conducive accommodation for staff, hostel accommodation, comfortable office cabinets and furniture for teachers, nonteaching staff and students, kitchen and dining halls equipment, spacious classrooms, sporting fields, laboratory facilities, internet gadgets and devices, among others. Are the teachers motivated in the teaching and learning process considering increase in the workload as per periods and number of students in the boarding school system? Are laboratory facilities, computer gadgets and internet equipment adequate compared to the number of students in the boarding schools? Also, the various personnel in the boarding school such as the patrons, matrons, hostel masters/mistresses, doctors, nurses, cooks,

cleaners, gardeners, security personnel, plant and water machine operators, are they adequate and properly managed considering their high input and services?

The issue of health cannot be compromised in the boarding school system. Does the system provide optimum healthcare and nutrition to the students and workers? Do they have the quality and quantity needed? Also, what effects do juvenile and unruly behaviours of students have on the available resources in the boarding school system? Psychologically, it has been observed that the age bracket of the boarders, 13-16 years, makes them very active and likely to damage or mishandle available properties. This requires special attention.

In the light of all these issues raised, there is the need to establish a resourceful boarding school system with all the necessary manpower, instructional materials, physical facilities and financial resources with proper maintenance management; that is what spurred the investigation into resource adequacy in public and private boarding secondary schools in Cross River State.

Purpose of the study

The main purpose of this study is to investigate resource adequacy in boarding secondary schools in Cross River State. Specifically, the study seeks to:

- 1. Ascertain the adequacy of teaching manpower resources in boarding secondary schools in Cross River State.
- 2. Ascertain the adequacy of boarding personnel in boarding secondary schools in Cross River State.

Research questions

The following research questions were formulated to guide the study:

- 1. How adequate is the provision of teaching manpower resources in public and private boarding secondary schools in Cross River State?
- 2. How adequate is the provision of boarding personnel in public and private boarding secondary schools in Cross River State?

Methodology

The study adopted descriptive survey design. The study employed both primary and secondary data. Primary data was obtained by collecting data from boarding schools through checklist and observation schedules. Data was also obtained by collecting opinions from teachers and non-teachers in sampled boarding schools. The population for

the study comprised 833 teaching and non-teaching staff in forty two (42) boarding secondary schools in Cross River State, according to Cross River State Post Primary School Management Board as at 2021. The population of teaching staff is 367, while for non-teaching staff, it is 466; for both public and private boarding secondary schools in the State. The sample was six (6) public and twenty (20) private boarding secondary schools in Cross River.

The sampling techniques that were used in this study were purposive and proportionate stratified sampling techniques. It was stratified because the sample was drawn from the three senatorial districts that make up the state, as each district represented a stratum of education zone. The sample of this study comprised 266 respondents (117 teaching staff and 149 non-teaching staff) representing 32% of the entire population. A total of twenty–six (26) boarding schools were sampled. Out of this number, six (6) were drawn from public boarding secondary schools, five (5) were drawn from private boarding schools in Ogoja Education Zone, five (5) from private boarding schools in Ikom Education Zone and ten (10) were drawn from private boarding schools in Calabar Education Zone. This was considered adequate for the study. Since the public boarding schools were six across the three Senatorial Districts, all of them were sampled which represent 100%, while twenty (20) boarding secondary schools were sampled from the private boarding schools.

Three instruments used to elicit information were questionnaire, observation schedule/check list, and document analysis. The questionnaire for data collection is "Adequacy and Management of Resources in Boarding Secondary Schools Survey Questionnaire" (AMRPBSSQ). The questionnaire is made up of sections A and B. The section A focused on the demographic data of the respondents such as categories of staff, sex, job area(s) and location of boarding school. Section B had three sections. Section 1 elicited information on the level of personnel maintenance management divided into (a) teachers (b) boarding personnel. Section 2 elicited information on level of maintenance of physical facilities divided into teaching facilities and boarding facilities. Also, observation schedule of Adequacy of Resource in Boarding Secondary Schools (ARPBSS) in Cross River State was used to ascertain the true position of the boarding resources. The schedule focused on these demographic data of the respondents such as school location, students and on the capacity and condition of the facilities in the boarding schools. Also, the adequacy of supporting boarding resources/services is observed using the educational specification as benchmark for all the items under investigation. Section B observed manpower resources which considered total number available by male and female, and also the number of trained and qualified staff in the boarding schools. The document

analysis index was based on the population of boarding students, teaching and non-teaching staff.

In order to ensure validity, the instruments of the study were presented to one expert in Educational Management and two experts in Measurement and Evaluation, University of Calabar, for scrutiny. Their corrections and modifications were incorporated into the final draft before being administered to the respondents. The validators recommended that checklist does not require reliability, as it is primary observation. The reliability of the instrument was determined through a trial test which was carried out using Cronbach Alpha method. A sample of 50 respondents from public boarding secondary schools outside Cross River State was used. The instrument was administered once. The data obtained was analyzed using Cronbach alpha which produced coefficients ranging from 0.765 to .948; this determined the internal consistency of the research instrument.

The researchers visited all the various schools and sought for permission from the principals to administer the questionnaire as part of ethical consideration. Copies of validated questionnaire were administered by the researchers and trained research assistants for the study. During data collection, verbal consent was sought from the respondents, with clear assurances given on the confidentiality of their responses, including their voluntary participation in the study and freedom to withdraw from the study at any time. First of all, the research assistants were trained on how to use questionnaire to gather important information by carefully explaining the meaning of each item to the respondents. After collecting the questionnaire with the aid of research assistants, codes/scores were assigned to each item. For ease of data preparation, a coding schedule was prepared by developing a key for each of the constructs of the instrument in a tabular form. The items in the resource adequacy of the questionnaire were answered as follows: The benchmark as provided by educational specification from Cross River State Ministry of Education was used to compare with the existing situation to determine the extent of adequacy. The benchmark is provided by the National Policy on Education (Federal Republic of Nigeria, 2014), adopted by the Cross River State Directorate of Education Inspection and Policy Service (2019). Analysis of the generated data was done through the use of percentages, ratio and bar charts, which were used to answer the research questions as applicable.

Presentation of results

Research question one: How adequate is the provision of teaching manpower resources in public and private boarding secondary schools in Cross River State?

Table 1: Responses on the provision of teaching manpower resources in public boarding secondary schools in Cross River State

FGC		GSS		UBEC		BASC		FGC			HCI						
Cal		Okpoma		Itigidi		Obudu		Ikom		goli							
ST	T	R	ST	T	R	ST	T	R	ST	T	R	ST	T	R	ST	T	R
52		:26	730		73	39		8	52		:59	32		:49	111		98
1652	63	1:5	17	65	1:5	1239	26	1:2	13	23	1:5	1132	23	1:2	11	31	1:36
Ade	quate	;	Ade	quate	;	Inac	lequa	te	Inac	lequa	te	Inac	lequa	te	Inac	lequa	te

Decision rule: 1:35 (1 T to 35 ST) Adequate, 1:36 and above (1 T to 36 & above ST)

Inadequate

Legend: ST - Students, T-Teachers, R-Ratio

Table 1 indicates the provision of teaching manpower resource in sampled public boarding secondary schools. Federal Government Girls College Calabar has a ratio of one teacher to twenty six students (1:26), and GSS Okpoma 1:27; these are considered adequate in terms of staffing requirements. UBEC Itigidi, BASC Obudu, Federal Government College Ikom, and Holy Child Igoli had the following ratios 1:48, 1:59, 1:49 and 1:36 which represent inadequate manpower requirement in line with the approved educational specification.

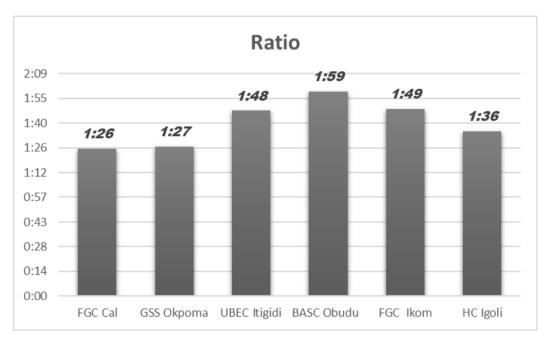


Figure 1: Teaching manpower provision in sampled schools in ratio

Table 2: Responses on the provision of teaching manpower resources in private boarding secondary schools in Cross River Central (Ikom) Education Zone

								`							
Regina Pacis		BNC			Kelv	Kelvin Nsor			Pythagoreans			MKID Osokom			
Obubra		Kwakwagom		Ikon	Ikom		Ikom								
ST	T	R	ST	T	R	ST	T	R	ST	T	R	ST	T	R	
22		9	30		_	68		∞	22		6	32		6	
1652	63	1.26	1730	65	1:27	1239	26	1:48	1352	23	1:59	1132	23	1:49	
A day	Adequate Adequate				Inad	Inadequate			Inadequate			Inadaguata			
Adequate			Adequate			mau	madequate			madequate			Inadequate		

Decision rule: 1:35 (1 T to 35 ST) Adequate, 1:36 and above (1 T to 36 & above ST)

Inadequate

Legend: ST - Students, T-Teachers, R-Ratio

Table 2 revealed that Regina Pacis secondary school, Obubra and BNC Kwakwagom, have teacher students ratio of 1:26 and 1:27 respectively which are adjudged adequate in terms of teaching manpower resource, while Kelvin Nsor, Ikom; Pythagoreans, Ikom; and MKID Osokom have teacher-student ratios of 1:48, 1:59 and 1:49 respectively which are considered inadequate.

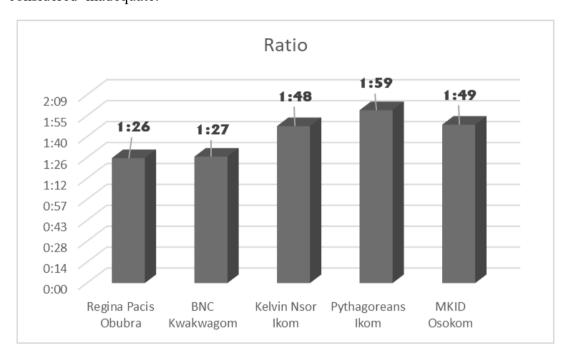


Figure 2: Teaching manpower resource in sampled private schools in Cross River Central Education Zone

Table 3: Responses on the provision of teaching manpower resources in private boarding secondary schools in Cross River North (Ogoja) Education zone

	UBE	C	P	OPE .	John	Roc	k		Ann	unciat	tion	Cor	ner	Stone
Okuku			Paul Yala			Foundation			Girls Ogoja			Coll		
						Obu	du					Bek	wera	
ST	T	R	ST	T	R	ST	T	R	ST	T	R	ST	T	R
1652	63	1.26	1730	65	1:27	1239	26	1:48	1352	23	1:59	1132	23	1:49
Adequate Adequate			guate		Inad	equate		Inadequate			Inadequate			

Decision rule: 1:35 (1 T to 35 ST) Adequate, 1:36 and above (1 T to 36 ST & above)

Inadequate

Legend: ST - Students, T-Teachers, R-Ratio

The finding on table 3 revealed that UBEC, Okuku and POPE John Paul, Yala have the teacher-students ratio of 1:26 and 1:27 respectively which is within the realm of adequacy. The Rock Foundation, Obudu; Annunciation Girls, Ogoja; and Corner Stone College, Bekwera have the following inappropriate ratios of 1.48, 1:59 and 1:49 respectively which indicate inadequate

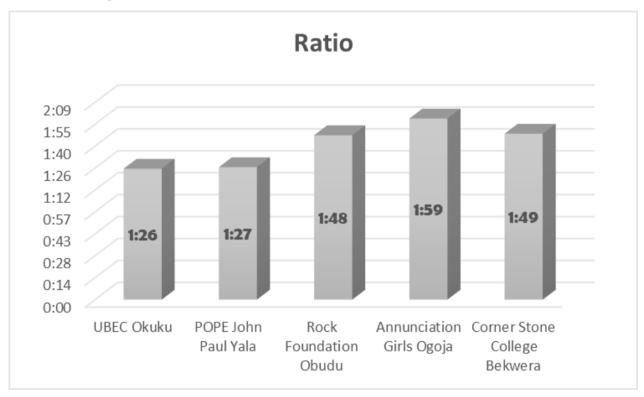


Figure 3: Ratio of teaching manpower resource of sampled schools in Cross River North Education Zone

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Table 4: Responses on the provision of teaching manpower resources in private boarding secondary schools in Cross River South (Calabar) Education zone

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HILCREAST CALABAR LORDS ACADEMY	MARY GOLD CALABAR SUREFOOT CALABAR	SECRED HEART HOPE WOLDELL	ST. PATRICK'S COLLEGE DEEPER LIFE	AUNTI AKIM SCH. EDGERLY MOMERIAL
S T R S T R	S T R S T R		S T R S T	R S T R S T R
T T	T T	T T	T T	T T
18.00 45 1.36 1.906 49	1,504 35 1.43 1,4500 30	1.48 1,353 35 1.38 1,888 41 1:46	1,966 45 1:43 1444 32	1:45 1304 30 1:43 1,252 32 1:40
Inadq Inadq	Inadq Inadq	Inadq Inadq	Inadq Inadq	Inadq Inadq

Decision rule: 1:35 (1 T to 35 STT) Adequate, 1:36 and above (1T to 36 & above S)

Inadequate

Legend: ST - Students, T-Teachers, R-Ratio; Inadq-Inadequate; Adq-Adequate

Table 4 indicates analysis of teacher – students ratio in Hilcrest, Calabar; Lourdes Academy, Calabar; Mary Gold, Calabar; Surefoot, Calabar; Sacred Heart, Calabar; St. Patrick's College, Calabar; Deeper Life, Akpabuyo; Aunti Akim School; and Edgerly Memorial Secondary School, Calabar with respective ratios of 1.36, 1.39, 1.43, 1.48, 1.46, 1.43, 1.45, 1.43 and 1.40 which represent inadequacy of teaching manpower.

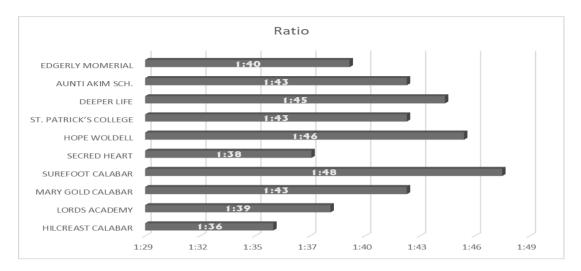


Figure 4: Ratio of teacher-students ratio of sampled schools in Cross River South (Calabar) Education Zone.

Research question two: How adequate is the provision of boarding personnel in public and private boarding secondary schools in Cross River State?

Table 5: Responses on adequate provision of boarding personnel in the public and private boarding secondary school in Cross River State

			Public S	Schools			Private	schools		
SN	Personnel	Required capacity	Existing capacity	Net Diff.	Remarks	Required capacity	Existing capacity	Net Diff.	Remarks	
1	Laboratory attendants	48	36	-12	Inadequate	160	20	-140	Inadequate	
2	Librarian	12	24	+12	adequate	40	20	-20	Inadequate	
3	Guidance counsellors	24	24	0	Adequate	80	60	-20	Inadequate	
4	Hostel Matron/patron	24	24	0	Adequate	80	40	-40	Inadequate	
5	Hostel Masters/ Mistresses	36	12	-24	Inadequate	120	60	-60	Inadequate	
6	Cooks	48	24	-24	Inadequate	160	160	0	Adequate	
7	Cleaners	30	18	-12	Inadequate	100	100	0	Adequate	
8	Security Guards	30	24	-6	Inadequate	100	100	0	Adequate	
9	Nurses in Health clinics	12	12	0	Adequate	40	120	+80	Adequate	
10	Doctors	12	0	-12	Inadequate	40	40	0	Adequate	
11	Water tanks	24	12	-12	Inadequate	80	80	0	Adequate	
12	Store keepers	24	24	0	Adequate	80	80	0	Adequate	

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Table 5 revealed that the required capacity for the six (6) public boarding schools are the following: laboratory attendants 48, librarians 12, Guidance counsellors 24, hostel matrons/patrons 24, hostel masters/mistresses 36, cooks 48, cleaners 30, security guards 30, nurses in health clinics 12, doctors 12, water tanks 24 and store keepers 24 while the respective existing capacity for the six (6) public boarding schools were 36, 24, 24, 24, 12, 24, 18, 24, 12, 0, 12 and 24. The required capacity for the twenty (20) private boarding schools were as follows: laboratory attendants 160, librarians 40, guidance counsellors 80, hostel matrons/patrons 80, hostel masters/mistresses 120, cooks 160, cleaners 100, security guards 100, nurses in health clinics 40, doctors 40, water tanks 80 and store keepers 80 and the respective existing capacity were 20, 20, 60, 40, 60, 160, 100, 100, 120, 40, 80 and 80.

The table further revealed that public boarding schools had inadequate number of laboratory attendants, hostel masters/mistresses, cooks, cleaners, security guards, doctors and water tanks but adequate number of nurses and store keepers. It was also revealed that private boarding schools equally had inadequate number of laboratory attendants, librarians, hostel masters/mistresses, hostel matrons/patrons, while the result further indicates adequacy of nurses in health clinics and doctors, cooks, security guard, water tanks and store keepers for private boarding secondary schools.

Discussion of the findings

The finding in respect of adequacy of teaching manpower in boarding secondary schools in Cross River State shows that provision of teaching manpower resources in public and private boarding secondary schools are inadequate. Given the state of inadequacy of this resources, Mukali et al. (2017) argued that adequacy of teaching manpower resources is a condition necessary for effective boarding school system on one hand, and on the other, the overall management of teaching manpower resources deserves another level of consideration due to its perceived impact on the teaching learning environment of boarding schools. Ngeno and Ayodo (2012) reported that there is no significant difference between public and private boarding schools on the nature of teaching manpower resources and even the difference that existed is to a small degree and therefore very insignificant. This position is in line with the views earlier expressed by Undie (2022) when he opined that boarding schools, whether private and public, share the same challenges, even when the private schools attempt to go extra mile to impress the parents, the question is how sustainable would the posture be in the long run. This has remained a very frontal challenge in development planning (Enaowho, 1999).

In line with Musyoka and Maithya (2019) work on influence of teacher adequacy on students' performance in public secondary schools in Kenya, it was found that teachers' inadequacy was occasioned by the fact that there were no immediate replacements made once teachers had been transferred from a school. Okoli and Abraham (2019) examined the staff personnel and school-community relations management practices of educational administrators for secondary school environmental safety in Rivers State, Nigeria. The study agreed that the personnel and school-community relations management practices of educational administrators for secondary school environmental safety include ensuring that efficient welfare services are put in place to keep school members motivated, and the use of social networks for encouraging interpersonal relationship among stakeholders to ensure environmental safety in schools.

Douglas (2006) conducted a comprehensive study on an assessment of the quality and educational adequacy of educational facilities and their perceived impact on the learning environment. This was a quantitative study that investigated the adequacy and quality of middle school facilities in Humble Independent School District (ISD) middle schools as reported by the primary users of these facilities, the teachers and administrators. He reported that the adequacy and quality of the teaching facilities influence teaching and learning processes. He suggested that in line with the secondary education board specification, if the government could provide adequate teaching facilities, it will boost the boarding school system.

In the same vein, Takwate (2018) investigated school facilities allocation, availability and maintenance as correlate of academic performance of senior secondary school students in Adamawa state, Nigeria. The adequacy of all boarding facilities as mentioned would have no doubt determined the productivity of the boarding system in the state. In line with this, it was revealed that government should adequately equip all libraries, science and computer laboratories in the state using appropriate procedures for facilities planning and allocation and that school principals should frequently carry out comprehensive assessment of facilities in their schools to determine areas of need, and the Ministry of Education should promptly provide funds for the maintenance of school facilities as they receive report from schools (Akinzito, 2003).

Conclusion

Based on the findings of the study, it is concluded that adequacy of manpower resources and other boarding facilities geared towards the promotion of effective boarding school system is a function of pecuniary value at the disposal of management and how prudent

the management is, in deploying resources. This implies the need for economic rationalization in the procurement process, utilization and distribution of same resources most advantageously, in terms of resource use. To set aside the economic thinking in this regard, is to invite colossal failure to the system.

Recommendations

The following recommendations were made based on the findings of the study:

- 1. Setting up boarding schools should be contingent on fulfilling all specifications for takeoff as provided by the result of education diagnosis and as specified in the National Policy on Education.
- 2. Up scaling of the teaching manpower in the public and private boarding schools' personnel, either through fresh employment or redeployment from other ministries in the state, is strongly recommended. This can be done by the state government through the State Ministry of Education and Cross River State Directorate for Education Inspection and Policy Services to ensure compliance.
- 3. Proprietors should source and provide adequate funding for boarding secondary schools to reduce the decay.
- 4. The enrolment in boarding secondary schools should be regulated to allow its management cope with its expansion.
- 5. Proprietors of boarding secondary schools should be guided by educational specifications in their operations.

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