

Provision and Maintenance of Physical Resources for Effective Management of Universities in South- East Zone of Nigeria

Ezeugbor Carol O. and Okorji Perpetua N.

Department of Educational Management & Policy
Nnamdi Azikiwe University, Awka. Anambra State, Nigeria

Corresponding Author: Ezeugbor Carol O.

Abstract

The ever increasing demand for University education in Nigeria has overwhelmingly impacted on the existing limited physical resources. Consequently, university managements have continuously grappled with the perennial shortfall in the provision and maintenance of physical resources for effective management of university education. The study investigated the provision and maintenance of physical resources for effective management of universities in South-East Zone of Nigeria. The study was a descriptive survey research carried out in the federal and state Universities in the South-East zone of Nigeria. The target population comprised all the 7 categories of university management staff with a total population of 72 from four federal and five state universities in the zone. Stratified random sampling technique based on location was used to select two federal and two state universities for the study. The study was guided by four research questions. Data was collected through questionnaire prepared by the researchers and administered with the help of four research assistants. It was validated by three experts, the reliability of the instrument was done and a reliability coefficient of 0.83 was obtained. Analysis was done using mean with an acceptance level of 2.50. The findings of the study revealed among others that the extent of provision of physical resources in the universities was low and these resources were poorly maintained. Based on these findings, it was recommended that both the governments and university managements should give adequate financial attention to resource provision and maintenance if effective management and achievement of university goals would be realized. Skilled personnel should be employed to man relevant areas of maintenance. The study would be of great significance to the National Universities Commission, University management, staff and students who would be sensitized on the urgent need for making adequate provision and prompt maintenance of physical resources for a healthy and effective teaching and learning.

Keywords: provision, maintenance, physical resources, effective management, universities

INTRODUCTION

Education is indeed becoming a very big business in Nigeria and this business aspect of providing adequate resources, particularly buildings, should now become a serious element for effective management of university education, (Ukeje, Akabuogu and Ndu, 1992). Resources are the vital organs of effective and efficient functional education. Hence the success of every educational system depends on the quality and quantity of its factors of production – human and physical resources. To fully actualize their objectives, universities need an environment where staff and students will live happily in performing their onerous tasks diligently. Akabue in Abdulkareem (www.unilorin.edu.ng) agreed no less with this when he noted that good school environment would foster desirable behaviour, creativity, harmonious relationship and problem-solving skills among lecturers and students. In the educational institutions, resources constitute essential inputs which could generate favourable teaching and learning environment, facilitate interaction and enhance achievement of educational objectives. In addition, school curriculum would be meaningful if

required facilities are provided in adequate quality at appropriate time, Abdulkareem reiterated.

Besides, Adetoro (2008) noted that the ever growing demand for university education in Nigeria has greatly impacted on the existing limited resources. He clearly stated that the available physical resources do not match the population of both staff and students. The National Scholar (January, 2013, P45-46) highlighted the total population of teaching staff in Nigerian universities as 37,504, non-teaching staff as 77,511 and the entire students' population as 1,525,913. This huge population requires that physical resources such as staff offices, lecture theatres, class room blocks and hostel accommodation should be made available in the same proportion if university managements are expected to achieve their goals.

A review of previous educational programmes in this country as noted by Agabi (2010) shows that resource inadequacy has long been a central factor in chronic education shortcomings. He contends that resources provided for the execution of educational

programmes are inadequate and irregular. This inadequacy no doubt is magnified by the meager budgetary allocations to education till date. Amidst this intense scarcity of resources, both the federal and state governments of Nigeria persistently expect university education through its managements to make optimum contribution to national development, (FRN, 2004).

To actualize this laudable policy dream requires that adequate provision be made of all the needed physical resources for effective teaching and learning. Nonetheless, the role of these physical resources for effective university management goes beyond their mere provision. They can only be optimally and efficient when they are adequately utilized and maintained. It is on this instance that Agabi (2010) argued that the meager physical resources provided are not only over utilized, they are also poorly maintained.

Given this situation and believing that Nigerian universities need to be turned around to meet the challenges of national development and international competitiveness, the federal government, set up the Committee on Needs Assessment of Nigerian Universities (CNANU). The needs assessment exercise involves an inventory of all physical facilities for teaching and learning. (The National Scholar, 2013). It was the belief of the committee that the Universities in Nigeria are not well equipped and not properly managed to produce the right caliber of graduates (as well as quality research outputs) that will drive the country's development. The committee further observed that municipal services that require cheap and routine maintenance schedules are generally ignored until they have completely failed or collapsed. This situation may likely not augur well for the effective management of universities in the areas of teaching, learning, research and community development. Therefore the concern of this study is on the provision and maintenance of physical resources for effective management of universities in Nigeria.

CONCEPTUAL FRAMEWORK

As defined by Adeogun in Adetoro (2008), 'resources' are all the things that are used directly and indirectly for the purpose of supporting, facilitating, influencing or encouraging transmission or acquisition of knowledge, competence, skills and know-how. Physical resources to Uchendu, Ekanem & Jonah (2013) are the movable and immovable properties, physical structures and assets belonging or allocating to an educational institution to enhance teaching-learning process and educational services. Such physical resources are buildings, lecture theatres, classrooms, laboratories, libraries and hostels. Others include administrative staff offices, technical equipment, workshops, and gymnasias.

Some others that should not be left out are reprographic equipment, machines, vehicles, ICT infrastructure and so on.

Considering the International best Practice and Nigeria's Minimum Standard, Enaohwo (2006) lamented that one of the major challenges to growth and development in Nigeria educational system is the perennial shortfall in the provision of essential resources, either in form of inadequate or unqualified staff or sheer lack of physical resources to service the system. Classroom lecture theatres sometimes were overcrowded with non-functional facilities and poor furnishing, dilapidated structures with poor ventilation. The staff offices are inadequate in number and space. Existing equipment are inadequate, obsolete or dysfunctional. Almost all the laboratories lack basic equipment, basic consumables (chemical and reagents) and water supply. The libraries (conventional and e-libraries) are poorly furnished and mostly inadequate in terms of space and number, (The National Scholar, 2013, and Agbo, 2013).

It is at this instance that a need may arise for university management to adopt a proper maintenance culture as a fundamental way of ensuring utility of available resources. Ukeje, Akabuogu and Ndu (1992) defined resource maintenance as those activities that are related to keeping the building, equipment and grounds at their original or best conditions of completeness and efficiency either through repairs or replacement. Maintenance culture of any university speaks much about the academic and administrative performance going on in the institution. Uchendu, Ekanem and Jonah (2013) pointed out that the current economic recession being experienced world over and its attendant dearth of resource provision has made it absolutely necessary that the gospel of maintenance culture be preached extensively at all levels of Nigerian educational system. Besides, maintenance culture goes with the saying that "a stitch in time saves nine". This is because maintenance ensures durability and saves the cost of replacement that may arise within a short period of provision. Enaohwo (1983) reasoned in this direction when he stated that maintenance enables the university management to pay less now, instead of waiting to pay more at a delayed point in time in the future.

The need for the available physical resources to be adequately maintained prompted Adeboye in Abulkareem (www.unilorin.ng) to highlighting four maintenance services. These are; preventive, corrective, breakdown and shutdown. Preventive maintenance involves regular checking and rechecking of the available resources and taking necessary measures to prevent malfunctioning or non-functioning of a particular resource. It is as well

cheaper and proactive in nature. Corrective maintenance involves reactivation or replacement of resources in order to normalize their performances. When a resource or equipment breaks down completely, a major repair or replacement may be needed. There may be a time when the unit concerned may need to close down in order to allow a major repair to be carried out.

Effective management entails planning, organizing, coordinating and controlling for the provision and maintenance of all the universities' physical resources. Effectiveness is an organization's ability to secure an advantageous bargaining position in its environment and to capitalize on that position to acquire, judiciously distribute and monitor utilization of scarce and valued resources (Hoy and Miskel in Agabi, 2010). In other words, universities are expected to adequately acquire, rationally distribute, efficiently utilize and regularly maintain scarce resources in implementing its programmes. It should focus on the educational needs, expectations, values and rights within the system and the use of appropriate education resource management strategies. It is on this vein that Tawga in Uchendu, Ekanem and Jonah (2013) has it that the key to protecting the huge investment of billions of naira pumped to the provision of educational resources is proper planning, coordinating and controlling of these resources in ensuring adequate distribution and maintenance. There should be schedules of work showing what is to be done, by whom, at what time and under whose supervision.

However, studies have shown that resource provision and maintenance in universities are challenged by a number of factors (Ukeje Akabuogu and Ndu, 1992, Adetoro, 2008, and Uchendu, Ekanem & Jonah, 2013). Such factors they succinctly put include dearth of funds, shortage of skilled and quality personnel and the fact that resource provision is predetermined by political choice of both the ruling governments and the institutional leadership.

Since education at all levels is an expensive social service and in realization of the current economic conditions, the government has issued directives to the universities and other tertiary institutions to explore other sources of funding internally to help finance basic university needs and programmes (FRN 2004, Anuna and Ukpabi, 2007). On the apex of these needs are in the adequate provision and maintenance of human and physical resources to ensure academic and administrative excellence. Given the situation where the classrooms and lecture theatres are over crowded with non-functional facilities, students crammed into room, designed for far less the number, dilapidated structures amongst others, it becomes a dilemma whether physical resources are adequately provided and maintained. Hence, the focus of this

study is to investigate the provision and maintenance of physical resources for the effective management of universities in Nigeria, with particular reference to the South-East zone.

STATEMENT OF THE PROBLEM

For a functional and sustainable education to be attained, resources must be adequately provided and maintained. Nonetheless, scholars have observed that the available physical resources in the universities do not match the overwhelming population of staff and students. Staff offices are crowded, lacking modern gadgets with irregular power supply. The lecture rooms are overcrowded without adequate and functional facilities, most buildings are dilapidated and in a state of disrepair. Most often, broken down vehicles, machines, and equipments are not serviced but abandoned and left to litter the campus. There is however paucity of work on the provision and maintenance of physical resources in the universities in the South-East Zone of Nigeria, hence the motivation for the study.

RESEARCH QUESTIONS

The following three research questions guided the study:

1. To what extent are physical resources provided for effective management of universities in South-East zone of Nigeria?
2. How are physical resources maintained for effective management of universities in South-East zone, of Nigeria ?
3. What are the challenges encountered in the provision and maintenance of physical resources for effective management of universities in South-East zone of Nigeria.

METHOD

The study was a descriptive survey research which was carried out in federal and state universities in the South-East zone of Nigeria. The zone is made up of 5 states; Abia, Anambra, Ebonyi, Enugu, and Imo, with 5 federal and 4 state universities. The target population consisted of all the 7 categories of university management staff with a total population of 145 from the 9 federal and state universities. Through simple random sampling technique 2 federal and 2 state universities were selected for the study. The 7 categories of respondents are: 4 vice-chancellors, 4 registrars, 4 bursars, 4 chief librarians, 4 directors of physical planning, 4 directors of works and service department and 47 Deans of Faculties. All together they were 71 respondents for the study.

The 7 categories of subjects were identified as a useful and relevant source of data for this study because they form the core of the university body on which the responsibility of providing and maintaining physical resources lie. Other categories of staff were excluded because they were considered not well

informed on the subject to provide relevant and useful data that would be used in this study.

INSTRUMENT

The instrument used for data collection was questionnaire titled, Questionnaire for the provision and maintenance of Physical Resources (QPMPP). The QPMPP was made up of three sections. Each section was expected to elicit responses addressed on the three research questions. The response format of QPMPP for research question I was on 4-point scale of Very High Extent (VHE), High Extent (HE), Low Extent (LE) and Very Low Extent (VLE). For research questions 2 and 3, the response format was strongly Agree (SA), Agree (A), Disagree (DA), and Strongly Disagreed (SD).

The instrument was validated by three experts in Educational Management and Policy and

measurement and Evaluation from Nnamdi Azikiwe University, Awka. With a score from test, retest done with six management staff of the same categories of staff from University of Port Harcourt in Rivers State a calculated reliability coefficient of 0.83 was obtained using Person Product Moment Correlation Coefficient.

The QPMPP was administered to the respondents by the researcher with the help of four research assistants who were well briefed on what to do. Out of the 71 copies of questionnaire distributed, 68 copies were returned duly filled, representing 97% return rate. Data analysis was done using mean. For the point of determination, any item with a mean of 2.50 and above was considered positive and below 2.50 was considered negative responses.

RESULTS

Table 1: mean ratings of the respondents on the extent of provision of physical resources for effective management of Nigerian universities.

S/N	Items	Federal university		State university	
	Describe the level of provision of the following in your university	×	Decision	X	Decision
1	Lecture theatre	2.35	Low	2.28	low
2	Classroom blocks	2.24	Low	2.31	Low
3	Auditoria	2.24	Low	2.24	Low
4	Laboratories	2.55	High	2.42	low
5	Libraries	2.44	Low	2.40	Low
6	Staff offices	1.89	V.low	1.91	V. low
7	Hostel accommodation	1.50	V.low	1.70	V. low
8	Studios	2.10	Low	2.24	Low
9	Gymnasia	2.25	Low	2.21	Low
10	Workshops	2.41	Low	2.40	Low
11	Information technology infrastructure	2.45	Low	2.40	Low
12	Generating sets as back up for power failure	2.65	High	2.51	High
13	Adequate water supply	2.43	Low	2.44	Low
14	Vehicles and cars	2.44	Low	2.31	Low
15	Laboratory equipment	2.40	Low	2.35	Low
16	Library facilities	2.55	High	2.45	Low

Table 1 indicates that 14 out of 16 items have responses below the cut-off mean of 2.50 in both federal and state universities, showing that they are the physical resources that are not provided for effective management of universities in the South-East Zone of Nigeria. However, items 12 and 16 recorded a mean score above the cut-off mean of 2.50, indicating that they are the only 2 items provided for effective management of universities. It therefore follows that the extent of provision of physical resources is quite low for effective management of universities.

Table 2 shows that 3 out of the 9 items have responses above 2.50, indicating that they are the ways physical resources are maintained in federal

universities. The rest of the 6 items recorded a mean score below 2.50 for both federal and state universities. It thus follows that physical resources are poorly maintained in both federal and state universities.

Table 3 revealed that all the items except item no 30 recorded responses that are well above the cut-off mean of 2.50, indicating that respondents from both federal and state universities agreed that 6 out of the 7 items are challenges hindering the provision and maintenance of physical resources for effective university management. Item no 30 shows that awarding contracts by the management without proper supervision is not a challenge because of the disagreement recorded by the respondents.

Table 2: Mean ratings of respondents on the maintenance of physical resources

S/N	Items	Federal		State	
	The following are ways of maintaining physical resources in my university	×	Decision	X	Decision
17	Renovation of old buildings	2.40	DA	2.30	DA
18	Repairs of broken machines and vehicles	2.55	A	2.41	DA
19	Regular servicing of machines and vehicles	2.50	A	2.32	DA
20	Taking measures to prevent malfunctioning	2.33	DA	2.34	DA
21	Reactivation of facilities to normalize their performance	2.38	DA	2.30	DA
22	Closing down a unit to carry out a major repair	2.41	DA	2.24	DA
23	Employing relevant skilled staff to man the maintenance of equipment for better performance	2.45	DA	2.00	DA
24	Contracting the maintenance of resources outside the university for better performance	2.51	A	2.34	DA
25	Having an integrated water supply and distribution network to assist in resource maintenance	2.44	DA	2.40	DA

Table 3: Mean ratings of respondents from federal and state universities on the challenges that hinder the provision and maintenance of physical resources.

S/N	Items	Federal		State	
		×	Decision	X	Decision
	Challenges hindering the provision and maintenance of physical resources are:				
26	Dearth of fund for adequate provision and maintenance of the resources	3.50	Agree	3.61	Agree
27	Shortage of skilled personnel to man relevant areas of maintenance	3.00	Agree	3.40	Agree
28	Politicization of physical resource provision based on university type by the ruling government.	2.80	Agree	3.40	Agree
29	Undue interference of the university management on the activities of the unit responsible for maintenance	2.56	Agree	3.10	Agree
30	Awarding contracts by the management without proper supervision	2.40	DA	2.44	DA
31	Vandalization of machines and vehicles	3.48	Agree	3.50	Agree
32	Theft of vital equipments for maintenance	3.50	Agree	3.51	Agree

DISCUSSION

The results in table 1 indicated that the mean responses of the respondents from both federal and state universities on the extent of the provision of physical resources were quite low for an effective management of universities in the South-East zone of Nigeria. The finding complements that of Agabi (2010) who noted that resources provided for the execution of educational programmes are inadequate and irregular. It was on this platform that Enaohwo (2006), the National scholar, (2013) succinctly lamented that one of the major problems facing Nigerian universities and indeed all educational system is the acute shortfall in the provision of essential physical resources for teaching, learning and research. It is however important to note here that physical resources are imperative because of their role in the academic and administrative achievement of educational objectives and therefore require urgent attention if the Nigerian's university education could meet the international best practices. The efficiency of management could be hindered as a result of lack of adequate physical resources.

In table 2, the findings revealed that physical resources are maintained in the federal universities in a minimal area of repairs of broken machines and equipment, regular servicing of machines and vehicles and contracting the maintenance of resources outside the university. However, the results indicated

that the level at which these are maintained is low looking at the mean scores of 2.55, 2.50 and 2.51 respectively. This revealed a poor maintenance culture in these areas in the federal university. On the whole, out of the 9 items, the respondents disagreed on 6 items as ways of maintaining physical resources in federal universities while the respondents in state universities disagreed with the entire 9 items. This goes without mincing words that resources are poorly maintained in both federal and state universities. This is in line with the report of the Committee on Needs Assessment of Nigerian Universities (The National Scholar, 2013), when the committee observed that very poor maintenance culture is costing Nigerian universities a lot of resources. Municipal services that require cheap and routine maintenance schedules are generally ignored until they have completely broken down. The committee further observed that at times, there is a deliberate neglect until a minor repair degenerates into a major contract. This stand is not a surprise on the grounds that the researcher being a lecturer in one of the universities has observed that most of the physical resources are not properly cared for, broken down vehicles are found parked while students shuttle for transport to school, and most old buildings are standing out there crying for renovation. In view of these findings, both the governments and university leadership should understand that cultivating the culture of maintenance of scarce physical resources, gives the institutions the needed

aesthetics and solid background to effectively manage the universities in order to achieve their goals. Resources which are well managed are likely to be durable.

Findings in table 3 revealed that the respondents of both federal and state universities are of the opinion that the items are the challenges hindering the provision and maintenance of physical resources for effective management of Nigerian universities. Uchendu, Ekanem & Jonah (2013) were in agreement when they opined that apart from financial constraints in the maintenance of educational resources, lack of skilled and qualified personnel for the use and maintenance of those resources stirs the universities at the face. It is therefore imperative for universities to take the government's directives on alternative sources of generating fund very seriously. This, if properly taken care of urgently will so likely augment the government's subvention in providing and ensuring adequate maintenance of these facilities for better and healthier teaching and learning environment in universities.

CONCLUSION

This study investigated the extent of provision and maintenance of physical resources for effective management of universities in the South-East zone of Nigeria. The study has revealed that the fact that Nigerian universities are not well-equipped and not properly managed to produce the right caliber of graduates and compete with the international best practices hinges on inadequate provision and poor maintenance of physical resources for effective teaching and learning processes. Added to this, are the overwhelming challenges confronting the provision and maintenance of these physical resources. These apparently have hindered the effective management of universities in south-East zone of Nigeria.

RECOMMENDATION

1. Funds should be adequately provided by both the federal and state governments through their relevant agencies to procure and adequately maintain all the physical resources in the universities.
2. The university managements on their own part should boost their sources through internally generation of funds, including Public Private Partnership (PPP) to assist them in augmenting governments' subvention for the provision and maintenance of physical resources.
3. Universities should employ adequate skilled personnel to man relevant areas of maintenance. Those already in the job should be retrained to match the world changes in technology.
4. To minimize theft and vandalization of equipment, the university management should implore adequate and modern supervisory strategies to

ensure safe keeping of the resources. As much as possible the resources should be protected from fire, theft and any other form of disasters.

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