Availability of Material Resources for Educational Delivery in Captain Elechi Amadi Polytechnics Port Harcourt, Rivers State

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ABSTRACT
This study investigated the availability of material resources for educational delivery in Elechi Amadi Polytechnics Port Harcourt. The study is a descriptive survey research design. The population consisted of 3,857 statistics of students in HND and OND session 2018/2019 and 609 academic/administrative staff total 4,466. A stratified random sampling technique (balloting) was adopted in selecting a sample size of 335 (7.5% of the population size) consisting of 200 students and 135. A 9-item self-structured questionnaire titled “Resources Availability Education Delivery Questionnaire (RAEDQ)” on a modified scale rating was used. The reliability of the instrument was determined via a test re-test method and a Pearson Product Moment Correlation Coefficient of 0.78 was obtained. The mean, standard deviation and rank order statistics were used to answer the research questions while the z-test were used to test the hypotheses at 0.05 level of significance. Findings showed that the availability of instructional facilities enhanced teaching and learning; inadequate instructional facilities affect the strategic planning and that instructional facility facilitates other forms of resources for effective educational delivery. Whereas, recreational facilities such as spaces, lawns, fields, pitches and equipment for sports, games are lacking to promote fitness, leisure time, etc, for students and lecturers. It was also recommended that Rivers State Government should make adequate provision for instructional and recreational resources for educational delivery such as making provision for new site; to contain adequate instructional facilities such as classrooms, adequate classroom seats, laboratories, libraries, experimental equipment, chalkboard, audio-visual learning equipment, zoological gardens and experimental agricultural farms; also, recreational facilities such as spaces, lawns, fields, pitches and equipment for sports, games and general recreation in Elechi Amadi Polytechnic, Port Harcourt.

Keywords: Resources Availability, Educational Delivery, Physical or Material Resource, Instructional and Recreational Resource.

INTRODUCTION
Education is a means of transmitting culture from one generation to another and the process of bringing about a relatively permanent change in human behaviour. As the oldest industry, it is the main instrument used by society to preserve, maintain and upgrade its social equilibrium. Salami (2012) stated that in all human societies, education is meant to pass on to new generations existing knowledge of their physical environment, to introduce them to the organization of society, give them skills for performing their daily jobs, enjoying their leisure, and inculcate sound morals in students for their own benefit and that of the society. In other words, education is a process by which the society assists younger generations in understanding the heritage of their past, participating productively in the society of the present and contributing to the future (Aigbomian, 2012). In these functions, education draws inspiration and nourishment from society, but in turn, contributes to the growth, renewal and development of that society.

This study concentrates on this study investigated the availability of material/physical resources for
Educational delivery in Elechi Amadi Polytechnics, Rivers State. Material resources are pivotal to the achievement of the aim and objectives of the school. Consequently, Merton (2012) revealed that material resources operationally can be grouped into; instructional resources, recreational resources, residential resources, hospital resources and open space which can gainfully be employed in the process of providing education so as to produce quality delivery needed for national development. The management of educational resources is very important because of its roles in the attainment of educational objectives.

Amadi (2004) constructively and prudently examined the horizon of educational enterprises that it has to do with the gradual growth of human intellect, technical training, character and effective citizenship with the aid of the various resources. For the sake of improvement in education delivery, applying the provision and management of the education system became necessary so as to attain a standard in the education sector. The different education goals will not be achieved if teaching and learning is not advanced by school administration through the implementation of performance-based-management (Anyadike, 2014).

Recently, there was a change in the pattern of school management which includes assessing lecturers’ attitudes and teaching outcomes so as to achieve education corresponding with the national goals. There have been changes in the Nigerian education system since 1999, these changes need the managers of schools to study, implement, assess and develop strategies to manage these changes, teaching and learning outcomes when only facilities are available (Merton, 2012).

Thus, effective management of these resources is very important in the achievement of education delivery. In the context of this study, Aisyai (2014) on resources means the totality of everything that the institution needs to achieve her goals and objectives. Educational resources are those things that can be used to achieve educational objectives. They can be tangible and intangible resources, they can be categorized into finance, physical, material, human, information, knowledge, time and technological resources in a broad term and specifically for the study variables (instructional and recreational resources) needed for effective operation of higher education (Dike, 2017). They are educational inputs that enhance both academic and administrative work in the institutions. Resources availability and management therefore, means the systematic coordination and integration of available resources for the achievement of the set goals of tertiary education (Aisyai, 2014). It involves a number of related activities such as planning, leading, coordinating, controlling, supervising or monitoring and directing in order to achieve efficient use of available resources for maximum output. Nigeria depends on her tertiary institutions for the development of high level manpower within the context of the needs of the economy. The Federal Republic of Nigeria (2014) articulated the goals of tertiary education to include among others

a. Contributing to national development through high level relevant manpower training.

b. Developing and inculcating proper values for the survival of the individual and the society.

c. Developing the intellectual capability of individual to understand and appreciate their local and external environments.

d. Acquiring both physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society.

Polytechnic institutions are expected to pursue these goals through teaching, research and dissemination of existing and new information, service to the community and to serve as a storehouse of knowledge. Kufi (2013) stated that the extent to which the institutions can achieve these laudable and well-articulated objectives depend greatly on the effectiveness in managing the available scarce resources by the institutional administrators. The success or failure of an educational system depends on the quality, quantity and effective management of the resources available to it. Availability and good management of educational resources in Elechi Amadi Polytechnics Port Harcourt needs effective and dynamic leadership.

The central theme of educational institutional management is the harnessing of instructional and recreational resources with the aim of achieving desired goals. This calls for creativity, ingenuity, resourcefulness and prudence on the part of the institutional chief executive for quality education delivery. Kufi (2013) further reaffirmed that the school administrator must have the requisite skills or ability to intelligently manage the available resources for the successful accomplishment of the institutional goals and objectives. Resource management therefore, means the systematic coordination and integration of educational available resources (inputs) for the achievement of set goals of tertiary
education. It involves a number of related activities such as planning, leading, coordinating, controlling, supervising or monitoring and directing in order to achieve efficient use of available resources for maximum output.

Abraham (2013) stressed that the educational resources are all the things that are used directly and indirectly for the purpose of supporting, facilitating, influencing or encouraging the transmission or acquisition of knowledge, skills, competence and know-how. They are essential components of educational system that have to be provided, effectively managed and utilized for the achievement of educational goals and objectives. They are necessary for the survival and continuity of the school system which result in the successful teaching-learning outcomes.

Education provide students with the needed knowledge, skills, attitudes and creativity for problem solving both locally and globally and to actively contribute to the societies’ sustainable and democratic development; hence, changes in the education sector were made (UNESCO, 2012). Noble professionals could be creative, resourceful and enterprising, result-oriented if they are contented and satisfied with the environment in which they work. The environment in this regard connotes the availability of educational resources.

However, educational delivery is universally accepted as a means for a country’s economic, social and political development. In Rivers State, education is seen as an instrument par excellence for development; this means that education is the key for the nation’s economic transformation and the means for the country to meet up with global competitiveness. The success of Elechi Amadi Polytechnic Port Harcourt depends greatly on the effective and efficient management of resources available by institutional administrators (Amadi, 2004).

In addition to the already existing educational curricula of various management sciences of the tertiary institutions, curriculum planners in management education should earmark academic programmes that will touch the lives of individuals who require management education to improve their skills, engender high standard of living and consequent economic development. Education in Elechi Amadi Polytechnics Port Harcourt has remained elusive and devoid of functionality due to major defects (instructional and recreational resources) in the institutions.

**Material Resources**

These are movable and immovable property, physical structures and assets belonging to an educational institution to use primarily for educational purpose. Madumere-Obike, Ukala and Nwabueze (2015) majorly described it as instructional, recreational, residential, hospital and open space, categorizing these as non-consumable materials in the school for the promotion of teaching-learning process. They are essential materials that have to be provided and properly managed for the successful execution of the school programmes. Resources in this category include classroom blocks, libraries, administrative offices, equipment, photocopying and duplicating machines, school vehicles, computer sets, generating plant, laboratories and hostels.

Harbison cited in Abraham (2013) further included the classrooms, classroom seats, laboratories, libraries, experimental equipment, chalkboard, audio-visual learning equipment, zoological gardens and experimental agricultural farms. These facilities bear directly on the teaching–learning process and are therefore considered to be prime priority among other school facilities.

These can be described as useable and consumable resources and include things such as furniture, instructional materials, chalk, chalkboard, stationeries, lecture notes, lecture time-table, textbooks, electricity, pen, and others (Facilities Management International, 2013).

1. **Instructional Facilities**

Agabi (2004) discoursed that these are facilities specifically meant for directing teaching and learning in the classroom. It includes classrooms, classroom seats, laboratories, libraries, experimental equipment, chalkboard, audio-visual learning equipment, zoological gardens and experimental agricultural farms. These facilities bear directly on the teaching–learning process and are therefore considered to prime priority among other school facilities (Facilities Management International, 2013).

The good of institutional facilities (IF) in learning environments and technologies is to provide faculties and students with a variety of learning environments designed to meet their needs. Instructional facilities need these by working closely with users in designing and supporting all types of instructional facilities (classrooms, conference rooms, distance learning etc) as well as the technology found in them. In 2013, Facilities Management International viewed instructional facilities
as valuable partner in supporting the university’s pursuit towards excellence in learning and research, increasing information literacy amongst the university community, academic integrity in scholarly publication and at the same time promotes the use of electronic resources subscribed by the library. From an environmental perspective, the concern for health and well being of students particularly young students are increasing interest in the improved performance and fabric of school structures. Just as important, Federal Ministry of Education (2005) reaffirmed that instructional facilities provide assistance to students to be able to utilize the technology appropriately to enhance teaching–learning in order to be globally relevant, enlightened and self-reliance in the competitive and turbulence economy of ours. With respect to the above, Akpan (2011) and UNESCO (2014) further outlined some instructional facilities and services as follows:

- **a.** Technology classroom
- **b.** Computer classroom, for example, multi-media computer centre, multi-media classroom equipped with video projector, reading room, collection of books
- **c.** Computer laboratories libraries and experimental equipment
- **d.** Instructional facilities design services eg, design classrooms, training rooms, distance learning, computer, labs etc.
- **e.** Classroom support offices.

### 2. Recreational Facilities

Recreational facilities are spaces, lawns, fields, pitches and equipment for sports, games and general recreation. Games and sports apart from developing specific skills also develop a good learning socio-psychological as well as mental environment through relaxation. The importance and levels of resources committed to the development and provision of recreation facilities must not exceed their values in facilitating the overall goal of the educational institution (Agabi, 2004).

Recreational resources play a far more importance role in the recruitment and retention of students. Lawanson and Gede (2011) emphasized on the health and wellness becomes part of the decision package when students and professional staff are recruited by the institution. The funding for this planning effort would be provided by the sport and recreation department through the strategic planning body and its preparation must be guided by the principles, policies, and guidelines in the school master plan (FRN, 2014).

There are steps or processes for preparing a comprehensive recreational facilities plan that will meet the needs of Elechi Amadi Polytechnics Port Harcourt. The process will work whether the planning model is a school master plan organized around precincts or supported by land use designations. The process involves sequential phases that build on each other; a systematic assessment of conditions, issues, needs, and site possibilities; and an understanding of how they come together in a physical setting (Facilities Management International, 2013). It requires an understanding of how recreation relates to the strategic initiatives and objective of the institution and the priorities that recreation is given in the planning and budgeting cycle. In 2013, Hoy and Miskel evaluated approaches developed to operate can be modified and would be adjusted in order to be consistent with the organizational structure and decision- making process of a particular institution. However, this a critical requirement for effectual employment of the concepts discussed because polytechnics differ in critical areas of academic, research, outreach, administration, faculty, staff, and student (graduate) composition.

### Statement of the Problem

The inadequate educational resources in Elechi Amadi Polytechnic, Port Harcourt since it has been newly promoted called for serious concern. Indeed, the most momentous event in the institution has been the upgrade to a Polytechnic status, no significant improvement on the part of physical or material resources such as instructional and recreational facilities. The development of education in any given society is either hampered or boosted by a variety of factors, some of the factors responsible for the retarded pace of educational development include; poor funding that incapacitated the availability of these facilities, brain drain among teachers, poor infrastructures, unstable curriculum and courses, unstable staff, politicization of education by the institutions’ Visitor, just to mention but a few. This crisis is rooted in the deteriorating conditions within the citadels of learning with respect to material or physical resources (instructional and recreational resources).

### Purpose of the Study

The purpose of the study was to investigate the availability of material resources for educational delivery in Elechi Amadi Polytechnics Port Harcourt. The specific objectives are to:
1. Examine the instructional resources available for educational delivery in Elechi Amadi Polytechnic, Port Harcourt.
2. Identify the recreational resources available for educational Elechi Amadi Polytechnic, Port Harcourt.

Research Questions
Based on the objectives of the study, the following research questions guided the study:
1. To what extent does instructional resources availability enhance educational delivery in Elechi Amadi Polytechnic, Port Harcourt?
2. To what extent does recreational resources availability foster educational delivery in Elechi Amadi Polytechnic, Port Harcourt?

Hypothesis
1. There is no significant difference between the students and academic/administrative staff on the availability of instructional resources for educational delivery in Elechi Amadi Polytechnic, Port Harcourt.

METHODOLOGY
The descriptive survey research design was used for the study. The population consisted of 3,857 statistics of students in HND and OND session 2018/2019 and 609 academic/administrative staff total 4,466 in Elechi Amadi Polytechnic, Port Harcourt (Source: Registrar’s Office Elechi Amadi Polytechnic, Port Harcourt; 2019). A stratified random sampling technique (balloting) was adopted in selecting a sample size of 335 (7.5% of the population size) consisting of 200 students and 135 staff. A 9-item self-structured questionnaire title “Resources Availability Education Delivery Questionnaire (RAEDQ)” on a modified scale of Low Extent, Very Low Extent, High Extent and Very High Extent with the values; 1, 2, 3 and 4 respectively. The reliability of the instrument was determined via a test re-test method and a Pearson Product Moment Correlation Coefficient of 0.78 was obtained. To determine the criterion mean for scoring the questionnaire, all the points from the alternative responses were added up and divided by four, for example; (4+3+2+1)/4=10/4=2.5. Therefore any mean that is 2.50 and above was accepted while any mean value below 2.50 was rejected. The mean, standard deviation and rank order statistics were used to answer the research questions while the Z-test were used to test the hypotheses at 0.05 level of significance.

Research Question 1: To what extent does instructional resources availability enhance educational delivery in Elechi Amadi Polytechnic, Port Harcourt?

Table 1: Mean (\(\bar{x}\)) and Standard Deviation (SD) on the responses from students and academic/administrative staff on the availability of instructional resources for educational delivery in Elechi Amadi Polytechnic, Port Harcourt.

<table>
<thead>
<tr>
<th>S/ N</th>
<th>Questionnaire Items</th>
<th>Students N=200</th>
<th>Staff N=135</th>
<th>Mean Set (\bar{x})</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The availability of instructional facilities depict lecturers’ delivery of teaching and learning</td>
<td>2.90, 1.50</td>
<td>3.38, 1.70</td>
<td>2.64 High Extent</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The instructional facilities are adequate in the institution</td>
<td>2.80, 1.81</td>
<td>2.31 Low Extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>It does not facilitates educational aim and objectives</td>
<td>2.59, 1.20</td>
<td>2.49 Low Extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ineffective strategic planning is the sole problem of instructional facilities in the institution</td>
<td>2.58, 1.10</td>
<td>2.39 Low Extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>It facilitates other forms of resources for effective educational delivery</td>
<td>2.96, 1.90</td>
<td>2.60 High Extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggregate</td>
<td></td>
<td>2.77, 1.40</td>
<td>2.40, 1.50</td>
<td>2.49</td>
<td></td>
</tr>
</tbody>
</table>
The data from Table 1: showed those items with serial numbers, 1 and 5 had mean value scores above the criterion mean value of 2.50. Hence, with high extent the students and staff responded on the availability of instructional resources for educational delivery. Whereas, items number 2 to 4 was characterized with low extent responses from students and staff on the availability of instructional resources for educational delivery in Elechi Amadi Polytechnic, Port Harcourt.

Research Question 2: To what extent does recreational resources availability foster educational delivery in Elechi Amadi Polytechnic, Port Harcourt?

Table 2: Mean (\( \bar{x} \)), and Standard Deviation (SD) on the responses on the responses from students and academic/administrative staff on the availability of recreational resources for educational delivery in Elechi Amadi Polytechnic, Port Harcourt

<table>
<thead>
<tr>
<th>S/N</th>
<th>Questionnaire Items</th>
<th>Students N=200</th>
<th>Staff N=135</th>
<th>Mean Set</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(( \bar{x} ))</td>
<td>(SD)</td>
<td>(( \bar{x} ))</td>
<td>(SD)</td>
</tr>
<tr>
<td>6.</td>
<td>Recreational resources are lacking in the polytechnic (institution)</td>
<td>2.90</td>
<td>1.40</td>
<td>3.00</td>
<td>1.00</td>
</tr>
<tr>
<td>7.</td>
<td>Recreational facilities promote fitness, leisure time, sports, etc, for students and lecturers</td>
<td>2.93</td>
<td>1.50</td>
<td>3.05</td>
<td>1.40</td>
</tr>
<tr>
<td>8.</td>
<td>Recreational facilities are spaces, lawns, fields, pitches and equipment for sports, games</td>
<td>2.95</td>
<td>1.40</td>
<td>3.00</td>
<td>1.50</td>
</tr>
<tr>
<td>9.</td>
<td>Recreational facilities are not available in the institution</td>
<td>2.60</td>
<td>1.30</td>
<td>2.00</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>Aggregate</td>
<td>2.85</td>
<td>1.40</td>
<td>2.85</td>
<td>1.30</td>
</tr>
</tbody>
</table>

The data from Table 2: showed that items with serial numbers, 6, 7, 8 and 9 had mean value scores above the criterion mean value of 2.50. Hence, with high extent the students and staff responded on the availability of recreational resources for educational delivery in Elechi Amadi Polytechnic, Port Harcourt.

Hypothesis 1: There is no significant difference between the students and academic/administrative staff on the availability of instructional resources for educational delivery in Elechi Amadi Polytechnic, Port Harcourt.

Table 3: Z-test calculated of the different in the mean scores of students and academic/administrative staff on the availability of instructional resources for educational delivery in Elechi Amadi Polytechnic, Port Harcourt.

<table>
<thead>
<tr>
<th>Categories</th>
<th>N</th>
<th>( \bar{x} )</th>
<th>SD</th>
<th>DF</th>
<th>Zcal.</th>
<th>Zcrit.</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>200</td>
<td>2.85</td>
<td>1.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic/Administrative Staff</td>
<td>135</td>
<td>2.85</td>
<td>1.30</td>
<td>333</td>
<td>3.49</td>
<td>1.96</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Table 3: showed that students have mean and standard deviation scores of 2.85 and 1.40 while academic/administrative staff have mean and standard deviation scores of 2.85 and 1.30 respectively with a degree of freedom 333 at an alpha level of 0.05. Since the z-cal score (3.49) is greater than the z-critical score (1.96), the hypothesis was rejected. Therefore, there is no significant difference between the students and Academic/Administrative staff on the availability of instructional resources for educational delivery in Elechi Amadi Polytechnic, Port Harcourt.

DISCUSSION OF FINDINGS

The findings of the study revealed that through proper planning and execution of the academic process, the availability of instructional facilities depict lecturers’ delivery of teaching and learning; the instructional facilities are not adequate in the institution; it does facilitates educational aim and objectives; Ineffective strategic planning is not the sole problem of instructional facilities in the institution but other odd factors and that it facilitates other forms of resources for effective educational delivery; affirmed by Akaranta (2014) that anything short of adequate instructional resources in the polytechnic will amount to effort (establishment or upgrading it) in futility, hence,
there is need for the availability of instructional facilities for educational delivery. On the other hand, recreational resources are lacking in the polytechnic (institution); recreational facilities promote fitness, leisure time, sports, etc, for students and lecturers; also, recreational facilities are spaces, lawns, fields, pitches and equipment for sports, games and finally, recreational facilities are not available in the institution. Abraham and Asodike (2011) concluded that educational-recreational facilities are those varieties in education which enable students and teachers to achieve some level of psycho motive fitness that also enhance learning. They further stresses that a successful implementation of any educational programme amongst others depend on the availability recreational school facilities. This is supported by the view of Abraham (2013) who posited that outdoor recreation spaces contribute to a “sense of space” and belonging on the part of the campus users. Therefore, planning for recreational opportunities is an important task that all institution that went to adapt to the 21st century changes and innovations must under-take and the need of the programmes must become part of the institutions’ annual planning and budgeting cycle

CONCLUSION
From the above, it could be deduced that provision of instructional and recreational resources play an all-round roles in the tertiary institution. Educational delivery emanate from the provision, availability and adequate educational resources that lead to educational goal achievement, the effective use of these resources by the school administration from the leaders are central and important to harness the best from instructional and recreational resources to the achievement of the set goals that the contemporary educational system needed.

RECOMMENDATIONS
1) The current site of Captain Elechi Amadi Polytechnic, Port Harcourt, Rivers State is infinitesimal, a new site should be provided by the Rivers State Government that can absorb the various facilities beyond the variables in the study or content scope.
2) Adequate provision of instructional facilities such as the classrooms, classroom seats, laboratories, libraries, experimental equipment, chalkboard, audio-visual learning equipment, etc, should be made to enhance educational delivery.
3) The availability of recreational facilities such as spaces, lawns, fields, pitches and equipment for sports, games and general recreation. Games and sports apart from developing specific skills also develop a good learning socio-psychological as well as mental alertness through relaxation should be provided in Elechi Amadi Polytechnic, Port Harcourt.

REFERENCES
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