Human Resource Adequacy and Management of Public Boarding Secondary Schools in Bayelsa State

1Ossai, Vincent Obaro & Prof. S. O. Nwafor2

Department of Educational Management
Faculty of Education
University of Port Harcourt, Rivers State, Nigeria

1ossaicent4prof@gmail.com;+234(0)8067450298
2+234(0)8037056776

ABSTRACT
The study assessed human resource adequacy and management of public boarding secondary schools (PBSS) in Bayelsa State. Four research questions and two hypotheses were postulated to guide the study. The descriptive survey design was adopted for the study. Population of the study was 10 public boarding secondary schools in Bayelsa State with 833 staff (367 teaching and 466 non-teaching) as respondents in urban and rural schools. Sample of the study was 266 respondents (117 teaching staff and 149 non-teaching staff). The purposive associated with proportionate stratified sampling technique was used for sample selection. Questionnaire titled “Adequacy and Management of Resources of Public Boarding Secondary Schools Survey Questionnaire” (AMRPBSSQ) was used for data collection and validated by experts. The Cronbach alpha was used for reliability estimate with an index of 0.892. Out of 266 copies of questionnaire administered, 238 copies were retrieved, representing 89.5% retrieval rate. Frequency count was used to answer research questions 1 and 2 while mean and standard deviation were used to answer research questions 3 and 4 and the two hypotheses tested using t-test at 0.05 alpha level. Result of the study indicated adequate manpower provision in the urban schools and only two of the rural schools. A significant difference existed between mean scores of urban and rural schools on the level of management of teaching manpower resources. It was recommended that there is need for scaling up the human resources in these schools and regular and routine supervision of schools in the State is also necessary.

Keywords: Human Resources, Adequacy, Management, Boarding schools, Bayelsa State.

INTRODUCTION
The impact of boarding schools to the educational system in Nigeria is enormous despite the mismanagement of available resources. The Federal Government of Nigeria have been able to manage and maintain 104 boarding schools from inception to date (Olusegun, 2017), so also the Bayelsa State Directorate of Education, Inspectorate, Policy Services and Special Education, Bayelsa State Education Committee (BSEC) and State Ministry of Education (SMoE) could follow suit. The boarding school system had made tremendous impact in the lives of those early students that were in the boarding schools. This was supported by Okpala in Okpo (1996) who observed that looking on the excellent performance and ability of some of our past and present generation of public figures in the country Nigeria, it does not take much effort to see what enormous contributions the usually restricted boarding school system has continuously made toward the quality of education. Many people are of the opinion that boarding school remains the most conducive place for academic development.

The word “boarding” is used in the sense of “room and board,” that is, lodging and meals. Boarding school provides education for learners who live on the premises for certain period of time. The system has
existed for many centuries, and now extends across many countries. Their functions and ethos (distinctiveness) vary greatly (Wikipedia Corporation, 2017). In some boarding schools, boarders stay through the term to come home for the mid-term break for only two days to one week while some encourage returning home at weekends. The system permits co-education and some either for only boys or girls, and sometimes day learners are allowed in the boarding system.

In another perspective, boarding school is a residential education which is provided in an environment where students reside and learn outside of their home environment, and usually refers to the care and education of young people and adolescents. Also, it is a generic term used to describe residential group care programs for at-risk, emotionally disturbed, or delinquent children (Goldsmith in Brad, 2014). Furthermore, the typical forms of residential education include boarding schools, preparatory schools, military schools, foster care, or orfanages, but it is, at times, used to describe some forms of outdoor education or specially designed education programs where participants live in residence (e.g., American “charter” schools, elite sports programs, gifted and talented programs, environmental education programs) (Goldsmith; Anderson; in Brad, 2014). The immediate past Bayelsa State Governor (Hon. Dickson Henry Sariake) declared a state of emergency on assumption of office in 2012 as a result of the State’s educational backwardness and low academic performance over the years. Thus, the Government decided to embark on boarding school system to improve the falling educational standard by creating an educational committee to be in charge. This was done by legislation and creating an agency named Directorate of Education, Inspectorate and Policy Services and Special Education saddled with the supervision of the secondary education and boarding school system in the State. Iworiso-Markson (2017) gave the historical narrative of education backwardness in Bayelsa State and the attendant clog in the wheels of overall development, spirited efforts by the administration of Governor Henry Seriako Dickson to break from the past represent nothing less than a paradigm shift. Thus beginning from February 14, 2012 when Governor Dickson assumed office and declared a state of emergency in this critical sector and till he left office. The story has been an adroit dedication to a total transformation of education as the lynchpin for social and economic development in the state. This is visible from massive infrastructure provision, building new schools across the State and equipping them, to a holistic definition of the kind of education needed in a knowledge economy as a 21st century enterprise, public schools are witnessing a quiet revolution in an era of free and compulsory education.

Addeh (2016) stated that the Bayelsa State Government would commence the reintroduction of boarding schools in its public school system to enhance the quality of education in the State from September, 2017 academic session. To this end, the Government (The then Deputy Governor, Rear Admiral Gboribiogha John-Jonah (rtd)) announced that as from September, 2017 eleven (11) new model boarding schools would be opened in all the eight Local Government Areas in the state, with highly populated councils getting more than one each. The Deputy Governor added that the principals of the model schools (the public boarding school) would be assisted by governing committees to ensure that the schools are effectively run. So far, the Government had worked on and established Ten (10) functional public boarding secondary schools in which one is in each of the eight Local Government Areas (but two in Yenagoa, the Capital City) called Model Secondary School (MSS), one Sports Academy in Asouama, Kolukum/Opukuma LGA and the first public boarding school in the State called Ijaw National Academy (INA) formerly called Teacher Training College Demonstration Secondary School (TTCDSS) at Bulu-Orua in Sagbama Local Government Area which began in April, 2015 meant for only indigenes of Bayelsa State. The boarding school system is completely free and admission based on merit, after passing the entrance examination. The Ijaw National Academy (INA) was officially commissioned on 14th and 15th July, 2017 by former Head of State, General Yakubu Gowon. Currently, there are ten (10) of the Model Secondary Schools which are in full operation. These are: Ijaw National Academy, Kaima, Sports Academy Asouama, St Jude’s Girls Secondary School, Yenagoa, Bishop Dimeri Grammar School (BDGS), Yenagoa, Model Secondary School Brass, Southern Ijaw, Ekeremor, Sagbama, Nembe and Ogbia. The Model Secondary Schools are completely and partially boarding school system. The Ijaw National Academy, Kaima and Sports Academy, Asouama are full boarding school system while the rest are mixed with boarders and day students.
The boarding school system in Bayelsa State is a welcome reformation in the educational system which the Government brought in the administration. To ensure continuity, the Government set up a body called the Bayelsa State Education Committee (BSEC) approved by the State House of Assembly. The members of the committee are made up of the Commissioner of Education Hon. Obuebite Jonathan who is the supervising head. The other members are renowned educationists in the State, political appointees and Directors of the State Ministry of Education. The management of the school system would be achieved with the help of the education committee which is to carry out the following functions: establishment of the Education Trust Fund (ETF); compulsory primary and secondary education; compulsory boarding education at secondary school level; development of model schools in all the Local Government Area Headquarters; educational scholarship programmes at secondary and tertiary level; availability of student loan for tertiary education and establishment of Teachers Training Institute (citation needed).

The boarding school system in Bayelsa State is barely three years they are established and still developing, thus the adequacy and management of educational resources such as the human, financial, instructional, physical facilities and time need to be checked 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 school that would be productive to the boarding school system. The Bayelsa State Government had invested huge amount in the boarding schools system and would continue to do so.

There is need to determine the adequacy and management of the human resources such as the teaching and non-teaching staff strength as well as the boarding school personnel. Are the teachers motivated in the teaching and learning process considering increase in the workload as per periods and numbers of students in the boarding school system? Also, are 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 adequate and properly managed in spite of their high input and services?

**Problem Statement**

Running a boarding school system requires enormous human resources and its efficient management will provide quality services to the boarding students. In recognition of its numerous benefits, the Bayelsa State Government have decided to re-introduce the boarding school system at the secondary school level. To ensure this promise, the State Government had established ten (10) public boarding secondary schools (PBSS) across the State and gone further to make it free of all cost.

However there appears to still be cases of shortage of human resources to execute different functions that must be carried out for the smooth administration of the schools objectives. This can be inimical to the educational intentions of the government and other stakeholders. This is the problem that this study intends to unravel in terms of the adequacy and management of this essential educational resource.

**Aim and Objectives of the Study**

The aim of the study was to examine the human resource adequacy and management of public boarding secondary schools in Bayelsa State, Nigeria. Specifically, the objectives of the study were to:

1. Examine the adequacy of teaching manpower in PBSS in urban and rural areas of Bayelsa State;
2. Investigate the adequacy of boarding personnel in PBSS in urban and rural areas of Bayelsa State;
3. Determine the management of teaching manpower in PBSS in urban and rural areas of Bayelsa State;
4. Determine the management of boarding personnel in PBSS in urban and rural areas of Bayelsa State;

**Research Questions**

The following research questions were formulated to guide the study:

1. How adequate is the provision of teaching manpower in public boarding secondary schools in urban and rural areas of Bayelsa State?
2. How adequate is the provision of boarding personnel in public boarding secondary schools in the urban and rural areas of Bayelsa State?
3. What is the level of management of teacher maintenance in public boarding secondary schools in the urban and rural areas of Bayelsa State?
4. What is the level of management of boarding personnel in public boarding secondary schools in the urban and rural areas of Bayelsa State?

Hypotheses
The following hypotheses were tested at 0.5 level of significance:

\( H_{01} \) There is no significant difference between mean scores of boarding secondary schools in urban and rural areas on the management of teacher maintenance in Bayelsa State.

\( H_{02} \) There is no significant difference between mean scores of boarding secondary schools in urban and rural areas on the management of boarding personnel in Bayelsa State.

Theoretical Framework
The theoretical framework adopted for this work was the resource based theory which was propounded by Armstrong and Shimizu (2007). The theory states that the strategic capability of a firm depends on its resource capability, specifically the human resources. The human or people are highly utilized as a resource. The theory exposed that competitive advantage could be achieved by the firms, through developing human resources by way of learning organization and learning and practicing, before their competitors in a most healthiest manner. It is important to note that if any organization could develop extraordinary, non-imitable strategies, values, policies and practices, that organization is able to achieve sustained competitive advantage which emanates the view of resources based approach.

The theoretical framework for resource based theory is thus illustrated in Figure 2.

![Figure 1: Theoretical Framework in Resource Based Theory](source)

Figure 1 expressed the place of the human resources-the boarding school personnel (teaching and non-teaching staff) is the most relevant input in the boarding school system. The importance of the various personnel in the system cannot be over-emphasized over other resources. The other resources lay fallow when the human resource is not active and productive. Where there are cooks or teachers in the boarding school it outputs which are students would have better academic performance and after school achievements such as gain admission and employment. In every organization, the human resource controls all other resources. In the school system, human resource include the teaching and non-teaching staff; boarding and non-boarding students; management and non-management team. Other resources cannot be productive on their own without the human resources. The other resources aid the students output within and outside the school.

Literature Review

Educational Resources
Educational resources according to Asodike and Jaja (2014) in Ossai, Akpabio and Frank (2017) categorized resources as: human, physical, financial and instructional resources. In the view of Black in Agabi (2014) viewed resources as natural, human, capital and financial. Educational resources can broadly be categorized into two and also subdivided in two(s) according to Menyinikor (2016) in Ossai,
Akpabio and Frank, (2017). Figure 3 showed the classification of educational resources with the illustration of a diagram.

**Figure 2. Classification of Educational Resources.**


The detail explanations of the various educational resources are necessary as they relate to the boarding school system. Educational resources would be elaborated with ample examples such as the human, financial, instructional, physical and time resources. The followings are examples of human resources in the boarding school systems that are in charge of the management of all other resources. They are either teaching or non-teaching staff. These are grouped into:

- (a) *academic* staff such as the principal, vice principals (administration, academic and welfare), teachers as well as corp members; (b) *administrative* staff such as the bursar, desk officer, secretary, clerks, cleaner; (c) *support* staff such as the patron, matron, hostel masters/mistresses; (d) *professional* staff such as doctors, nurses, cooks, and (e) *specific* competencies such as the generator/plant operator and water tank operator etc.

**Developing the Human Resource in the Boarding Schools**

The human resource controls all other resources, it is of great importance that the human resource is well developed to manage all other resources. According to National Open University of Nigeria (NOUN, n.d.) opined methods of development readily available educational human resource include:

i. **In-service Course for Teaching and Non-Teaching Staff:** One most important concern and function of school heads or government is the professional development of its staff through in-service training. Whenever possible and necessary, the staff should be given opportunities to attend relevant useful courses, which will update their knowledge in their subject areas and help some teachers and even the school heads upgrade their qualifications and thereby improve their
conditions of service and prospects of advancement in the service. Apart from the benefit to the
individual members of staff who participate in in-service courses, other members of staff could
benefit as well through discussion and implementation of some of the ideas and techniques gained
in the course.
ii. **Staff Seminar:** seminars on selected topics for staff members can be organized as part of school
programmes, such seminar can contribute to staff professional development. There may be the
very knowledgeable and experienced teachers among his staff, or in the community who may be
willing to lead discussions on such topics which are organized not only as a means of promoting
staff professional growth, but also as a way of improving staff relations.

iii. **Induction Courses:** These are conducted to introduce the newly employed personnel to their
boarding schools, since most of them are not likely to possess previous experience. It is designed
to bring the knowledge and skills of the new employees to a satisfactory level.

iv. **On-the-Job-Training:** This is similar to the induction course just concluded above. The major
objectives of the two types of training are similar in the sense that they entail acquiring new skills
to be able to handle new jobs. Induction course is basically meant for new employers. However
on the job training can be extended to include old employees, if a new skill is introduced in the
organization.

v. **Off-the-Job-Training:** This is the type of training that can be conducted outside the school
environment. It is usually conducted in classrooms where trainees are given theoretical
knowledge on how to handle a particular operation. The only practical aspect of this type of
training is the use of films or charts or diagrams for illustrations.

vi. **On-and-Off-the-Job Training:** It combines classrooms instructions with practical instruction in
the working environment. This has almost the same major objective with “Industrial Attachment”
programmes for technicians or teaching practice for teacher trainees.

vii. **Refresher Courses:** It is used mainly to update knowledge and skills or externally or both. It is
very useful and necessary with innovations through changes of ideas. It serves as a motivating
factor where the employee feels satisfied for being given the opportunity for learning.

viii. **Conference Training:** This is sometimes conducted through conference or workshops. This is
not highly formalized since the trainees are treated as participants and not just passive recipients.
The theme chosen for conferences must be relevant to the organization’s objectives.

ix. **Role Playing:** This is another training device that can be used in organizations; it can be used for
executive development. The participants assume the roles or positions they are expected to
occupy after the training and their performance are simultaneously evaluated and corrected where
necessary by the training instructors.

x. **Sensitivity Training:** It is used for development of awareness to behavioral pattern of oneself
and one’s colleagues. It is used to encourage mutual understanding among working group. It is
highly recommended for leadership training and executive development.

xi. **Supplementary Training:** since many organizations may utilize quite a good number of the
training methods discussed above it may still be inevitable for them to seek supplementary
training methods from independent institutions. Public or private organizations used the
supplementary training method.

xii. **Collaboration with Other Boarding Schools:** there are public and private owned boarding
schools that have achieved greatly and successful over the years in the system, such school(s)
should be contacted and have collaboration on the strategies of success for a boarding school
system.

**Resource Adequacy**

Resource is defined as something resorted to for support. It is also seen as something an organization or a
person has and can use especially to increase their wealth (Adetoro, 2009). Barney in Wikipedia
Corporation (2019) defined firm resources as all assets, capabilities, organizational processes, firm
attributes, information, knowledge, etc. controlled by a firm that enables the firm to conceive of and
implement strategies that improve its efficiency and effectiveness. The concept of adequacy refers to the
quality of being sufficient, adequate or able to meet the needs (Wikipedia Corporation, 2018). The school system is an environment of its own which needs the necessary resources for its productivity. The school with a large population of boarding students would need ample resources to cater for them and as well as small population will need small resources. A school where there is large a number of boarding students and the resources available are below the number of student will be regarded as having inadequate resources. On the other hand, a school where there is low number of boarding students and the resources are above the number of students, which would be that the resources are more than the students has excess resources. But when there is 1,000 boarding students in a school and the resources available are equal to the number of students, then that would be regarded as adequacy of resources. The above explanation is derived from the Economics concept on types of population which are under population, over population and optimum population respectively. This concept is diagrammatically illustrated in Figure 3 thus:

Figure 3: Number of Students and Available Resources
Source: Researcher’s view adapted from Economics types of population

In figure 3, series 1 and 2 indicate the types of population and available resources respectively. The horizontal line at 1000 indicates the fixed number of resources while the slant line indicates the types of population. This showed the number of students as it relates to the available resources in the boarding school system when the bases of the resource is #1000. Assuming in the above boarding school, the population of the school is under population of 500 students that will mean that the resources will be over adequate for the students. On the other hand, if the population of the school is over populated (i.e. 2000 students), the students will experience inadequate resources because the population is more than the available resource of 1000. Also, at the point where the optimum population which have 1,000 population and the resources available is N1,000 this showed that there is adequacy of resources for the students.

Resource Management
Resource management implies the coordination of the resources such as men, money and materials in an organization in the right direction for the attainment of organizational goals. Resource or facility management involved the management of all services such as housekeeping, security maintenance, general administration, transportation and so on, of facilities within the specified budget and in timely manner (Igbinedion, 2014). In the same vein, it is the professional management of organization’s properties which are essential for the achievement of organizational goals as stated by Facilities Management International, (FMI) in Igbnedion, (2014). The different boarding school facilities such as classrooms, offices, furniture, school field, dormitory/hostels, dining hall, library, laboratories, ICT equipment and etc. would not function properly except there is efficient resource manager.

Resource Management in Schools
Ihuoma (2008:20) viewed management of resources as that “Facilities management that is therefore an integral part of the overall management of the school.” There are various resources in the boarding schools that really need proper management for efficiency and productivity (in the boarding school system). The resources are: human, financial, facilities, instructional and time resources. (These resources were discussed in 2.1.10 - 2.1.11)
Resources are essential for any organization or system or when carrying out projects. Asodike and Adieme in Ossai, Akpabio and Frank (2017) asserted that resources are seen as anything that can be utilized in order to achieved objectives or goals of an organization. They further described that management is an organization that is constantly concerned with planning, sourcing for resources, coordinating, directing and decision-making, controlling, communicating and evaluating performance to ensure that the human, material and finance resources that are available in the organization are properly utilized for organizational effectiveness. The concept of resource management is the efficient and effective deployment of an organization’s resources which are human, financial, physical and material resources. Asodike and JajainOssai, Akpabio and Frank (2017) stated that resource management is the coordination of the resources made available in the education sector for the purpose of producing quality graduates in the system.

**Strategies for Efficiency Use of Resources in Schools**

In Economics, efficiency of resources use could be referred to the maximal use of the available resource for maximal productivity. Daad (2007) asserted that efficient educational strategy for using boarding schools resources for maximal productivity are:

a. **Ensure that the school is able to meet the total development needs of students:** - Boarding schools should be able to function as extended families where teachers and students are able to live and learn together, and where opportunities are created for students to develop every aspect of academic, cultural, athletic, spiritual and social life. The school environment should be safe, academically challenging, diverse, active and fun. Where possible, it should bring together students of different communities.

b. **Ensure that the school is well-managed:** - School-management must ensure that there is a peer support system, and there is good rapport between teachers and students, as well as between parents and teachers.

c. **Use boarding schools as community centres:** - The school should be open in the evenings and school holidays as a community centre for meetings and adult education. This is important for integration of school life into community life.

d. **Gain parental confidence:** - The success of a boarding school is dependent on parental confidence. This requires that the school is perceived as an institution that addresses parental concerns, recognizes the language and culture of the students, and guarantees adequate information, frequent visits and good medical attention.

e. **Ensure frequent contacts between children and family members:** - students grow mentally, intellectually and socially through adult contacts in the family and community.

f. **Ensure that curriculum includes local and cultural studies:** - Curriculum planners must ensure that student’s right to learn their language and culture is preserved.

**METHODOLOGY**

The research design adopted was descriptive survey design. The target population for the study was made up of 10 public boarding secondary schools (PBSS) which comprises of 833 staff (367 teaching and 466 non-teaching) in the urban and rural areas in Bayelsa State. The sample of the study was 266 respondents (117 teaching staff and 149 non-teaching staff). The sample size was selected using Taro Yemen’s formula (Nwankwo, 2013; Baridam in Kpee, 2015). Purposive associated with proportionate stratified sampling technique was used for sample selection. The instrument used for data collection was questionnaire tagged “Adequacy and Management of Resources of Public Boarding Secondary Schools Survey Questionnaire” (AMRPBSSQ). The instrument was validated by two experts in Educational Management at the Niger Delta University. Out of the 266 copies of questionnaire administered, 238 copies were completed and retrieved, representing 89.5% retrieval rate which as sufficient for the study. The Cronbach alpha was used to establish the reliability estimate with an index of 0.892. Research questions 1 and 2 were answered using frequency count while mean and standard deviation were used to answer research questions 3 and 4. t-test was used to test the hypotheses at 0.05 alpha level.

**RESULTS**

**Answer to Research Questions**

**Research Question 1:** How adequate is the provision of teaching manpower resources in public boarding secondary schools in urban and rural areas of Bayelsa State?
Table 1: Responses on the provision of teaching manpower resources in public boarding secondary schools in urban and rural areas of Bayelsa State.

<table>
<thead>
<tr>
<th>SCHOOLS IN URBAN AREAS (2 schools)</th>
<th>SCHOOLS IN RURAL AREAS (8 schools)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSS OVOM</td>
<td>MSS AMARATA</td>
</tr>
<tr>
<td>MSS Brass</td>
<td>MSS Ekeremoro</td>
</tr>
<tr>
<td>MSS NEMBE</td>
<td>MSS OGBIA</td>
</tr>
<tr>
<td>MSS SAGBAMA</td>
<td>MSS S/Ijaw</td>
</tr>
<tr>
<td>Ijaw Nat Academy</td>
<td>Sports Academy</td>
</tr>
</tbody>
</table>

|          | ST | T  | R  | ST | T  | R  | ST | T  | R  | ST | T  | R  | ST | T  | R  | ST | T  | R  |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| MSS OVOM | 1652 | 63 | 1:26 | 1239 | 26 | 1:48 | 1352 | 23 | 1:50 | 1132 | 23 | 1:49 | 1111 | 31 | 1:36 | 1929 | 42 | 1:47 | 1751 | 17 | 1:44 | 1115 | 51 | 1:22 | 200 | 26 | 1:08 |
| MSS AMARATA | 1730 | 65 | 1:27 | 1239 | 26 | 1:48 | 1352 | 23 | 1:50 | 1132 | 23 | 1:49 | 1111 | 31 | 1:36 | 1929 | 42 | 1:47 | 1751 | 17 | 1:44 | 1115 | 51 | 1:22 | 200 | 26 | 1:08 |
| MSS BRASS | Adequate | Adequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Adequate | Adequate |
| MSS Ekeremoro | 1239 | 26 | 1:48 | 1352 | 23 | 1:50 | 1132 | 23 | 1:49 | 1111 | 31 | 1:36 | 1929 | 42 | 1:47 | 1751 | 17 | 1:44 | 1115 | 51 | 1:22 | 200 | 26 | 1:08 |
| MSS NEMBE | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Adequate | Adequate |
| MSS OGBIA | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Adequate | Adequate |
| MSS SAGBAMA | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Adequate | Adequate |
| MSS S/Ijaw | Adequate | Adequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Adequate | Adequate |
| Ijaw Nat Academy | Adequate | Adequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Adequate | Adequate |
| Sports Academy | Adequate | Adequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Inadequate | Adequate | Adequate |

DECISION RULE: 1:35 (1 T to 35 ST) Adequate, 1:36 and above (1 t to 36 & above ST) Not Adequate

LEGEND: ST- Students, T- Teachers, R- Ratio
Table 1 revealed that there is adequate provision of manpower in the two schools in urban areas of Bayelsa State. MSS Ovom and MSS Amarata have teacher-students’ ratios of 1:26 and 1:27 respectively within the stipulated ratio by Federal Republic of Nigeria of 1:35 (That is 1 teacher to 35 students). It was revealed that Ijaw National Academy and Sports Academy in the rural areas have adequate teachers alongside their students with various ratios of 1:22 and 1:8 respectively. On the other hand, in the rural areas, MSS Brass, MSS Ekeremor, MSS Nembe, MSS Ogbia, MSS Sagbama and MSS Southern Ijaw have shortages in the supply of teachers to match their students. MSS Brass, MSS Ekeremor, MSS Nembe, MSS Ogbia, MSS Sagbama and MSS Southern Ijaw have ratios of 1:48, 1:59, 1:49, 1:36, 1:47 and 1:44 respectively. On the contrary, Ijaw National Academy and Sports Academy have adequate manpower supplies in the ratios of 1:22 and 1:8.

In summary, MSS Ovom and MSS Amarata have adequate manpower provision in the urban areas. Similarly, Ijaw National Academy and Sports Academy have adequate manpower supplies while MSS Brass, MSS Ekeremor, MSS Nembe, MSS Ogbia, MSS Sagbama and MSS Southern Ijaw in the rural areas have inadequate manpower supplies.

Research Question 2: How adequate is the provision of boarding personnel in public boarding secondary schools in the urban and rural areas of Bayelsa State?

Table 2: Responses on adequate provision of boarding personnel in the urban and rural areas of Bayelsa State.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Personnel</th>
<th>Required Capacity</th>
<th>Urban Areas</th>
<th>Rural Areas</th>
<th>Remarks</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Existing Capacity</td>
<td>Net Diff.</td>
<td>Remarks</td>
<td>Required Capacity</td>
</tr>
<tr>
<td>1.</td>
<td>Laboratory Attendants</td>
<td>8</td>
<td>1</td>
<td>-7</td>
<td>Inadequate</td>
<td>32</td>
</tr>
<tr>
<td>2.</td>
<td>Librarian</td>
<td>2</td>
<td>1</td>
<td>-1</td>
<td>Inadequate</td>
<td>8</td>
</tr>
<tr>
<td>3.</td>
<td>Guidance Counsellors</td>
<td>4</td>
<td>1</td>
<td>-3</td>
<td>Inadequate</td>
<td>16</td>
</tr>
<tr>
<td>4.</td>
<td>Hostel Matron/patron</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>Adequate</td>
<td>16</td>
</tr>
<tr>
<td>5.</td>
<td>Hostel Masters/Mistresses</td>
<td>20</td>
<td>6</td>
<td>-14</td>
<td>Inadequate</td>
<td>80</td>
</tr>
<tr>
<td>6.</td>
<td>Cooks</td>
<td>28</td>
<td>28</td>
<td>0</td>
<td>Adequate</td>
<td>224</td>
</tr>
<tr>
<td>7.</td>
<td>Cleaners</td>
<td>30</td>
<td>11</td>
<td>-19</td>
<td>Inadequate</td>
<td>240</td>
</tr>
<tr>
<td>8.</td>
<td>Security Guards</td>
<td>12</td>
<td>16</td>
<td>+4</td>
<td>Adequate</td>
<td>96</td>
</tr>
<tr>
<td>9.</td>
<td>Nurses in Health clinics</td>
<td>2</td>
<td>6</td>
<td>+4</td>
<td>Adequate</td>
<td>16</td>
</tr>
<tr>
<td>10.</td>
<td>Doctors</td>
<td>2</td>
<td>0</td>
<td>-2</td>
<td>Inadequate</td>
<td>8</td>
</tr>
<tr>
<td>11.</td>
<td>Water tank operators</td>
<td>4</td>
<td>2</td>
<td>-2</td>
<td>Inadequate</td>
<td>16</td>
</tr>
<tr>
<td>12.</td>
<td>Store keepers</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>Adequate</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 2 revealed that schools in urban areas have adequate supply of hostel for matron/patron, cooks, security guards, nurses and store keepers. On the contrary, there are inadequate laboratory attendants, librarian, guidance and counselors, hostel masters/mistresses, cleaners, doctors and water tank operators. It was shown that schools in rural areas have adequate supplies of hostel for matron/patron, cooks, water tank operators and store keepers while laboratory attendants, librarian, guidance-counsellors, hostel masters/mistresses, cleaners, security guards, nurses and doctors are inadequately supplied in boarding schools in the rural areas. The Table 2 is explained in Figure 4.
Research Question 3: What is the level of management of teacher maintenance in public boarding secondary schools in the urban and rural areas of Bayelsa State?

Table 3: Mean scores ($\bar{x}$) and standard deviation (SD) of respondents to the level of teaching personnel maintenance management in public boarding secondary schools in the urban and rural areas of Bayelsa State.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Maintenance Management Elements</th>
<th>Urban Areas</th>
<th>Rural Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Remarks</td>
</tr>
<tr>
<td>1.</td>
<td>Regular teaching staff are properly remunerated</td>
<td>2.5</td>
<td>.85</td>
</tr>
<tr>
<td>2.</td>
<td>Corp members are properly managed, housed and supervised.</td>
<td>1.8</td>
<td>.83</td>
</tr>
<tr>
<td>3.</td>
<td>Contractual teaching personnel are properly managed, housed and supervised.</td>
<td>1.41</td>
<td>.52</td>
</tr>
<tr>
<td>4.</td>
<td>Teachers enjoy regular supervision and guidance.</td>
<td>1.31</td>
<td>.46</td>
</tr>
<tr>
<td>5.</td>
<td>Promotion of teaching manpower at an appropriate time.</td>
<td>1.32</td>
<td>.47</td>
</tr>
<tr>
<td>6.</td>
<td>The teaching manpower have access to health services.</td>
<td>1.72</td>
<td>.76</td>
</tr>
<tr>
<td>7.</td>
<td>The teaching manpower have access to nutritional services.</td>
<td>1.5</td>
<td>.50</td>
</tr>
<tr>
<td>8.</td>
<td>The teaching manpower are sponsored for or attended regular training in workshops/seminars.</td>
<td>1.5</td>
<td>.50</td>
</tr>
<tr>
<td>9.</td>
<td>The teaching manpower are provided with basic facilities e.g. light, water, e-learning etc.</td>
<td>1.41</td>
<td>.49</td>
</tr>
</tbody>
</table>

Aggregate Mean: 1.60, .25, Low; 1.59, .24, Low
Table 3 showed the mean of the respondents to the level of teaching personnel maintenance management in public boarding secondary schools in the urban and rural areas of Bayelsa State. The urban respondent responded to item 1 which is high with mean 2.5 at the criterion mean of 2.5 while item 2, 3, 4, 5, 6, 7, 8, and 9 had low mean of 1.8, 1.41, 1.31, 1.32, 1.72, 1.5, 1.5, and 1.41 respectively. The rural respondents responded to item 1, 2, 3, 4, 5, 6, 7, 8 and 9 with mean 2.01, 2.06, 1.42, 1.31, 1.32, 1.72, 1.53, 1.44 and 1.54 respectively shows a low mean less than the criterion mean of 2.5.

Thus, the aggregate mean of 1.60 and 1.59 from urban and rural areas showed that teaching personnel maintenance management is low in the public boarding secondary school in Bayelsa State.

**Research Question 4:** What is the level of management of boarding personnel in public boarding secondary schools in the urban and rural areas of Bayelsa State?

**Table 4:** Mean scores ( \( \bar{x} \) ) and standard deviation (SD) respondents to the level of management of boarding personnel in public boarding secondary schools in the urban and rural areas of Bayelsa State.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Maintenance Elements</th>
<th>Management</th>
<th>Urban Areas</th>
<th>Rural Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Remarks</td>
</tr>
<tr>
<td>10.</td>
<td>Boarding personnel enjoy encouraging salaries/allowances</td>
<td>2.11</td>
<td>1.80</td>
<td>Low</td>
</tr>
<tr>
<td>11.</td>
<td>Boarding personnel are exposed to relevant training and retraining program</td>
<td>1.32</td>
<td>.47</td>
<td>Low</td>
</tr>
<tr>
<td>12.</td>
<td>Boarding personnel are regularly supervised and guided</td>
<td>1.80</td>
<td>.73</td>
<td>Low</td>
</tr>
<tr>
<td>13.</td>
<td>Boarding personnel enjoy performance merit award scheme.</td>
<td>1.23</td>
<td>.42</td>
<td>Low</td>
</tr>
<tr>
<td>14.</td>
<td>Boarding personnel are sponsored to relevant training workshop.</td>
<td>1.30</td>
<td>.47</td>
<td>Low</td>
</tr>
<tr>
<td>15.</td>
<td>Boarding personnel enjoy medical/health benefits.</td>
<td>1.4</td>
<td>.49</td>
<td>Low</td>
</tr>
<tr>
<td>16.</td>
<td>Boarding personnel enjoy campus accommodation, security and social amenities</td>
<td>2.3</td>
<td>.49</td>
<td>Low</td>
</tr>
<tr>
<td>17.</td>
<td>Boarding personnel enjoy food supply/essential goods.</td>
<td>1.4</td>
<td>.49</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Aggregate Mean** | 1.60 | .16 | Low | 1.60 | .16 | Low |

Table 4 showed mean respondents to the level of management of boarding personnel in public boarding secondary schools in the urban and rural areas of Bayelsa State. The urban respondents responded to item 10 to 17 were with a low mean of 2.11, 1.32, 1.80, 1.23, 1.30, 1.4, 2.3 and 1.4 respectively which is less than the criterion mean of 2.5. The rural respondents to item 10 to 17 were with a low mean of 2.06, 1.35, 1.73, 1.23, 1.30, 1.37, 2.2 and 1.46 respectively which is less than the criterion mean of 2.5.

Thus, the aggregate mean of 1.60 and 1.60 in urban and rural areas respectively showed that there is low maintenance of boarding personnel in the public boarding secondary school in the urban and rural areas of Bayelsa State.

**Test of Hypotheses**

The following hypotheses were tested at 0.5 level of significance:

- **Ho1** There is no significant difference between mean scores of boarding secondary schools in urban and rural areas on the level of management of teacher maintenance in Bayelsa State.
Table 5: Summary of z-test Analysis on the Mean Scores of public boarding secondary schools in urban and rural areas on the level of management of teaching manpower resources in Bayelsa State.

<table>
<thead>
<tr>
<th>Categories</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>SD</th>
<th>DF</th>
<th>t-value</th>
<th>Probability value</th>
<th>Alpha level</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel in Urban Schools</td>
<td>65</td>
<td>1.50</td>
<td>.24</td>
<td>236</td>
<td>9.27</td>
<td>0.00</td>
<td>0.05</td>
<td>Significant</td>
</tr>
<tr>
<td>Personnel in Rural Schools</td>
<td>173</td>
<td>1.75</td>
<td>.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Level of significance = 0.05

Table 5 shows that the calculated t-value of 9.27 significant because the probability value of 0.0 is less than the alpha value of 0.05 with the degrees of freedom 238. Since the probability value is less than the alpha level of significance, the hypothesis is rejected. Therefore, there is significant difference between mean scores of public boarding secondary schools in urban and rural areas on the level of management of teaching manpower resources in Bayelsa State.

**H\(_{02}\):** There is no significant difference between mean scores of public boarding secondary schools in urban and rural areas on the level of management of boarding personnel in Bayelsa State.

Table 6: Summary of z-test analysis on the mean scores of public boarding secondary schools in urban and rural areas on the level of management of boarding personnel in Bayelsa State.

<table>
<thead>
<tr>
<th>Categories</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>SD</th>
<th>DF</th>
<th>t-value</th>
<th>Probability value</th>
<th>Alpha level</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel in Urban Schools</td>
<td>65</td>
<td>1.88</td>
<td>.15</td>
<td>236</td>
<td>1.22</td>
<td>0.22</td>
<td>0.05</td>
<td>Not significant</td>
</tr>
<tr>
<td>Personnel in Rural Schools</td>
<td>173</td>
<td>1.91</td>
<td>.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Level of significance = 0.05

Table 6 shows that the calculated t-value of 1.22 is not significant because the probability value of 0.22 is greater than the alpha value of 0.05 with the degrees of freedom 238. Since the probability value is greater than the alpha level of significance, the hypothesis is accepted. Therefore, there is no significant difference between mean scores of public boarding secondary schools in urban and rural areas on the level of management of boarding personnel in Bayelsa State.

**DISCUSSION OF FINDINGS**

**Adequacy of Teaching Manpower Provision in the PBSS of Bayesa State**

The study revealed that MSS Ovom and MSS Amarata in the urban areas and Ijaw National Academy, Kaima and Sports Academy Asouama in the rural areas have adequate manpower provision in the urban areas. This is a result of the regular supervision, concentration and checks by the Bayelsa State Education Committee (BSEC) who have direct control of these schools. On the other hand, MSS Brass, MSS Ekeremor, MSS Nembe, MSS Ogbia, MSS Sagbama and MSS Southern Ijaw in the rural areas have inadequate manpower supplies, the reason behind this, the rural areas have difficult terrain to get there for supervision, and teachers who are transferred there most time are unwilling to stay for a long time before seeking for transfer to the urban areas. Also, cutting down the stipulated hours for daily supply of power.

**Adequacy of Boarding Personnel in the PBSS of Bayelsa State**

It was revealed that schools in urban areas have adequate supply of hostel for matron/patron, cooks, security guards, nurses and store keepers. This is resulted from the high concentration of the Bayelsa State Educational Committee (BSEC) in the urban areas in terms of provision of fund for the On the contrary, there are inadequate laboratory attendants, librarian, guidance and counselors, hostel masters/mistresses, cleaners, doctors and water tank operators. It was shown that schools in rural areas have adequate supplies
of hostel matron/patron, cooks, water tank operators and store keepers while laboratory attendants, librarian, guidance-counsellors, hostel masters/mistresses, cleaners, security guards, nurses and doctors are not adequately supplied in boarding schools in the rural areas.

**Teaching Personnel Maintenance Management in PBSS of Byaelsa State**

There is significant difference between mean scores of boarding secondary schools in urban and rural areas on the level of management of teaching manpower resources in Bayelsa State. It was revealed that the from urban and rural areas showed that teaching personnel maintenance management is low in the public boarding secondary school in Bayelsa State. The Government, Bayelsa State Education Committee (BSEC), Ministry of Education (MoE) and Post Primary Schools Board (PPSB) failed to recruit more teachers into the system, knowing fully well there is shortage of personnel in the State Civil Service Commission because there haven’t been employment in the State for over a decade because of the employment embargo policy by the State Government. The boarding school system was started with the aim of making it a model school to all other public secondary schools in the State and that depends more on the level of teaching and learning process. The teachers that were in the schools before the inception of the PBSS were the same teachers still teaching which were inadequate. The embargo in employment in the State had led to the shortage of personnel in the teaching field as well as others. The rural-urban migration of teachers made clear that there are more teachers in the urban areas than in the rural areas. Teachers’ migration were due to the level of socialization in the urban area of the State capital (Yenagoa). Also, the level of basic amenities such as the health facilities, good accommodation in an environment, communication and good road network for road transport services. The different business adventure and investment, political activities in the government house and others made it that the urban areas have more teachers than the rural areas.

The irregularity of teacher monthly salary payment, non-payment of promotion arrears, non-implementation of promotion and other financial benefits affect the teaching personnel maintenance management. The corps member and contract teaching staff who are giving a helping hand are paid meagre amount or nothing and that will affect their teaching performance. The supervisors from the Ministry of Education (MoE), Post Primary Schools Board (PPSB) and Zonal Boards do not go for regular supervision. The teachers in the boarding schools and other public schools do not have access to health care and nutritional services in the boarding. The inability of the MoE and PPSB to organize workshops/seminars or in-service training for teaching personnel affect the management of the teaching personnel. Also, the lack of basic facilities such as power supply, e-learning facilities will definitely affect the teaching personnel maintenance management in the boarding schools system both in the urban and rural areas.

**Maintenance of Boarding Personnel in PBSS in Bayelsa State**

There is no significant difference between mean scores of boarding secondary schools in urban and rural areas on the level of management of boarding personnel in Bayelsa State. It was showed that in the urban and rural areas there is low maintenance of boarding personnel in the public boarding secondary school in the urban and rural areas of Bayelsa State. The low maintenance of boarding personnel such as the security men, cooks, cleaners, operators, hostel masters/mistresses, patrons/matrons, nurses/doctors are resultant to poor allowance they earn at the end of the month compare to the nature of work and job functions. High remuneration will motivate the boarding personnel to work hard. There had not been training and retraining program for the boarding personnel which would had helped them to be at their best. It was observed that many of them came in without a prior orientation or workshop on the operations of boarding school system. The irregularity of supervision and guidance by the BSEC, MoE and PPSB contribute to the low maintenance of the boarding school personnel. The absence of award for good performance based on merit affect the boarding staff, as well as lack of medical benefit for staff (but available for all students), inadequate accommodation for security men, cooks, cleaners, operators, hostel masters/mistresses, patrons/matrons, nurses/doctors etc. The system have not been able to provide food for all the boarding personnel but few and that had led to low maintenance of the boarding schools.
CONCLUSION
The conclusion made based on the findings of the study is thus: there is inadequacy of human resources in the public boarding secondary school in terms of teaching manpower and boarding personnel.

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

1. The provision of teaching manpower and boarding schools personnel as the human resource should be scaled up (employed) by the State government through the State Ministry of Education and Bayelsa State Education Committee. The adequacy of the human resource will help to manage the boarding schools system for very productivity in terms of teachers’ efficiency and students’ academic performance.

2. State Ministry of Education (SMoE) and Bayelsa State Education Committee (BSEC) should draw a regular and routine supervisory of both the urban and rural areas where the boarding school are situated for proper check on the principals, vice principals, teachers, boarding staff to ascertain maintenance management of the available resources.

3. General staff training, seminar, workshop and replication of other boarding schools who have succeeded in the boarding system in the State.

4. State Ministry of Education (SMoE) and Bayelsa State Education Committee (BSEC) should properly monitor each school principal, vice principal welfare and cooks on the supply/distribution of resources such as the instructional materials, boarding facilities and food stuff so that there will be adequacy and not experience insufficiency.

5. The government should increase the remuneration, give allowances, pay up promotion arrears of teaching staff and boarding personnel and the management of public boarding secondary schools in Bayelsa State will be better off when the teaching and boarding personnel are financially satisfied.

REFERENCES


