

Science Educational Services in the Niger Delta Public School System in Nigeria

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Doi:10.5901/ajis.2015.v4n1p297

Abstract

Primary Education is the bedrock of any given national education system. It is the terminal education for a great percentage of Nigeria children and among other States in the global south. Therefore it requires a solid foundation, for on this hinges is the success of subsequent levels. The focus of attention had been on the provision of educational services in the public primary school with the attention effect on the status and quality of public primary products. This paper examines the status and effect of science educational services on the quality of public primary school in Ogba/Egbema/Ndoni Laical Government Area (ONELGA) in Rivers State of Nigeria.

1. Introduction

In the recent times, Nigeria primary schools have expanded tremendously. Primary education is the first formal and organized education for Nigeria child. The future of Nigeria child academically depends to a large extent on the quality of our primary education. Primary education seems to constitute a major adversely influencing the declining quality of education will also influence other levels of education positively. Good school is very important to the national development towards social, economic, political growth and development. Solid investment in primary education is an investment in human capital and this will lead to over all national development. The pupils will have power of independent thought and action and this will positive influence their behaviour.

The National Policy on Education (1981) defined primary education as an institute for children aged normally 6-11 years plus. This document rightly observed that since the rest the whole education system is built up on it, the primary stage is the key to the success of failure of the whole educational system. Section 4 and sub section C of the same document also emphasized that in pursuance of the goals of primary education that educational services shall be provided by government and this provision shall be adequate so as to increase the quality of primary education in Nigeria. The same document explained that the goal of National Policy on Primary Education includes:

1. The inculcation of permanent literary and numeracy, and the ability to communicate effectively.
2. The laying of a sound basis for scientific and reflective thinking
3. Citizenship education as a basis for effective participation in and contribution to the life of the society.
4. Character and moral training and development of sound attitude.
5. Developing in the child ability to adopt to his changing environment
6. Giving the child opportunities for developing manipulative skills that will enable him to function effectively in the society, within the limits of his capacity.
7. Providing basic tools for further educational advancement, including preparation for trade and crafts of the locality.

The educational services as in the same document include Establishing a school library; Establishing basic health services; Counselling services; Education resource centre.; Specialist teachers of particular subjects such as mathematics, science physical education, language arts (in relation to English, French, Sign Language and Nigeria Languages) Librarian, Music, Fine Art and Home economics. These educational services form part and parcel of fee total requirement in the process of primary education in Nigeria. It is on this assumption that I lead to examine the effort of education in Nigeria. It is on this quality of public primary schools in Rivers State. The question one will ask is how far has laudable objective been achieved in the public primary schools in Rivers State, Nigeria?

2. Library Services

A reflection on the national policy on education (1981) reveals that libraries are one of the most important education

services we need in the primary school. This is because it helps to complement classroom instruction. Library is a collection of books. It is also at place where people to and read and carry out research. Ahiauzu (2002) defined library as a collection of books and other forms of record house. He also explained that it is an organized and interpreted to meet broad and varying needs of persons for information knowledge, recreation and aesthetic enjoyment. He further summarized the use of library as follows. "Library services in the public primary school will aid in teaching and learning and even in the attainment of the objectives of primary education.

Libraries are important elements. It is also an integral part of the educational system. It normally occupies the central and primary place in school. This is because library serves all academic functions in the school by supporting its aims and objectives. Library also plays a central support role in the education programmes and that it is responsive to curriculum development to groups and individual needs and change in the teaching methods. The scope of knowledge has become too vast to be covered within the boundaries of classroom instruction hence; libraries are established to aid this expanding challenge McColvin (1961). A close observation of the provision of objectives seems to have very close ties. This is because in the primary education are innumerable. The basic principle of teaching is for learning to take place. The teacher must have the dept knowledge of the subject matter. The subject matter must be adjusted to suit the learner.

The library aids in the teaching, learning and it takes proper care of academic relevance and large comfortable reading space for comfort of pupils and teachers. Library will help our pupils to responsible and functional members of the society. A survey conducted at the various public primary schools in Rivers State revealed that the educational service for a long time has not been implemented in the public primary school. This could be due to lack of commitment on the part of government and state ministry of education to understand the need to provide fund for establishment of libraries in public primary schools in the state. The ministry through aid from government should train librarian and library assistant for this service. The attainment of this objective will help to bridge the gap between public primary school and private primary school in terms of quality.

3. Counseling Services

In the attainment of primary education objective, government promised establishment of counseling services in the primary schools. Counseling services has a lot to contribute in the intellectual development of the primary school child. Counseling according to Amadi (1991) is helping relationship whereby a counselor helps a client in person to face to face encounter, to solve his educational, social vocational or personal problems, by identifying his own resources and environmental opportunities. She emphasized that it is a helping process by which the pupils is helped by the counselor to behave in a more rewarding and satisfying manner. This implies that the counselor provides information and reactions which stimulates the pupil to develop positive behaviour which enables the child to deal more affectively with him and his environment.

The primary school counselor plays dual role. She is basically concerned with helping the child to solve his educational, vocational and personal problems as well as counseling the classroom teachers, other staff and parents so that they will become more effective in the solution of their problems. A close examination of the concept of guidance counseling shows a close relationship between the objectives of guidance, counseling and objective of primary education. For instance, both objectives aims at helping to develop the child so that he will be a sound individual who will function effectively in the society within the limits of the capacity. Counseling is also based up on recognizing the dignity of man and his rights to choose. The pupils learn about himself, the realities of his situation and how to solve his problem in a rewarding manner.

The proposal for counseling services has not been implemented in the public schools. This implies that no public primary schools in the state has a practicing counselor whose duty is directly concerned with helping the pupils to solve their vocational and even emotional problems in the school. The absence of a practicing counselor in public primary school creates a big gap between the quality of the products primary school and private primary school in the state.

It was clearly observed that government will make adequate provision of specialist teachers of particular subjects. This could be to reduce the work load of classroom teachers who teaches all the subject including those he or she does not have background knowledge in these particular subjects includes mathematics, science, physical education, language arts, music, fine art, and home economics. These subjects were picked because of their importance and use in everyday life and everywhere in the world. They are also important in developing logical reasoning as well as the need for other discipline.

To lay a solid foundation of these selected subjects in the primary schools, the teacher must have good

background of the subject he is teaching. This is because he cannot teach what he does not know. For this, he must have a possession of good grasp of the subject matter. A teacher that has an in-depth knowledge of the subject to be taught find it easier to put it across in a variety of ways for the understanding of the pupils. Unlike the teacher who feels insecure, who is devoid transmitting his or her feeling to the children. On the other hand, the teacher who has confidence, understand, interest and enthusiasm, love for mathematics has gone a long ways towards insuring success.

Nenty (1992), pointed out that teacher cannot teach effectively a subject he neither has a high value for nor appreciate sufficiently. He added that the teacher has to like to teach the subject and be committed to ensuring that the pupils know it and she also has to be convinced of the usefulness of the subject to the learner and determined to make sure that the learner is not handicapped in life as a result of his or her not being taught the subject well. It is based on all these that government deemed it necessary to make adequate provision for specialist teachers to teach these particular subjects in the primary school so as to achieve the general objective of primary education.

The same document also emphasized that the major aims of teaching English in the primary school is to inculcate in the children the ability to communicate effectively. English language is one of the most widely spoken languages in the world. It has also helped to link Nigeria with other nations of the world and so it is important that primary school pupils must acquire the skills and ability to communicate effectively in the language. In support of this, Allah (2000) explained that the primary level is the level for teaching the basis. He added that the skills of speaking, writing, listening and reading should be incorporated in the lesson and duty of the teacher should make the lesson child centred. Realizing the relevance of English in attainment of primary education objective government proposed for provision of specialist teachers who must have proper training and communication competence in the language. This objective has not been achieved in the public primary school in Rivers State School system in Nigeria.

The prominent position given to science at all levels of our educational system is an indication of what role it lays in our national and individual lives. Science is very important in the education of primary school child. According to Uche (1992), science is a systematic study of nature, it is knowledge arranged in an orderly manner especially knowledge obtained by observation and testing of facts. He also pointed out that science is a peculiar discipline, distinguishable from other fields of study. This implies that science should be well taught at the primary school level.

The science teacher at the primary school must be cognitively and affectively rich. He must be exposed towards the subject and so will be able to lay a good cognitive and effective background for the pupils. He must keep abreast of changes in scientific knowledge and changes in the approaches to the teaching of science. He must be aware of problems of individual difference in the pupils and the capacity to improvise and utilize environmental resources for teaching and learning of science. The teacher must understand the need to lead pupils to achieve meaningful learning and not rote learning.

4. Educational Resource Centre

Meaningful teaching and learning takes place when the learner is fully involved in the process through the use of well prepared and presented variety of instructional resources. This is because, the use of variety of resources gives the learner the opportunity to experience, observes, hears, touches even manipulates things, it is with this understanding that the Federal Government through the National Policy on Education 1981 issued policy statement that education resource centre should be established in the primary schools in the country.

According to Onyejemezi (1988) since the introduction of formal education in Nigeria, the use of resources for improved teaching the learning activities has been identified by both colonial and federal school are either not being use at all or are not fully used in teaching and learning. Onyejemezi (1988) found out some reasons responsible for the under utilization of the available resources in the schools as the resources are not well organized, and managed in the schools and no resource person and centre. Secondly, the poor attitude of some head teachers and lack of support and encouragement from the ministry of education.

Onyejemezi (1988) explained that a school resource centre is an agency in the school. It is responsible for stimulating active creation and use of resource collections, she pointed out that this agency is usually located in a convenient space within the school. The main aim of a school resource center is to make resources and new techniques available for teachers and learners. The use of materials will improve the quality of teaching and learning however the centre does not exist in the public primary schools in Rivers State.

The importance of both human and material resources towards the achievement of educational goals cannot be over-emphasized. Teachers and facilities constitute very important resources of education. These are vital to the realization of school goals and objective. It is obvious that education has over the years been under funded. This is

particularly true as the federal government could not afford up to half of the total percentage of the UNESCO's stipulation of 25% of total budget allocation to be made to education over five years. The situation is precarious at the state and local government in the provision of social services, which among others include education.

One would expect the funding of education especially in the primary school level to be adequate. Despite the expectation above, our primary education and associated essential services are still at their embryonic stages of developing with poor funding, which lagged behind in every aspect of life. Suffice it to say that inadequate supply of primary' education human and material resources makes it impossible to adopt some effective and efficient teaching and learning process in our schools. We cannot therefore, isolate the realities of Nigeria Primary schools from the value and orientations of their pupils. In other words, any study of our primary schools must unavoidable take cognizance of the realities of their places of study.

5. Methodology

The study utilizes a simple survey to gather necessary data on the status of our primary schools (human and material resources). The target group of this study comprised 300 primary school teachers randomly selected from 30 primary schools not withstanding their sex from ONELGA to stipulate the conditions of our primary school. For each primary school, 10 primary school teachers were selected through simple random sampling technique. The major instrument for data collection was the structured questionnaire used administered face to face to these teachers. The data collected were based on the responses and were analyzed using mem response and rank order.

6. Results and Discussions

The findings of factors responsible for primary school low status and quality showed that there is poor condition of services, poor environment with dilapidated buildings etc. Nwadiani (1993) pointed out that the learning environment of public primary schools in most parts of Nigeria is inhibitive and hostile to learning. Nobody likes to teach in primary he/she may not even have a stool to sit down. There is lack of learning; chairs, and tables, shortage of classroom, classroom without windows, and generally the existing infrastructural facilities are inadequate. Anything notwithstanding, primary school is the most important level of our educational system because it is the foundation of the system.

Table 1: Human factors, status and quality of primary school teachers.

S/No. Factors	Mean Response	Rank Order
1. Inadequate qualification of our primary school teachers	2.03	6 th
2. Teachers negative personal and professional behaviour	3.38	4 th
3. Poor image of primary school teachers	4.16	2 nd
4. Poor training and retraining of specialist teacher	2.17	5 th
5. Wider society negative influence on primary school teachers	3.61	3 rd
6. Poor condition of services	4.57	1 st

Table 1 shows that poor condition of service (mean = 4.57) is a serious factor that affect their work. Obviously this has been an age long problem as there is a situation degenerating into low esteem. Poor image of primary school teacher was also perceived as a problem by respondents. This suggests that primary school teachers have poor image before the Nigeria society irrespective of their qualifications. This has affected the status and the quality of public primary school products in Nigeria. Primary school teachers indicated that their salary is not paid regularly and not even on time.

Table 2: Material resources in primary schools

S/No. Factors	Mean Response	Rank Order
1. Inadequate classrooms, chalks and chalkboard	4.25	3 rd
2. Poor library facilities	4.17	4 th
3. Inadequate health centre I sick bays	4.12	5 th
4. Lack of counseling units	5.03	1 st
5. Lack of resource centres	4.48	2 nd

The findings on table 2 shows that lack of counseling units ranks first, implying that there is lack of this unit in the primary

schools. According to Amadi (1991) counseling is a helping relationship whereby a counselor helps a client in person to person encounter to solve his educational, social, vocational or personal problems. It was also explained that the counselor provides information and reactions which stimulates the pupils to develop positive behaviour. This information will help the pupils to know why they are in school irrespective of their background.

Another inadequacy that was identified is lack of resource centres which ranked second. Though resource materials exist in schools, they are not used at all or not fully used in teaching and learning. This could be attributed to a lot of reasons as follows: poor teacher education, lack of training and retraining of teacher, lack of teacher's professionalism etc. School resource centres which is an agency in the school that stimulates active creation of resource collections is not in existence in the some public primary schools. On this note, Onyejemezi (1991) pointed out that the Federal Government through the National Policy on Education issued policy statement on the use of instructional resources and the setting up of educational resource centres at schools. Poor retraining of specialist teacher's ranked 5th from the findings as shown in table 2. A careful examination of the finding shows that poor training and retraining of specialist teacher has posed a problem of shortage of specialist teachers in the public primary schools. This has made primary school teachers to teach all the subjects on the time table, because the trained specialist teachers are not enough as to teach only the subjects they specialized on. In addition to this, Bank (1964) emphasized that to lay a solid foundation of these selected subjects (science, mathematics and English Language) in the primary school, the teacher must have good background of the subject he neither has a high value for nor appreciate sufficiently

7. Conclusion

The effect of science educational services on the quality of public primary schools has been discussed. The importance of both human and material resources towards the achievement of primary education goals was also seen as a passport to attain status and quality of public primary school products. This is because good trained teachers and facilities constitute very important resources of education. These are vital to the realization of goals and objectives of primary school.

8. Recommendations

1. Since the primary school is the bedrock of education, the public primary school provides primary education to majority of the children in the Nigeria society. On this note, adequate provision of science educational services as recommended in the national policy on education (1981) should be made available in the primary' school. In the light of the above, it is recommended that government for proper provision of the needs of primary education should aid her in providing fund.
2. Libraries play immeasurable role in education and as such government and school authorities should establish standard children libraries in every public primary school in the community. Since the will involve much fund, the Parent Teachers Association (PTA) and philanthropists in the community should assist in funding the project. Government should also employ a trained librarian whose duty will be to organize the materials for easy accessibility by the pupils.
3. Counseling services is very vital in the intellectual development of the child. The primary school counselor helps the child to solve his educational and vocational problems. Even the identification of talents and early patterns of development is the joint responsibility of teachers and counselor. Therefore, the establishment of a counseling unity in the primary school children through the preventive role of the guidance counselor.
1. Excellent teaching does well to hold down pupils in the class, stimulate their interest and motivate them to achieve large premium should, therefore be placed on the training and retraining of specialist teachers who will help to lay solid foundation of the selected subjects in the National Policy on Education (1981).
2. A functional school resources and new techniques for improving the quality of teaching and learning available to teachers and learners.
3. Adequate funding at the primary school level is equally desirable. Government should help in the allocation of good finds to primary school education for provision of the educational service. Also the masses should be sensitized through public primary school should explore the potentials of the community resources such as the Parent Teachers Association, the age grade and philanthropist, etc in funding and provision of science education services in the school

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