



Challenges Facing Administration Mathematics Programme in Public Primary Schools in Gwagwalada Area Councils of F.C.T, Abuja, Nigeria

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ABSTRACT

The study investigated the challenges facing the administration of mathematics programme in public primary School in Gwagwalada area council of F.C.T, Abuja, Nigeria. Descriptive research survey design was used for the study. The population of the study comprised sixty (60) respondents, thirty (30) Mathematics and thirty (30) school administrators. The thirty (30) mathematics teachers and thirty school administrators (30) were selected from ten (10) public primary schools. Stratified random and sampling technique was used to select the respondents. The researchers developed a questionnaire which was used in the study. The questionnaire was tagged "Challenge Facing Administration of Mathematics Public Primary Schools Questionnaire (CFAMPPSQ)". The instrument was pattern to four-point likert-type on Strongly Agree = 4, Agree = 3, Disagree = 2 and Strongly Disagree = 1. Observation and checklist was also used in the study. Test-retest method was employed to determine the reliability of the instrument. Simple percentage was used to analyze the data collected. The study revealed that inadequate professional mathematics teachers, inadequate instructional materials, inadequate infrastructural facilities such as (Mathematics laboratories, classrooms, table, chairs, ICT facilities, exam halls), poor capacity development programme of mathematics teachers, institutional corruption, political instability and inadequate funding of mathematics programme are the challenges facing the administration of mathematics programme in public primary schools in Gwagwalada area council of FCT. Based on the findings, the researchers hereby recommended that: government should increase the funding of public primary schools in the country and direct all school administrators to increase the allocation for the administration of mathematics programme in their schools.

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1.0 Introduction

Public primary schools are primary schools owned by the government established purposely for the provision of educational services for the children. Primary school is the post-pre-education system that deals with the provision of functional education for the children. Primary /basic school are educational institutions that prepares the learners for junior and secondary school education. The basic education is designed to provide the learners with basic forms of education. The objective of primary school education include to inculcate functional literacy and numeracy, develop the ability to communicate effectively, and enhance positive attitudes towards cooperation, work, community, national development and continuing learning (UNESCO, 2011). The following programme are offer at the primary level: Mathematic programme, English language programme, Christian Religious Programme, Basic science and technology program and the student will have to choose one from the three major Nigerian languages which include Igbo, Hausa and Yoruba. According to Awofala & Awolola, (2011) the programme and curriculum designed for the first six years of the basic education programme is discipline- based and the curriculum meet up with the basic education goals.

The objectives for primary school education mathematics according to the National Mathematics Curriculum for basic education programme in Nigeria include the following: to ensure acquisition of mathematics literacy to enable an individual function in an information age; to ensure students cultivate the understanding and application of mathematics skills and concept necessary to thrive in the technological world; to develop in the students the essential element of problem solving kills, communication, reasoning and interconnection within mathematics programme and to understand the major ideas, methods and approaches use in mathematics (NERDC, 2007). Mathematics programme is one of the important programme or subject offer in the Nigerian primary school education. Mathematics programme is a science oriented programme. Mathematics programme involves calculation. Mathematics programme a programme that every students will offer from the basic school to the secondary school level while at the higher institutions is a field on it

own. It is a compulsory subject at the basic school to senior secondary schools. Mathematics programme is the foundation for the economic and technological development of any nation. It has been asserted that without mathematics there cannot be any modern developed Society (Azuka,2014, Ukeje, 2005). Mathematics programme in Nigerian primary and secondary schools is a compulsory subject (Federal Republic of Nigeria, 2008). Mathematics Programme is aimed to serve as a tools to accelerate social, economic, political and technological advancement of a country. To achieve this objectives of mathematics programme in the educational institutions, there is need to ensure effective teaching and learning of mathematics programme. The first place to start this is at the primary school level. The development of mathematics programme depends on effective administration of the programme at the primary school level. The achievement of the objectives of mathematics programme depends on effective school administration and effective planning of the programme.

School administration deals with effective utilization of school resources to actualize the objectives of the school. School administration is the application of human and material resources and programme available in the realization of school goals. School administration is the systematic arrangement of both human and materials resources in a scientific ways applying them to actualize the objective of educational institutions. The objectives of school administration include planning to realize the school programme, to ensure effective students administration, teachers development and effective teachers administration, effective resources allocation, progemme development, instructional supervision, reduction of wastage in educational resources, ensure proper coordination of extra curriculum programme, ensure quality education, promotion of accountability in administration and smooth implementation of school programme.

Mathematics programme administration refers to the use of mathematics resources to realize the objectives of mathematics programme in the educational institution. Mathematics programme administration is the act of using both human and materials resources of mathematics in a way that will ensure the actualization of the objectives of

mathematics programme at the school level. The realization of Mathematics programme administration depends on the available materials and human resources available for administration of the programme at the educational institutions. The implementation of the Mathematics programme depends on the level administration and planning of the Mathematics programme.

To realize the objectives of Mathematics programme at every level of the educational institutions, there is need for effective administration of mathematics programme at the primary schools. Teaching and learning of mathematics programme in the Nigerian educational institutions is facing many challenges especially at the primary school level. This study is aimed to investigate the challenges facing the administration of mathematics programme in public primary schools in Gwagwalada area council of FCT, Abuja, Nigeria.

1.1. Research Objectives

The aim of this study is to investigate the challenges facing the administration of mathematics programme in public primary school in Gwagwalada area council of F.C.T, Abuja, Nigeria. Specific objectives:

1. To determine the challenges facing the administration of mathematics programme in public primary school in Gwagwalada area council of F.C.T, Abuja.

1.2 Research Question

The following research question were generated to guide this study:

1. What are the challenges facing the administration of Mathematics programme in public primary schools in Gwagwalada area council in FCT?.

2.0 Literature Review

Mathematics programme in the Nigerian educational institutions is one of the compulsory programme that students must learn and pass before moving to the next class. Due to the important placed on the programme in the educational institutions, many researchers have done studies on different aspect of mathematics programme. Among them is Ogunode (2020) who did a study that investigated the challenges facing the planning of mathematics programme in Federal Capital Territory, Nigeria. The result revealed that there are challenges facing the planning of mathematics programme of senior secondary education and the

challenges includes; inadequate data/information to plan, inadequate funding of planning of mathematics programme, poor capacity development of few mathematics planners, inadequate professional mathematics planners ,political instability, corruption and lack of political will to support planning of mathematics education. The study concluded that the implication of the challenges on the implementation mathematics education is poor implementation of the mathematics programme in the senior secondary schools.

Shield and Kelly (1999) did a study that sourced information from Principals on reasons for poor performance in mathematics. The principals gave the following reasons: ineffective support for mathematics students; poor capacity development of mathematics teachers; inadequate or shortage of instructional materials for teaching mathematics; Learners' attitude towards learning mathematics in schools; poor coverage of the scheme of work for mathematics programme and inadequate time allocated for mathematics programme.

Uwadiae (2009) observed that seventy seven percent (77%) Of the students who sat for West African School Certificate Examination failed to get credit in mathematics in the 2009 as reported by vanguard newspaper. The aim of this study was to investigate the factors responsible for mass failure in mathematics in senior secondary schools across the country. The following factor were identified: shortage of mathematics teachers, lack of instructional materials, the negative attitude of students towards learning mathematics, use of unprofessional teachers to teach mathematics in schools, inadequate learning facilities such of mathematics laboratories, lack of appropriate method of teaching mathematics and overcrowding of mathematics syllables (Femi, 2013).

Infor-guide in (2018) identified the problems facing the teaching and learning of mathematics in Nigerian schools to include: negative attitude of student towards the learning of mathematics, fear of mathematics as a subject, teaching of mathematics without the use of instructional materials, the wrong attitude and value of people toward the studying of mathematics. Some of the problems also include lack of adequate mathematics teachers, inadequate

infrastructural facilities, shortage of learning materials, poor funding of mathematics programme and poor supervision of mathematics programme.

Ogunode (2009) identified the problem of inadequate funding as the major challenge facing the administration of mathematics programme in the educational institutions. The budgetary allocation for the administration of mathematics programme at the basic school, senior secondary school and at the higher institutions is inadequate. The Nigerian government have not been adequately funding the education generally and this is affecting the funding of other programme offers in the educational institutions across the country.

Tata Umar; Abba & Abdullahi (2014) did a study with the aims of finding out the causes of poor performance in mathematics among public senior secondary school students in some selected secondary schools in Azare metropolis of Bauchi state, Nigeria. The result of the study showed that negative students of attitude towards mathematics, fear of mathematics programme, shortage of professional teachers, poor teaching methods, and overcrowding classes are the causes of poor performance of students in mathematics. The study also discovered that developing positive attitude toward learning of mathematics, motivation of students and proper guidance, applying the right teaching methods for the teaching of mathematics, provision of teaching and learning materials and provision of adequate infrastructural facilities are the methods to improving the performance of students in mathematics programme in Azare metropolis of Bauchi state and in Nigeria.

Femi (2013) did a study that investigated the challenges facing teaching and learning of mathematics programme in some selected secondary schools. The result revealed that there are challenges facing the teaching and learning of mathematics programme includes; inadequate professional mathematics teachers, inadequate funding of mathematics programme, poor capacity development of mathematics teachers, inadequate mathematics instructional materials, inadequate infrastructural facilities and planning of mathematics programme.

3.0 Methodology

Research Method

The researchers adopted descriptive research survey design for this study.

Population of the Study

The study population was made of Sixty (60) which comprised thirty (30) mathematics teachers and thirty (30) school administrators from ten public primary schools. Three mathematics teachers and three school administrators (Head master, assistant head master, and HOD) were selected from ten public primary schools in Gwagwalada area councils of FCT, Abuja.

Sample Size and Sampling Method

The population of the study comprised sixty (60) respondents 30 Mathematics and thirty school administrators. Thirty (30) mathematics teachers and thirty school administrators (30) were selected from ten (10) public primary schools. Proportional stratified random and sampling technique was used to select.

Instrumentation

The researchers developed an instruments that was used in the study which was tagged “ Challenge Facing Administration of Mathematics Public Primary Schools Questionnaire (CFAMPPSQ). The research instrument was made up of two section. Section A which seek information on bio-data of the respondents while the section B collected information on the subject matter. Section B part had nine item questions on challenges facing administration of mathematics programme. The instrument was pattern to four-point likeert-type on Strongly Agree = 4, Agree = 3, Disagree = 2 and Strongly Disagree = 1. Observation and checklist was also used in the study.

Validity and Reliability of Instrument

To ensure the face content validity of the instrument, the researchers employed the service of lecturers from University of Abuja to evaluate the suitability of the instrument. The mistakes observed were corrected and suggestions were included for preparing the final questionnaire. Test-retest method was employed to determine the reliability of the instrument. 10 public primary schools mathematics teachers in another area council were administered the same research instrument twice within two weeks. The test-retest reliability coefficient was calculated using Pearson Product Moment Correlation and 0.86 Coefficients was achieved.

Administration of Instrument

The administration of instrument to the public primary schools was administered through a research assistant. The research assistant went to the various public primary schools and hundred percent of the research instrument was collected back from the sampled schools.

Data Analysis Method

Simple percentage was used to analyze the data collected.

4.0 Data Analysis

Research Question One: What are the challenges facing the administration of mathematics programme in public primary schools in Gwagwalada area council in FCT?

Table One: Responses on challenges facing the administration of mathematics programme in public primary schools in Gwagwalada area council in FCT.

S/N	Items	Strongly Agree	Agree	%	Disagree	Strongly Disagree	%	Total
1	Inadequate professional mathematics teachers	35	25	100%	-	-	-	60
2	Inadequate instructional materials	40	20	100%	-	-	-	60
3	Inadequate infrastructural facilities (Maths labs)	18(%)	42(%)	100%	-	-	-	60
4	Poor capacity development program of mathematics teacher	39(%)	21(20%)	100%	-	-	-	60
5	Institutional corruption	31(%)	16(31.25%)	100%	3	10		60
6	Political instability	34(42.5%)	14(23.75%)	65.75	7(20%)	5(13.75%)	33.75	60
7	Inadequate funding of mathematics programme	49	11	100	-	-	-	60

Result from item one from the table one showed that 35(38.75%) of the respondents strongly agreed, 25(36.25%) agree that inadequate professional mathematics teachers is among the challenges facing the administration of mathematics programme in public primary schools. This implies that the majorities of the respondents agreed that inadequate professional mathematics teachers is a challenges facing the administration of mathematics

programme in public primary schools in Gwagwalada area council of FCT.

Result from item two showed that 40(63.75%) of the respondents strongly agreed and 20(36.25%) of the sampled respondents agreed that inadequate instructional materials is another major challenge facing the administration of mathematics programme in public primary schools. This implies that the majorities of the respondents agreed that

facing the administration of mathematics programme in public primary schools.

Result from research question two table two item three showed that 18(90%) of the respondents strongly agreed and 42(36.25%) of the sampled respondents agreed that inadequate infrastructural facilities (Maths labs) is a challenge facing the administration of mathematics programme in public primary schools. This implies that the majorities of the respondents agreed that inadequate infrastructural facilities (Maths labs) is a problem facing the administration of mathematics programme in public primary schools. The researchers personally observed that most of the mathematics students did not have mathematics textbooks recommended for their classes, lack of mathematics laboratories, inadequate instructional materials on mathematics and inadequate infrastructural facilities. Many students do not have chairs and tables and most of the classes are overcrowded. This factors have hindered them to effectively teach and to learn the mathematic programme.

On poor capacity development program, result of item four showed that 39(80%) of the respondents strongly agreed and 21(31.25%) of the sampled respondents agreed that poor capacity development program of mathematics teacher is a challenge facing the administration of mathematics programme in public primary schools. This means that the majorities of the respondents agreed that poor capacity development program of mathematics teacher is a challenge facing the administration of mathematics programme in public primary schools. Mathematics teachers interviewed, all agreed that capacity development programme for mathematics teachers is very poor and not encouraging.

On institutional corruption, result from item five showed that 31(68.75%) of the respondents strongly agreed and 16(31.25%) and 3(31.25%) ticked strongly disagreed, 10(31.25%) disagree of the sampled respondents that institutional corruption is a major challenge facing the administration of mathematics programme in public primary schools. This implies that the majorities of the teachers agreed that is institutional corruption in the administration of mathematics programme in public primary schools is a very big problem.

Result from item six showed that 34(68.75%) of the respondents strongly agreed and 14(31.25%) of the sampled respondents agreed that political instability is one of the major challenge confronting the administration of mathematics programme in public primary schools. This implies that the majorities of the respondents agreed that political instability is a challenge confronting administration of mathematics programme in public primary schools in Gwagwalada area council of FCT.

On the issue of inadequate funding of mathematics programme, 49(31.25%) of the mathematics teachers agreed and 11(31.25%) disagree that inadequate funding of mathematics programme is a problem facing the administration of mathematics programme in public primary schools in Gwagwalada area council of FCT.

4.1 Result Discussion

Result from table item one showed that inadequate professional mathematics teachers is a challenges facing the administration of mathematics programme in public primary schools in Gwagwalada area council of FCT. This findings is in line with Tshabalala and Ncube, (2013) that submitted that inadequate professional teachers, shortage of teaching facilities, inadequate fund to buy learning mathematics, inadequate modern textbooks, overcrowd classes, mathematics teachers poor motivation, inadequate mathematics laboratories and school libraries, ineffective supervision of mathematics programme, teachers transfer, negative attitudes of students towards, automatic promotions of pupils, the negative role of public examinations on the teaching learning process and inequality in education opportunities all affecting the smooth acquisition of mathematics knowledge in schools.

Result collected from table one item two revealed that inadequate instructional materials is another major challenge facing the administration of mathematics programme in public primary schools. This result is in agreement with Tata Umar; Abba & Abdullahi (2014) who carried out a study that investigated the causes of poor performance in mathematics among public senior secondary schools students in Azare metropolis of Bauchi state, Nigeria. The result of the study showed that negative students of students towards mathematics,

fear of mathematics programme, shortage of professional teachers, poor teaching methods, and overcrowding classes are the causes of poor performance of students in mathematics.

Result on table one item three disclosed that inadequate infrastructural facilities (Maths labs, classrooms, table, chairs, ICT facilities, exam halls) is a challenges facing the administration of mathematics programme in public primary schools. This result supported the discovered of Tata Ogunode (2020) who concluded that inadequate infrastructural facilities is a major problem facing teaching and learning in majorities of public primary school in Nigeria.

On poor capacity development program on table one item four, result indicated that poor capacity development program of mathematics teachers is a challenge facing the administration of mathematics programme in public primary schools. Poor development of mathematics teachers is another factors prevent effective administration of mathematics programme in the primary school education in Nigeria. Many mathematics teachers teaching presently in the Nigerian basic schools are not constantly been trained in the modern methods of teaching mathematics and this is affecting their performance in the classroom because of the massive failure recording in mathematics exams across the country (Ogunode, & Olaoye 2020).

On institutional corruption, result obtained from one table one item five showed institutional corruption is challenges facing the administration of mathematics programme in public primary schools. This result is in agreement with Ogunode & Olaoye (2020) who submitted that institutional corruption is a factor affecting the entire educational institutions in Nigeria and this is also affecting the administration of programmes in the schools.

Result from table one item six showed that political instability is a challenge to administration of mathematics programme in public primary schools. This findings collaborates with the result of Ogunode & Olaoye (2020) who submitted that political instability is affecting the development of education. Many educational programme have been put to hold because of political instability.

On the issue of inadequate funding of mathematics programme, result collected revealed that inadequate funding of mathematics programme is a problem facing the administration of mathematics programme in public primary schools in Gwagwalada area council of FCT. This result is in line with the submission of Ogunode (2009) who submitted that the issue of funding mathematics programme by the government and other institutions has been a major problems. The budgetary allocation to the education sector and mathematics programme in particular has been grossly inadequate. The education sector in Nigeria has not received much priority in budgetary allocation as it deserves over many years. Mathematics education has a lot of potentials and prospects to offer to the young Nigerian if the government will adequately fund the programme in all aspect of education.

4.3 Conclusion

The objectives of the study was to investigate the challenges facing the administration of mathematics programme in public primary schools in Gwagwalada area council in FCT. The data collected and analyze revealed that inadequate professional mathematics teachers ,inadequate instructional materials, inadequate infrastructural facilities such as (Maths labs, classrooms, table, chairs, ICT facilities, exam halls), poor capacity development program of mathematics teachers, institutional corruption, political instability and inadequate funding of mathematics programme is a problem facing the administration of mathematics programme in public primary schools in Gwagwalada area council of FCT.

4.4 Recommendation

Based on the findings, the researchers hereby recommended that:

- 1) The government should increase the funding of public primary schools in the country and direct all school administrators to increase the allocation for the administration of mathematics programme in the country.
- 2) The government should provide more infrastructural facilities like (mathematics laboratories, classrooms, exam halls, tables, chairs and offices). This will help to reduce the problem of class overcrowding.
- 3) More professional teachers should be employed and deploy to all the public primary schools in

Gwagwalada area council of FCT and in the country generally.

4) Training and retraining programme should be constantly organized for the mathematics teachers in public primary schools across the area council in FCT, Abuja.

5) The government should fight all the institutional corruption in the ministries and agencies that divert educational funds meant for development of school programme for personal use. This will help to develop the mathematics programme in all public primary schools in Gwagwalada area council of FCT and in the entire country at large.

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