

# Mathematics as a Tool for Re-Branding Nigeria: Implications of Difficulties in the Teaching and Learning of Mathematics by In-Experienced Teachers in Universal Basic Education

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## Abstract

Mathematics education is the pivot of all sciences. Achievement of Nigeria's vision 20,2020 therefore is based principally on the successful attainment of the objectives of mathematics education at all levels. The removal of all impediments or problem areas in the achievement of the goals of mathematics education has become imperative at all levels of education so as to maintain the enviable position of mathematics in nation building. The Curriculum Development Centre (CDC) Chief Examiner's report about the very poor performances of students in mathematics in JSSCE in Uzo-Uwani LGA of Nsukka Education Zone of Enugu State gave rise to the Curriculum Development Centre (CDC) workshop of 1995. This research work was therefore conducted at Uzo-Uwani LGA, an educationally disadvantaged area in Nsukka education zone to discover whether the causes of poor performances in mathematics as discussed in 1995 by CDC are still in existence or not. There was no random sampling exercise since all the 13 (thirteen) post basic and 16 (sixteen) basic schools in LGA were used in the study. A total of 6 (six) research question and 2 (two) hypotheses guided the study. Findings made are that all areas of difficulties identified by the CDC in 1995 are still in existence. Insufficiency of qualified mathematics teachers, lack of instructional materials, difficulties in the teaching and learning of number and numeration, addition, subtraction, simple equations etc. and difficulties in the teaching and learning of geometry, trigonometry are still there. Recommendations made are include that qualified teachers should be recruited for basic and post basic levels of education, further training through workshops, seminars and sandwich degree programmes be made available for the teachers at that level of education to help remove these bottlenecks.

## Introduction

In the National Policy on Education (NPE) of the federal republic of Nigeria became fully spelt out (FRN, 2004). The National Policy States that:

“Basic education shall be of 9 (nine) years duration, comprising 6 (six) years of primary education and 3 (three) years of junior secondary education. It shall be free and compulsory. It shall also include adult and non-formal education programmes at primary and junior secondary education levels for adults and out-of-school youths”

The specific goals of basic education as specific goals education as spelt out in the policy are:

“The goals shall be the same as the goals of the levels of education to which it applies (that is primary education, junior secondary education and adult and non-formal education)”

At the primary, junior secondary, and adult and non formal education programmes, their respective goals spelt out clearly the importance attached to mathematics education. At the primary level for instance, the first two goals out of 7 (seven) of them gave credence to mathematics education as below:

- To inculcate permanent literacy and numeracy and ability to communicate effectively.
- To lay a sound basis for scientific and reflective thinking (FRN 2004: 13)

The curriculum provisions at this level also included mathematics as one of the core subjects. At the junior secondary level the third of the five specific goals of education is to:

“Provide trained manpower in the applied sciences, technology and commerce at sub-professional grades”. Mathematics occupied the third position of all the core subjects in the curriculum. At the Non-formal education programme mathematics education also takes a very good position. Out of the 5 (five) goals of Mass literacy, Adult and non-formal educations, the importance of mathematics as tool for re-branding Nigeria was also re-emphasized in the third goal, viz “to provide education for different categories of completers of the formal education system in order to improve their basic knowledge and skills. According to the Blue Print of the

National Mass Education Commission

(NMEC,1990) the world “Basic Literacy” means “the possession of mechanical skills of writing, reading, computation, communication in written symbols and the acquisition of competencies, knowledge and critical consciousness required for effective performance of their social, political and economic roles and the appreciation of basic issues and features of ones environment (Blue Print 1990, Timer, 1992).

From the forgoing, it is evident that mathematics as a tool for re-branding Nigeria is fully given recognition in all levels of the basic education programme (primary, junior secondary, adult and non-formal education). For instance at the primary level, the objectives of mathematics education programme are: (FRN 2004:14)

- Acquisition of certain mental attitudes that will facilitate the development of problem solving attitudes and strategies.
- Acquisition of the techniques of representation and interpretation of numerical and non-numerical forms of data.
- Training of the mind in the abilities to measure, approximate and estimate numbers and other quantities.
- Acquisition of functional and basic numeracy skills, relating to how and when to use arithmetic operations on both whole numbers and decimal fractions and
- Acquisition of spatial concepts and the ability to represent these concepts using such tools as maps, and other scales for drawing (NPE, 2004). At junior, senior secondary education level, some of the objectives of math education are
- Development of creativity, originality and curiosity in the learners at both levels
- Acquisition of relevant manipulation skills
- Laying emphasis on the wide applicability of mathematics in various fields of learning and in the world of work and
- Leading learners to discover and appreciate the beauty and elegance of mathematics (FRN,2004: 29)

Eze and Onyego (2005) observed that the system of education which Nigeria inherited from the colonia administration had some defects in terms of its contents and philosophy with respect to the needs of the country. These defects, according to the authors manifested to the in-ability of the system of education to serve the manpower needs of the ever growing commerce, industry and public sector of the country. According to Eze and Onyego (2005) mathematics occupies a central place in school curriculum. However studies carried out have shown that there is currently low interest in the study of mathematics and mathematics related disciplines at all levels of education in this country. Obodo, (1997) and Iloputaife, (2004) in their respective studies, emphasized that there is a general impression that mathematics is a difficult subject naturally. Obodo (1997) and Iloputaife,(2004) recognized that the persistent poor performances of students in mathematics especially at secondary levels of education (junior and senior) and the continued low enrolment of students in mathematics and science related disciplines in tertiary education have become sources of worry to both students and parents in this country. Students poor performances in the senior school certificate examination (SSCE) and National Examination Council (NECO) examination, to mention but only these two have prevented many Nigerian children from offering the courses of their choice at tertiary levels of education. These findings made by these interested researchers like Obodo (1997), Iloputaife (2004), Amadi (2005) pointed to the continued poor performance of students in mathematics both in Junior and senior secondary school levels in their end of programme examinations (Junior and senior school certificate examinations respectively). The chief examiner’s reports in mathematics (paper 2) (Theory part of mathematics) in the SSCE examination in 1988 and 2000, contained the following as shown in the table below:

**Chief Examiners Report in Mathematics (paper 2) in SSCE.**

Year	1988	2000	2001	2002
1.	Most candidate lacked adequate preparations for the examinations. There were many unexpected errors.	The same as 1988	Many of the students performed poorly in mathematics during this period. Males perform more than female in the examination.	The same as 2001.
2.	Students showed ignorance of key words like find, calculate, simplify among others	The same as 1988	The same as in 1988	The same as in1988

These findings, as indicated in the chief examiner’s report in the table above can not be said to be non-

existent even at the junior secondary and primary education levels in this country. After all, a child taking the SSCE should have passed from the primary to junior secondary levels before going to the senior levels. Uzo-Uwani Local Government Area is one of the most educationally backward Local Government Area in Enugu State. The chief examiners report was received with great attention by interested persons, especially educators. Similarly, Kenth (1988) opined that a single simultaneous occurrence of two events is enough to establish a bond. This is so since it brings about new behaviour patterns. Problems facing the teaching and learning of mathematics derive from either one or two or a combination of the following factors, as pointed out from communiqués from the workshops held by National Education Research Development Centres (NERDC) in 1988 and that of Curriculum Development Council (CDC) in 1995:

- Lack of interest in the subject
- Lack of basic knowledge of aspects of subject.
- Gender issues associated with learning environment
- Home factors in learning of the subject
- Teacher related factors.
- Students' teachers related factors and poor background of students in the subject resulting from their inability to know early enough the importance of mathematics in the modern world of science and technology. (FRN 2004: 41)

It should be recalled that in an effort to solve these perceived problems, the Nigerian Educational Research and Development Council (NERDC) In 1995, another workshop was organized by the Curriculum Development Centre (CDC) on the difficult concepts in mathematics at the Junior Secondary School levels. The aims of these two workshops were three fold, namely to:

1. Identify difficult concepts and topics or problematic areas in mathematics at the junior secondary school level.
2. Identify reasons why they are considered by these difficult at that level.
3. Proffer specific solutions to these problems imposed by these difficult concepts in order to assist both students and teachers at Junior School in area with the area of achieving desired objectives.

Those concepts in mathematics in Junior Secondary School Curriculum and perhaps at primary school level, leading to poor performance of students at these levels, and which have also continuously affected students' performances in the subject, when they get into senior secondary levels, the results of which are usually reflected in their poor performances in the SSCE and NECO examinations, still need to be re-identified and re-echoed for the benefit of teachers, especially the new, fresh and in-experienced teachers who are usually found in Junior Secondary School levels. This is very imperative since the situation in the achievement of students in mathematics in Junior Secondary School levels, and even at other levels remain almost unchanged nationwide. This is evidenced from the observations of Amadi (2004) that the statistics of student's performances in the SSCE shows that Nigerian Students usually obtained poorest results in mathematics when compared with counterparts from other West African Countries that take part in the WAEC in end of Secondary School programme examinations. In this paper, inexperienced teachers are those with less than five years of teaching experience in the secondary education.

### **Statement of the Problem**

The problem of this study is the identification of those mathematical concepts and other factors that still pose as difficulties in the teaching and learning of mathematics by gender, as perceived by in-experienced and (even experienced teachers) at the basic and post basic education level of education in this country. This new research when added to the NERDC and CDC workshops of 1988 and 1995 respectively serve as a way of re-emphasizing, re-echoing, and re-exposition these difficult concepts which now are ill-winds that have been blowing nobody any good in this country. In the light of mathematics being a tool for re-branding Nigeria, in this era of industrial revolutions, technological advancement and in the light of Global Challenges and Millennium Development Goals, the importance attached to mathematics to national development cannot be over-emphasized. Reasons for the continued current poor performances of a significant percentage of students in mathematics as observed, in internal and external examinations (SSCE, NECO, JSSCE and FSLC) in most parts of this country, still need to be explored, investigated upon, and possible remedies to the difficulties encountered in the teaching and learning of mathematics be identified in order to achieve maximum expertise in the utility of knowledge. For instance in most school in Enugu State, one can hypothetically say that not more than 5% of the candidates that take each of these examinations get up to distinction in mathematics, not more than 40% get credits and others get either passes or failure. The place mathematics as a tool for re-binding Nigeria need to be guided jealously in order to remove all possible areas of set backs in achieving set goals at all levels. This study will therefore, contribute in bringing about improvement in student performances in internal and external examinations in Uzo-Uwani local government of Enugu state.

### **Purpose of the Study**

The main purpose of this study is to identify those factors, concepts that still pose as difficulties, in the teaching and learning of mathematics at the primary and junior secondary school levels of education as perceived by new teachers in the field. Specifically, the study will help in the following ways:

1. Finding out if insufficient numbers of qualified mathematics teachers still constitute a problem in the teaching and learning of the subject at that level.
2. Finding out if lack of adequate instructional materials, is still perceived as a problem
3. Finding out if extent of motivation of teachers at that level is still perceived as a problem area.
4. Finding out if inadequate infrastructures such as school power plant; classroom blocks, generator, laboratories constitute problems.
5. Finding out if the extent to which concepts in mathematics like Geometry, Algebra, number and numeration still pose as problem areas during curriculum development and curriculum evaluation.
6. Finding out the degree to which the teaching of whole numbers, fractions, and trigonometry still constitute problem areas in teaching and learning.

### **Research sample**

This study was carried out in primary and JSS levels of education in Uzo-Uwani L.G.A of Nsukka in Enugu state. Uzo-Uwani L.G.A is an educationally backward LGA in the state and has been attraction attention of educationists. In this study a random sample of 10 primary schools and 10 teachers one from each school and random sample of 10 JSS Schools and 10 teachers together with a random sampling of 240 JSS students, (10 from each of JSS 1, JSS 2, JSS 3), were used.

### **Scope of the Study**

This research work is limited to in-experienced teachers of mathematics in junior secondary, those teachers with less than three years experience. The work also covered primary school teachers in the area. The research work was limited only to the difficult concepts in the teaching and learning of mathematics at the basic and post basic education levels. Those difficult concepts in general mathematics like geometry, Algebra, Trigonometry number and numeracy, addition, subtraction, multiplication etc. The work is also limited to schools in Uzo-Uwani LGA of Enugu State.

### **Research Questions**

The following research questions were posed to guide the study:

1. To what degree are teachers in primary and Junior Secondary Schools levels in Uzo-Uwani L.G.A. sufficient or adequate in number to guarantee un-interrupted teaching and learning, as perceived by inexperienced teachers?
2. To what degree do the teachers have adequate instructional materials for effective teaching and learning?
3. To what degree are teachers in basic and post basic levels motivated for effective curriculum planning and development?
4. To what degree are there adequate provision of functional schools plants in the school in the LGA/
5. To what extent do the teaching and learning of concepts in mathematics in Junior Secondary S like Geometry, Algebra, number and numeration for primary schools constitute problem areas?
6. To what degree do the teachings of whole numbers and fractions, trigonometry constitute problem areas in the teaching and learning process at both levels?

### **Research Hypotheses**

The following hypotheses have been formulated to guide the study. Each will be tested at 0.05 levels.

**Ho<sub>1</sub>** There will be no significant difference between the mean responses of male and female teachers in the degree to which teaching and learning of identified concepts still constitute problem areas in the teaching and learning at primary school levels in Uzo-Uwani LGA of Nsukka Education Zone?

**Ho<sub>2</sub>** There will be no significant difference between the mean responses of male/female teachers in primary schools in the extent to which there is inadequate number of mathematics teachers in primary school levels in Uzo-Uwani LGA of Nsukka Education Zone.

### **Methodology**

The design employed in this work is the descriptive research survey design. This type is considered appropriate since the study sought representative views of teachers with less than 3 years experience in the field at the JSS level as well as views of teachers of Primary Schools on the difficulties in the teaching and learning of some concepts in mathematics by gender. There is a total population of 13 (thirteen) Secondary Schools in the L.G.A.

The population of students in Junior Secondary School classes is 4480 made up of 2414 males and 2066 females and the total population of teachers at that level is 116, made up of 86 males and 30 females. In the same vein there are 5760 students in the 16 primary schools in the LGA where 10 primary schools and 10 teachers were randomly relected in the ratio of one teacher in each of primary schools and secondary schools. A simple random sample of 30 students each also randomly selected from JSS 1: JSS II: and JSS III classes of the schools making it a total of 240 (two hundred and forty) that were sampled in this work. Instruments used were questionnaires with 17 items for the students and 14 for teachers. These items sought information on difficulties in teaching and learning of mathematics by gender in primary and JSS in Uzo-Uwani Local Government Area Secondary Schools. Part A contained information on respondents; Part B contained information on quality and quantity of teachers and other factors that possibly constitute problem areas in teaching and learning of mathematics at both levels.

Instrument was validated by three experts, two in Measurement and Evaluation and one in education mathematics of the University of Nigeria, Nsukka. The instruments have on the average reliability co-efficient of 0.78. Using Cronbach's Alpha. Data were collected by the researcher himself with the help of 8 (eight) other teachers of Senior Secondary classes, one from each of the eight schools randomly selected. After administration of the questionnaire instruments, they were collected from the students and teachers in each of the schools. This was to ensure that responses received from students from one school do not influence those students' responses from other schools yet to be visited. The researcher also undertook a follow-up interview with the sample of students from each school.

**Table 1: Responses of (10) ten of the in Experienced Teachers of JSS in Uzo-Uwani Secondary School with Respect to the Items.**

S/N	Item	SA (4)	A (3)	Disagree (2)	Strongly Disagree	Total	Mean
1.	Teachers in JSS classes are adequate in number.	-	-	10	0	10	2.0
2.	Teachers in JSS classes have adequate instructional materials for teaching and learning of the difficult concept in JSS maths classes.	-	2	8	2	10	1.8
3.	Mathematics teachers in JSS classes are adequately motivated.	2	6	2	2	10	2.4
4.	School plants in schools in Uzo-Uwani are very functional.	-	1	8	1	10	2.0
5.	Teaching of concepts in Geometry, triangles, squares, circles, prism, parallelograms are always easy to understand.	-	1	7	2	10	1.9
6.	Teaching of concepts of numbers and numeration, addition subtraction, multiplication etc do not constitute difficult areas in JSS mathematics.	-	1	8	1	10	2.0

From table 1 answer to research question no 1 shows that the new teachers disagree that there are sufficient or adequate number of mathematics teachers in JSS Classes in Uzo-Uwani secondary schools. This result can also be ascertained from the total number of teachers in JSS level. There are 116 teachers (80 males, 36 females) for a total population of 4480 JSS students.

Therefore teacher-student ratio at JSS level is 39.1

From table 1 answer to research question no 2 was obtained. It shows that the JSS teacher also disagreed that they have adequate instructional materials for teaching students mathematics at JSS level. Answer to research questions 3, shows that the inexperienced teachers disagreed that they are adequately motivated. Answer to research question 4, shows that the teachers also disagreed that the school plants are functional.

Answer to research question 5 shows that the teachers disagreed that teaching of concepts in geometry, triangle, squares, circles are usually easy to understand by the students. Answer to research question 6 shows that the teacher s disagreed that concepts in mathematics like number and numeration, addition, subtraction do not constitute problem areas in teaching and learning of mathematics in JSS and primary levels.

Answer to research question no 7 shows that the teaching of concept in trigonometry, solving of sample equation for values of numbers, simple interest, profit and loss accounts do constitute problem areas as perceived by the teachers. Answer to research question 8 shows that the teachers strongly agreed that the following are the root causes of qualified mathematics teachers, insufficiency in number of students, lack of interest an mathematics by the teachers, lack of instructional materials in this order. The teachers also strongly agreed that lack of mathematics laboratories contribute problems of poor performances in the subject.



**Table 2: Responses of Students of JSS Class in Uzo-Uwani with Respect to the Items of the Instruction.**

S/N	Item	SA (4)	A (3)	Disagree (2)	Strongly Disagree	Total	Mean
1.	Teachers in JSS classes are adequate in number.	4	1	20	1	30	1.7
2.	Teachers in JSS classes have adequate instructional materials for teaching and learning of the difficult concept in JSS maths classes.	-	-	22	10	30	1.7
3.	Mathematics teachers in JSS classes are adequately motivated.	-	18	4	8	30	2.7
4.	School plants in schools in Uzo-Uwani are very functional.	-	24	20	2	30	1.7
5.	Teaching of concepts in Geometry, triangles, squares, circles, prism, parallelograms are always easy to understand.	-	5	15	10	30	1.5
6.	Teaching of concepts of numbers and numeration, addition subtraction, multiplication etc do not constitute difficult areas in JSS mathematics.	-	-	15	15	30	1.5

From table 2, it can be seen that answers obtained from students with regards to the items of the instrument are exactly same with those of their teachers except in item no 3 where the students tend to agree that their mathematics teachers are adequately motivated.

**Table 3: Influence of Home Factors in the Teaching and Learning of Mathematics and Gender Issues as Perceived by Students.**

S/N	Item	SA (4)	A (3)	Disagree (2)	Strongly Disagree	Total	Mean
1.	Farm work makes it difficult for students in the L.G.A to study mathematics.	180	30	10	20	240	3.0
2.	Lack of adequate knowledge of the importance attached to the application of mathematic in everyday life, makes students loose interest in the subject.	-	170	30	40	240	2.4
3.	Mathematics is related to things to things to do at home.	160	40	20	20	240	2.4
4.	Some parents discourage their children from learning the subject because they think it is difficult and useless.	150	50	20	20	240	2.00
5.	Boys participate more than girls in mathematics class attendance.	20	20	10	10	240	3.0
6.	Teachers create more chances with males than females.	20	30	180	10	240	1.0
7.	In all schools males and females learn equally.	30	190	20	-	240	2.0

From the result obtained from this table major factors that influence teaching and learning at JSS level in the LGA are items 1,2,3,4,5, and 7 in this order.

**Table 4: Responses Of Teachers On The Perceived Gender Factors In The Teaching And Learning Of Mathematics In The LGA.**

S/N	Item	SA (4)	A (3)	Disagree (2)	Strongly Disagree	Total	Mean
1.	Males participate in class discussion than females.	8	2	-	-	10	3.8
2.	Teachers give males better chances to participate in classes than females.	-	4	1	5	10	1.9
3.	Females feel shy to ask questions in class.	7	2	1	0	10	3.0
4.	All males and all females in schools i.e boys and girls participate equally.	6	4	-	-	10	3.6
5.	Females and males may perform equally if the females participate effectively as the boys.	9	-	1	0	10	3.8

Results obtained from this table show that items 1,3,4 and 5 are strongly, identified by the teachers. They indicate that males pay more attention in class work than females.

**Table 5: Primary School Teachers Responses to the Items of the Questionnaire**

S/N	Item	SA (4)	A (3)	Disagree (2)	Strongly Disagree	Total	Mean
1.	Teachers in JSS classes are adequate in number.	-	1	8	1	10	2.0
2.	Teachers in primary schools have adequate instructional materials for teaching and learning of the difficult concepts in mathematics.	-	-	7	3	10	1.9
3.	Mathematics teachers in primary schools are adequately motivated.	-	1	6	3	10	2.2
4.	School plants are very the functional in the LGA.	-	-	8	2	10	1.8
5.	Teaching of concepts in fractions in triangles, squares, circles, prisms, parallelogram etc are always easy to understand by students.	-	-	8	2	10	1.8
6.	Teaching of concepts of numbers and numeration, addition subtraction, multiplication etc still constitute difficult areas in primary school mathematics.	6	2	2	-	10	3.1

From table 4, teachers of primary schools in Uzo-Uwani LGA disagreed that they are adequate in number.

From table research question 2, shows that the teacher disagreed that they have adequate instructional materials.

From table, research question 3 shows that the teachers also disagreed that they are adequately motivated.

Research question no 4, the teachers disagreed that they have function school plan.

Research question no 5, the teachers disagreed that the teaching of concepts in geometry like circles prisms, triangles, squares are always easy to understand by student research question from table show that the teachers agreed that the teaching of concept like subtraction, multiplication etc. still constitute problem areas of the teaching and learning of mathematics in primary school. As to research question 7 results shows that the teachers agreed that any other concepts-simple interest, public and was etc still constitute problem areas mathematics at primary education level is the LGA.

### Discussion of Results

Results obtained for research question1, showed that the in-experienced teachers teaching mathematics in Junior Secondary School classes disagree and received as grossly inadequate the number of teaching students in Junior

Secondary School classes. Answer to research question 2, also shows that the teachers perceive as inadequate, the nature of instructional material used in teaching students. These finds are in agreement with the findings of Amadi (2004) and Obodo (1998) with regards to students, performances in both Junior Secondary School levels in mathematics. The new teachers in Uzo-Uwani Secondary Schools also perceived and disagreed that teachers are motivated to perform their duties. This however, is not in agreement with the opinions of Obodo (1980) and Amadi (2004) respectively.

Results of research questions 4,5, from table shared that the teachers disagreed that school plants are functional and that the teaching of mathematical concepts in Geometry, like Triangles, squares, parallelogram, do not constitute problem areas in the teaching and learning encounter in their classes. So these findings are also in disagreement with the findings of Iloputaife and Obodo (1998) and Agwahah (2000) who have contrary views.

### **Implications of the Findings**

Findings made in this study, suggest amongst others that the causes of difficulties in the teaching and learning of mathematics in JSS classes in Uzo-Uwani Local Government Area, are the lack of fundamental knowledge of the basic concepts in mathematics with regards to these areas students consider as difficult. This might have been noted right from the primary level of education. These problems are also caused mostly by lack of sufficient number of teachers at that level, and their levels of qualification which is mostly National Certificate in Education (NCE). Findings made also imply that teachers at that level of education should be increased in number so that all the classes should be having their lessons as and when due. Findings also imply that mathematics as a tool for re-branding Nigeria needs to be more assured continuously if these basic problem areas are not fully addressed i.e more teachers to be available so that teaching and learning can be held uninterruptedly more training of the teachers at that level through workshop seminars, and sandwich degree programmes provided for those teachers in primary school.

### **Limitations of the Study**

The study is limited to those difficult concepts encountered in the teaching and learning of mathematics at JSS level in primary schools in Uzo-Uwani LGA. These concepts include Geometry, algebra, number and numeration addition, division etc amongst others earlier mentioned. These concepts had earlier been identified and discussed by the NEDRC and CDC workshops held in 1988 and 1995 respectively.

### **Recommendations**

Based on the findings made in this work, the following recommendations have been made:

That Government of Enugu state should recruit and post more teachers, especially mathematics teachers to schools in Uzo-Uwani Local Government Area of the state.

1. That teachers deployed in JSS classes should also be increased in number so that students can have their lessons regularly.
2. That teacher, especially those in JSS classes in mathematics should improve their knowledge through in-service sandwich training programmes or through workshops.
3. That parent in that local government area should encourage their children to develop interest in mathematics by telling them to go to school and participate in class discussions regularly.
4. That parent should not use farm work as an excuse to deny their children of the most cherished education, especially since the LGA is one of the backwards and educationally disadvantaged ones in Enugu State.
5. That parent should stop their young females from engaging in early marriages, which should no longer be in vogue. This will help their children to contribute educationally for self acquisition and national development.
6. That the much cherished acholde given to mathematics as a tool for re-branding Nigeria should not be allowed to fizzle away by allowing ills in basic education mathematics to keep on existing. The mathematics Association of Nigeria (MAN) and other state holders should help-out to remedy this situation.

### **Suggestions for Further Studies**

Further study is suggested in the following areas, with regards to the study of mathematics in Secondary Schools in Uzo-Uwani Local Government Area of Enugu State. Identification of those difficulties in the teaching and learning of mathematics at the Senior Secondary School levels of education.

### **Conclusion**

Difficulties in the teaching and learning in Universal Basic Education Levels of mathematics in Uzo-Uwani



Local Government Area of Enugu State, an educationally backwards area in Enugu State and as perceived by new, in-experienced mathematics teachers include, among others. Inadequacy of number of teachers teaching mathematics at that level, low educational qualifications of the teachers at that level, lack of adequate instructional materials for teaching: Lack of interest on the part of the students, due to their lack of information on the roles mathematics plays in everyday activities of individuals in the society and for self and national development, Early marriages and Students engaging actively in farm work to the neglect of education. That mathematics as a tool for re-branding Nigeria should be allowed to serve as a golden rule for lovers of mathematics.

### Significance of the Study

This study is considered significant because of the following reasons:

1. The hopes of mathematics educators that mathematics may achieve the goals of education as a tool for re-branding Nigeria will be assured.
2. The problem areas in the teaching and learning of mathematics at the primary, junior secondary school level as perceived by the now, in-experienced teachers would have been identified specifically through this research.
3. Parents, guardians, teachers and students, members of the general public would be of benefit when such problem areas are identified and adequately tackled for better performance of their children.
4. Guidance counselors in schools could also benefit since the mass failures of students in mathematics examinations, resulting from their failure in the understanding of these concepts in mathematics will be a thing of the past and will no longer constitute psychological problems to them and their student-clients.
5. The chief examiners of such examinations as the FSLC, JSSCE, (and even WAEC and NECO) would be of benefit because results of students in mathematics could be better when the remedies to these problem areas are applied in other to make things better.
6. Mathematics association of Nigeria would be in better position to know the current situation of things in the teaching and learning of mathematics at all levels, especially the basic education level.

### Perceived Remedies

Perceived remedies to these problems are: that more qualified teachers are to be recruited; Adequate and increased interest in mathematics to be adequately assured by teachers, government, and other stakeholders.

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