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Difficulties in Teaching and Learning of Mathematics in Ezza South L.G.A of Ebonyi State

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ABSTRACT

This study investigated the language difficult in teaching and learning of mathematics, to improve pupils in learning of mathematics. The study adopted a descriptive design. The study made use of 80 pupils from eight primary school, as sample selected by simple random sampling technique. Four research questions and two hypotheses were formulated to guide the study. The instrument used in collecting data was a structured questionnaire while t-test, was used to analyze the hypotheses. The data collected were analyzed using mean and standard deviation and presented in tables. The findings showed among all others the importance of mother tongue in the teaching and learning of mathematics as well as inability of teachers in teaching mathematics and lack of instructional materials in teaching mathematics. The findings of this research gave recommendations to all stakeholders in mathematics education of the Nigerian child through the proper use of language in teaching and learning of mathematics.

Keywords: Difficulties, Teaching, Learning, Mathematics, Ezza South L.G.A

INTRODUCTION

Mathematics is important in everyday life. It is used in many forms in science, technology, medicine, the economy and in public decision-making. It is also a science dealing with quantity form of measurement and arrangement in particular with methods from discovering concept and symbols, properties and magnitudes. Different cultures have contributed to the development and application of mathematics. Mathematics is a creative discipline that can create moments of pleasure and wonder. [1] observed that pupils usually get excited and encouraged when they solve a problem for the first time or discover a more elegant solution to that problem. School exists for the primary purpose of have as their primary objective the promotion of learning in mathematics. [2] ways in which children learn (Mathematics) will be more likely to attain effective result than the one who does not. It seems reasonable, therefore that some important consideration with respect to how mathematics is learned should be set forth at the outset. The student may not all learn things in the same way and at the same speed or with the same facility and completeness. Yet, the teacher has the dual task of setting appropriate objectives with respect to the things to be learned. [3] mentioned that mathematics teachers should be facilitators of mathematics learning this they can do by providing new and varied experiences, which students can use to build upon their own foundation of existing knowledge. It is important that students construct understand how each student recognize and comprehends his/her own learning experiences to this process of learning, mathematics teachers must work at creating environment, implementing strategies and selecting learning resources that will maximize each students unique learning abilities.

Mathematics is the language of order line in thinking. It is an abstract subject whose abstractness has scared many students away because it requires extreme hard work and discipline. In spite of this recognition of mathematics as a key subject in the school curriculum

because of its vital importance, it is a common knowledge that-many mathematics teachers are distressed about the state of general public are institution in this country. This call is necessitated by the fact that teachers in primary schools no longer put much interest to language they use in teaching mathematics. In realization of the importance of mathematics in educational development educators are required to engage themselves in all educational methodologies in order to solve the problems posed. This study is to find out the language difficulties in teaching and learning of mathematics in Ozibo Local Government.

Statement of the problem

Mathematics as a science has been confronted with variety of problems based on language difficulties. The most serious problems in mathematics at the primary schools level today comes from using (another) language that is not the mother- tongue i.e. foreign language in teaching and learning of mathematics. Another problem appears to be that there is a negative attitude towards mathematics as a, school subject. There appear to be lack of instructional materials in the learning of mathematics. Could the use of non-mathematics teachers in the teaching of mathematics. Affect achievement in the subjects'? It is because of these problems, the researcher has decided to study the problems and find some solutions.

RESEARCH METHODOLOGY

Design of the study

The design adopted for this study is the descriptive survey research design. A survey research is one in which a group of people or items is studied only a few items considered to be representative of the entire group [4].

Population of the Study

The population consisted of here are seventeen (17) schools in pupils in he Ozibo local government area, in detected schools ten pupils, have-been chosen at random to porting on this problem of language difficulties and the solution of mathematics.

Sample and Sampling Technique

There are seventeen primary schools in Ozibo Local Government area in Ebonyi State. In this 17 schools 8 schools were selected through simple random sampling technique using balloting method out of these selected eight schools, Eighty (80) number of pupils were selected as sample for the study.

Instrument for Data for Collection

A structured questionnaire was constructed by the researcher consisting of 23 items. The instrument has two parts A and B. Part A deals with the data of the respondents based on the research questions. The instrument is a four point modified as strongly agree (4), agree (3), disagree (2) and strongly disagree (1).

Validation of Instrument

The instrument was face validated for clarity and adequate and relevance by two expert one in measurement and evolution and one in mathematics education all in There correction were effected.

Reliability of the Instrument

A trial-testing was carried out by the researcher using 25 pupils of a particular number. The data collected was analyzed and gave a reliability of 0.74 which showed that the instrument see appendix 11

Procedures for Data Collection

Copies of the instrument were taken to the selected schools and administered the pupils with explanation; they completed the questioning and returned.

Method of Data Analysis

The data for this work was collected through administered of questionnaires by the researcher to the various schools used for this work. Eighty (80) questionnaires were administered and collected on the spot. Simple means was used to analyze the responses from the questionnaire returned simple mean of positive and negative (agree and disagree)

response was calculated and the result was interpreted base on mean.

PRESENTATION OF RESULTS

This chapter deals with the presentation and analysis of data. The order of presentation is according to the research questions listed in chapter one.

Research Question 1

How does the use of mother tongue influence the teaching and learning of mathematics?

Table 1: Mean response on learning mathematics in mother tongue

S/N	Item	$\overline{X}$	SD	Interpretation
1	Mathematics is taught in class in the mother tongue i.e. nature language	3.31	0.95	Accepted
2.	Pupils ask questions in vernacular during mathematics class or lesson.	3.31	0.87	Accepted
3.	It is good to teach mathematics in vernacular.	3.38	0.96	Accepted
4.	Pupils do not always ask questions in mother tongue or vernacular during mathematics class or lesson	2.86	1.06	Accepted
..5.	Pupils learn mathematics in both vernacular and English language	2.71	1.17	Accepted
	Grand mean (Average)	**3.11**		**Accepted**

From table 1 above all item are accepted because their mean is 3.11 which is also above 2.5. Therefore the statement of the research question 1 is accepted that the use of mathematics influence the learning of mathematics in primary school.

Research Question 2

How does lack of instructional materials influence teaching and learning if mathematics lesson?

Table 2: Mean on Lack of Instructional Materials

S/N	Item	X	SD	Interpretation
6	Our school compound does not have enough materials for teaching mathematics.	2.98	1.04	Accepted
7	Teachers do not use instructional materials in teaching and leaning of mathematics	3.14	0.99	Accepted
8.	My teachers cannot improvise instructional Materials	3.20	0.96	Accepted
9	My teacher makes use of instructional materials during lesson presentation.	3.01	0.85	Accepted
.10	Poor provision of instruction of instructional materials and resources for teaching and learning mathematics	2.98	.84	Accepted
		3.062		**Accepted**

From table 2 above all items are accepted because their means value are above 2.5 the cut off point. The grand mean is 3.062, which is above 2.5. This show that the research question 2: is accepted that lack of instructional materials affects the teaching and learning of mathematics n primary school.

Research Question 3

How does the mathematics teacher influence the teaching and learning of mathematics?

Table 3: Responses on Use of Non-Mathematics Teachers

S/N	Item	X	SD	Interpretation
11	Most of the teachers are not qualified in mathematics	2.89	0.87	Accepted
12	We do not have enough mathematics teachers in many schools so any teacher can be asked to teach the course	2.92	98	Accepted
13.	My teachers does not has any experience in the teaching and learning of mathematic	3.11	87	Accepted
14.	My teacher is not trained teacher at all in mathematics	2.58	96	Accepted
15	My teacher is not professional professionally trained in the field	2.58	96	Accepted
.16	Lack of qualified and experienced teachers affect students achievement in mathematics	2.68	1.00	Accepted
17	The classroom are not well equipped with necessary teaching aids like table, chair and chalk board	3.15	71	Accepted
18	School environment is not conductive for the teaching and learning of mathematics in Ozibo L. G. A,	3.13	.74	Accepted
	Grand mean	**2.88**		**Accepted**

In this table 3 all the items are accepted because their mean values are also above 2.5 the cut off point. The grand mean is 2.88 which also above 2.5 this indicate that the use of non mathematics teachers also affect the teaching of mathematics.

Research Question 4

How does teacher's attitude influence the teaching and learning of mathematics?

Table 4: Responses on teacher's attitude in class

S/N	Items	X	SD	Interpretation
19	Teacher's attitude towards their duty can hinder student's academic progress.	3. 64	56	Accepted
20	The mathematics teachers do not come to class always.	2.64	. 80	Accepted
21	The mathematics teachers are always shouting at us when the pupils made little mistakes	2.70	1.08	Accepted
22	The mathematics teachers always provide adequate equipment for teaching and learning of mathematics	2.99	.74	Accepted
23	The mathematics teachers assist in provision of mathematics textbooks to boast performance in the subject.	2.98	.57	Accepted
		2.99		**Accepted**

The above table 4 also shows that all the items are accepted because their mean value is above 2.5 the cut off point. The grand mean is 2.99 which is also above 2.5 therefore the research question 4 prove that teacher's attitude in the class affects the teaching and learning of mathematics in the primary school.

HYPOTHESIS 1

There is no significant difference in the mean responses of pupils between mother tongue and teacher's attitude. This hypothesis was analyzed by using t. test between mother tongue and teacher's attitude.

Table 5: t-test Analysis between mother tongue and teacher Attitude

Variables	No	X	SD	Df	t.cal	t.crit	Significance
Mother tongue	80	3.31	0.94	79	-2.90	1.98	NS
Teacher's Attitude	80	3.36	0.55				
Mother tongue	80	3.31	0.86	79	5.13	1.98	S
Teacher's Attitude	80	2.63	0.79				
Mother tongue	80	3.37	0.96	79	4.33	1.98	S
Teacher's Attitude	80	2.70	1.0				
Mother tongue	80	2.36	1.06	79	-.79	1.98	NS
Teacher's Attitude	80	2.98	0.73				
Mother tongue	80	2.71	1.17	79	-1.79	1.98	NS
Teacher's Attitude	80	2.97	0.57				
t -test Value					**0.802**	**1.98**	**NS**

From the data collected. There is no significant difference on mother tongue and teacher's attitude.

Research Hypothesis 2

There is no significant difference in the mean response of students between mother tongues and instructional materials.

Table 6: t-test Analysis between mother tongue and instructional materials

Variables	No	X	SD	Df	t.cal	t.crit	Significance
Mother tongue	80	3.31	0.94	79	3.59	1.98	S
Instructional material	80	2.97	1.04				
Mother tongue	80	3.37	.960	79	1.56	1.98	NS
Instructional material	80	3.20	.960				
Mother tongue	80	2.8625	1.064	79	-1.38	1.98	NS
Instructional material	80	2.0125	.849				
Mother tongue	80	2.725	1.171	79	-1.82	1.98	NS
Instructional material	80	2.9750	.842				
t -test Value					**1.95**	**1.98**	**S**

From the data collected above. There is significant difference of mother tongue and instructional material.

Summary of Findings

The researcher finds and stated out language difficulties in teaching and learning of mathematics in primary school.

1. The use of mother tongue influence learning of mathematics in primary school.
2. The lack of instructional materials affects the teaching and learning of mathematics in schools.
3. Use of non mathematic teachers in teaching and learning of mathematics influence the pupils performance of learning.
4. Teacher's attitude in the class affects teaching and learning of mathematics.

Discussion of research findings

Research Question 1

This research question sought to determine the extent pupils used mother tongue in learning of mathematics in primary schools of Ebonyi State. The researcher found out that 3.11 average of he pupils agreed that they understand the topic very well taught in their mother tongue. In the researcher's view majority of teaches supported the idea for better performance. Therefore pupils should be allowed to ask questions in vernacular during mathematics lesson.

Research Question 2

In Research Question 2, the researcher found that improvisation of material affect teaching and learning. Response to research question 2 showed that 3.063 mean agreed that lack of instructional materials influences the learning therefore materials should be provided for the effective understanding of the lesson.

Research Question 3

Here research question tried to say the extent of provision of qualify teacher in mathematics. The use of non-mathematics teacher affects in teaching and learning. The mean of 2.88 agreed that insufficient teachers issue or none qualify mathematics teachers make the lesson to be boring. To eliminate this, qualified mathematics teacher should be provided.

Research Question 4

This research question attempted to find out the extent the teacher's behaviour I

the class influence during the lesson. The mean of 2.88 agreed in the study that teachers attitude affect in teaching of mathematics. In the researcher's view laissez-faire teacher's attitude made some pupils not to have interest in mathematics learning. Therefore the teachers should be advised to have good manner of approach or character, so that the pupils will develop more interest in learning of mathematic.

Educational Implication of Findings

This research has implication for pupils in the primary school and the teacher's attitude towards pupils. Poor performance of pupils on this vital aspect of science still abounds. Pupils have confessed openly that mathematics is difficult and hard to understand. It can still be enjoyed if proper instructional materials are provided and used in teaching the pupils at the primary school level. These will arouse the pupils' interest in mathematics and make them to begin to understand and appreciate its diverse aspects. This study also considers the attitude of the teachers towards pupils. The teacher should pay individual attention to every child in the class; this will make them to have interest in learning of mathematics on the part of the teachers those who are not interested in mathematics should not be allowed to teach it. The implication of the findings is that they may not know the methodology and philosophy behind skilled involved.

Limitation of the Study

1. Some teachers were not willing in completing the questionnaire.
2. These research work was designed to cover the primary schools on Ozibo Local Government of Ebonyi State, but due to financial imbalance and time factor, the researcher has to focus her attention to some selected primary schools in the area

Suggestions for Further Study

1. Attitude of pupils towards the learning of mathematics in Ebonyi State should be changed.
2. The school environment as it influences pupils' academic performance in primary schools should be improved
3. An investigation should be carried out regularly.

SUMMARY OF THE STUDY

This research work dealt with the analysis of language difficulty in teaching and learning of mathematics in primary school level. The study populations were pupils and teachers within Ozibo Local Government area of Ebony State. In order to comprehend the various parts involved in this research work, a detailed review of relevant and related literatures were carried out from the pupils, we can see that majority of pupils said that teaching mathematics in vernacular helps them to understand the topic taught. Based on findings, the pupils understand better when they are taught in their mother tongue because it makes the pupils to feel happy, this was the result obtained from the research.

RECOMMENDATIONS

Based on the findings, the researcher recommends as follows; that the teaching and learning of mathematics in Ozibo urban should improve. All teacher training institutions and universities should be required to draw up and execute plans in co-operation with the ministries of education to increase the rate of production of qualified mathematics teachers. In classification of pupils in the classes, the headmaster/headmistress should see that the maximum number of pupils in the class is 30 so as to help the teacher to teach. And pay individual attention to every child in the class. The method of teaching adopted by the teacher would determine to a great extent whether the lesson would be successful. Many primary school teachers should be recommended the use of teaching materials for their lesson to become real. The teacher approaches to the solution of problems and delivery of his lesson. Interest, knowledge of the subject matter and his ability to control and arouse the interest of the pupils understanding of the lesson.Parents and guardians are also

another set of stakeholders in the mathematics education. They need to train their children in a way that will assist mathematics teacher to cope with them at school. Proper attention should be given to children at home so that they will have enough time to study.

CONCLUSION

In conclusion, from the problems stated in this research, I suggest that the government and specialist in the field (or area) should look into these problems once these problems are addressed, there will be no language difficulties in teaching and learning of mathematics in Ozibo Local Government Area.

REFERENCES

1. Abiola, M. K. O. (1990). Mother Tongue bet for learning, National Concord, Lagos Concord Press Nigeria ltd.
2. Abitoa, J. M. (1990). Address to Nde. National workshop on primary and teacher education mathematics curricular. Nigeria educational research council.
3. Adama, A. C. (1980). Approaches to science Education research analysis and cricism.
4. Afolayon, (2000). Unpublished project on. Students' weakness in mathematics teachers' responsibilities.
5. Akpan, O. F. (1984). A problem integrated science education. Seminar paper resented to the faculty of Education University of Sokoto
6. Ale, S. O. (1983). Mathematics as Universal subject, Nnasu, convention, Zaria, Enugu, smmers educational foundation and innovation
7. Bangbose, A. (1990). Mother tongue best for learning. National concord, Lagos concord press of Nigeria ltd
8. Banngboso, G. A. (1990). Trends in the preparation of mathematics teachers for post- primary institution in Nigeria.
9. Clement, J. (1982). The performance of some secondary school pupils in solving words problem, encyclopedia Webster dictionary
10. Earp, K. A. (1970). Mathematics. The language of the millennium A keynote address at the Annual continence of man Lagos University of Lagos
11. Ezeani, E. (1988). Science in Igbo Languae puplished seminar paper, Anambra State college of Education Awka.
12. Fafunwa, A. (1974). History of education in Nigeria, London. Federal ministry of education (1981) national policy on education Lagos, federal Government press
13. Hornby, A. S. (1962). Advanced learner's Dictionary of current English language 12th Edition
14. Kalejaiyi, (1981). The performance of some secondary school pupils in solving word problem, science technology association of Nigeria.
15. Maculey, I. (1979). Mother Hood and Child Care Ben, E Ethiopia Publishing Corporation.
16. Mendel, R. (1969). How well are college preparing teachers for modern mathematics.
17. Muchin, E. J. (1978). Science as unified Discipline, science education of Africa Edited by D. G. S Gilbert.
18. Nna, E. C. (2003). Individual difference in mathematics class unpublished class note.
19. Nwamkpa, N. O. (1987). Language factor in learning in curriculum innovation and Evaluation.
20. Nworgu, B. G. (1991). Developing Enhancing and sustaining interests in the teaching and learning of mathematics in primary schools
21. Oatiainites, V. B. (1970). Curriculum Planning in Howson Developing a new curriculum.

22. Olig, F. A. (1978). Common sense and the curriculum, London Gargeallen and Unwin publishers limited
23. Onwudigbo, E. (1983). Mathematics and modern technology, science teachers association of Nigeria
24. Ozigi. A. (1978). learning and teaching in Nigeria. Oxford: University Press 1
25. Polya, G. (1957). How to solve it 2 ded. Princeton N. J. Princeton University Press 1
26. Quane and Adama (1990). National language and mother tongue the UNESCO currier July 1990
27. Sharp, M. (1975). Children learning introduction of educational psychology. Britain: University of London Press.
28. Umeh, A. A. (1990). Establishing a practical Basis for preparing Effective Teachers for .national Development, Perspective in Education Research and national Development.