International Journal of Educational Research and Management Technology
ISSN: 2545-5893(Print) 2545-5877 (Online)
Volume 3, Number 4, December 2018
http://www.casirmediapublishing.com

Teachers' Motivation on Use of Mother Tongue in Teaching Mathematics in Lower Primary Schools in Yola South L.G.A

Fatima Abdulwahab Umar
Department of Early Childhood Care and Education
Federal College of Education, Yola, Adamawa State
Email: *fatimaumarabdulwahab@gmail.com*

Abstract: Use of mother tongue (MT) as a medium of instruction is globally recommended for pupils in lower primary schools. The child MT should be the medium of instruction in learning in grades 1-3, because the fundamentals of mathematics concepts are introduced at this level. The purpose of the study was to investigate the extent to which motivation influence the use of mother tongue in teaching mathematics in lower primary schools in Yolanda south local government. In this study, it was assumed that some teachers are not motivated when using mother tongue in teaching mathematics at the lower level of education. Descriptive survey research design was used to guide the study. The target population was teachers in lower primary schools in Yola Metropolis. The study employed random sampling techniques to select the sample for the study. Data was collected using questionnaire for teachers. A pilot study was carried out in two primary schools. Content validity was used to test the validity of the instruments. The reliability of the instruments was determined using test re-test method at a correlation coefficient (r) of 0.75. Quantitative methods were used in analyzing data using the Statistical Package for Social Sciences (SPSS) to generate frequencies and means. Results were presented using tables, figures, and text. Results from the study revealed that, majority of the respondents always used mother tongue in teaching counting and recognition of numbers respectively. Result of level of training of the respondents shows that up to 74% had NCE as their level of training with 56% had only between 1-5 years teaching experience and 71.43% revealed that they love to use mother tongue to teach mathematics. The correlation result showed that the variable, motivation had positive correlation with r-value of 0.487 and statistically significant at 1%. It was recommended that Teachers should be motivated when using Mother Tongue in teaching mathematics. Teachers should be given rewards and encouraged to use mother tongue to teach young ones in order to understand the contents of the subject matter.

Introduction

Vroom (1964) defined motivation as the act of making somebody to do something; add further argued that in many situations, people were encouraged to do something which they do not intend to do. The people may be motivated financially or morally. Ofoegbu (2004) stated that motivation could under lie teacher activities which operate in schools; she adds that the teacher is the one that renders educational philosophy and objectives into knowledge and skills and transfers them to students in the classroom. In addition, high level of exposure to the language and motivation are also required (Cummins, 2012: 143). The level of the second language competence, which a bilingual child attains, is partially a function of the type of competence the child has developed in the first language at the time when concentrated exposure of the second language begins.

Mohammed (2010) states among trainee teachers of Indonesian language at the University of New Syan Kuala in Indonesia, are still teacher's lacks personal motivation in order to develop their academic profession. Researchers always think in order to write scientific papers in the field of learning, by using appropriate current technology for learning tools and create a work of art. Acccording to Chuen (2012) teachers who have taught the participant in the primary school are another motivation factors. The participant or students who have

International Journal of Educational Research and Management Technology
ISSN: 2545-5893(Print) 2545-5877 (Online)
Volume 3, Number 4, December 2018
http://www.casirmediapublishing.com

started the attitudes of primary school teachers are always motivated successful in terms of dedication, responsibility, patience and concern about the success of the students gave positive reinforcement. According to Cook and Travers (2000) as cited in Ibrahim (2014) self-actualization is the most famous concept of the needs hierarchy. Self-actualization means using our capability to the limit of our potential ability. Teachers move towards their goals in order to satisfy their basics needs.

UNESCO global monitoring report (2013) revealed that in many countries that experienced a rapid expansion of their primary education sector in order to meet the demands of universal primary education, have experienced a shortage of well trained and skilled teachers. Tatto *et al.* (2012) in a study conducted in 17 countries focusing on the relationship between teachers' education policies and readiness of teachers to teach mathematics found that one of the challenges facing teachers included heavy work load diversity in student abilities and home language. Liassa (1985) found that, teachers should be motivated because, without them there will be no achievement of desired goals. He further added that, when teachers are motivated he/she perform his/her duties actively and conscientiously.

Methodology

Research Design

The researcher used descriptive research design to gather information from selected respondents because it is concerned with gathering facts, opinion and obtaining pertinent information about current status of phenomenon and to draw conclusions from facts discovered. Descriptive survey helped the researcher to describe the variables found in a given situation. The design was considered suitable for this study because the researcher was to find out teacher factors that influenced use of mother tongue in teaching mathematics in lower primary schools in Yola Metropolis.

Location of the study

The study was conducted in Yola metropolis of Adamawa State. The name Yola was derived from Fulfulde word "Yolde" meaning a knoll, which means settlement on a highland. Yola is located between latitude 9° to 12° N and longitude 11° to 12° E. It also occupies a land area of about 8,068 square kilometers and has an altitude of about 185.9m above sea level (Adebayo and Tukur, 1999). The study area has two distinct seasons, rainy and dry season with an annual average rainfall of 759mm with mean annual temperature of 34.6°c; the coldest and driest months are December and January with an average temperature of about 11.11°c and relative humidity drops to 13% during these periods. The hottest months are March and April, which have average temperature of about 42.8°c (Adebayo and Tukur, 1999). The study area has a population of 402,854 inhabitants (NPC, 2006). The major ethnic groups in the area are Fulani, Verre, Bata, Higgi, Hausa and Margi among others (Adebayo and Tukur, 1999). This location was chosen because it represents the majority of the entire population of the study, and the researcher had no evidence of similar empirical study had been conducted in similar area. Another reason for selecting

International Journal of Educational Research and Management Technology
ISSN: 2545-5893(Print) 2545-5877 (Online)
Volume 3, Number 4, December 2018
http://www.casirmediapublishing.com

Yola metropolis was because it has rural setting where mother tongue is supported to be the medium of instruction. Singleton (1993) opines that the ideal setting for any study is one that is directly related to the researcher's own interests.

Sampling Techniques

Sampling technique or procedure is the process of selecting individual for study from the entire population (Orodho, 2009). Stratified random sampling was used to select the sample. The purposive sampling was used to select units that are represented in the population (Orodho, 2009). This study used Stratified random sampling technique which involves a process of stratification of segregation of the population in standardized group i.e. groups with the same characteristics (Mbwesa, 2006).

Data Collection Techniques

After getting the necessary authorization, the researcher contacted the primary school teachers and distributed the questionnaires to them which included, cover letter stating the purpose of the study and the background information and a copy of the questionnaire; the participants were requested to return the questionnaire within seven days. After seven days the researcher visited the schools and collected the questionnaires. The entire data collection process took about six weeks.

Data Analysis

Data were analyzed using both Quantitative methods using the statistical package for social sciences (SPSS) version. Descriptive statistics (frequencies, percentages), was computed. It was through this that the data was outlined and summarized.

Result

Teachers' Age.

Teachers were requested to indicate their age according to specified age brackets. The frequencies in each age bracket were as presented in Table 1

Table 1.0 Age of Teachers in the Schools

Teachers' Age	Frequency	(%)
21-30	47	**37.0**
31-40	73	**58.0**
41-50	4	**3.0**
51 and above	2	**2.0**
Total	**126**	**100**

Table 1.0 summarizes the age bracket of the respondents. The highest proportion of the teachers fell in the category of 31-40 years (59%).This implies that the teachers were of fruitful age, matured and had experience.

International Journal of Educational Research and Management Technology
ISSN: 2545-5893(Print) 2545-5877 (Online)
Volume 3, Number 4, December 2018
http://www.casirmediapublishing.com

Academic qualifications of teachers in the schools

Academic qualification was a factor that was considered while seeking data on what could be influencing the teaching-learning process. The responses are shown in Table 2.

Table 2: Teachers' academic qualification

Academic Qualification	Frequency	(%)
B. Ed	17	13.0
Diploma	16	13.0
NCE	93	74.0
Total	126	100.00

Table 2 illustrates that a great number of teachers (74%) as well as (26%) of the teachers have the basic requirement of a professional certificate in education. SACMEQ (2000) revealed that the quality of teaching largely depends on teachers' academic qualification among other variables.

Teachers Motivation and Use of Mother Tongue in Teaching Mathematics

The fourth objective of this study was to find out the influence of teachers' motivation on the use of mother tongue in teaching mathematics, to achieve this; teachers were provided with a table with facets in which they were to indicate the degree to which they agree how motivation had influenced them in teaching mathematics. The result was presented in Table 3

Table 3: Responses on Teachers Motivation in Teaching Mathematics

Statement	Strongly Agreed		Agreed		Strongly Disagree		Total	Mean
	Frequency	%	Frequency	%	Frequency	%		
I The benefits of mother tongue	29	23.02	82	65.08	15	11.90	266	2.1
School management encouragement use of MT	22	17.46	70	55.56	34	26.98	240	1.9
Parent support the use of MT	18	14.29	67	53.17	41	32.54	229	1.8
School provide relevant material of MT	13	10.32	66	52.38	47	37.30	218	1.8
School support in-service training of MT	17	13.49	49	38.89	60	47.62	209	1.6
I like to use MT	15	11.90	90	71.43	21	16.67	246	1.9

Source: Field Survey, 2016 Key: SA= Strongly Agreed; A= Agreed; SD= Strongly Disagreed

Result on Table 3 revealed the influence of teacher's motivation on the use of mother tongue in teaching Mathematics. A quarter of the respondents strongly agreed, two-third agreed while one-tenth disagreed that they know the benefit of using mother tongue in teaching mathematics. Close to one-fifth of the respondents indicated strongly agreed, slightly more than half said agreed while a quarter disagreed that School Management encourages them

International Journal of Educational Research and Management Technology
ISSN: 2545-5893(Print) 2545-5877 (Online)
Volume 3, Number 4, December 2018
http://www.casirmediapublishing.com

to use mother tongue in teaching the subject. Almost one-fifth of the respondents indicated strongly agreed, above half said agreed while one-third disagreed that parents support the use of mother tongue in teaching mathematics. One-tenth of the respondents indicated strongly agreed, more than half of the respondents agreed while one-third disagreed that the school provides culturally relevant materials to promote the use of mother tongue in teaching mathematics. Little above one-tenth of the respondents indicated strongly agreed, close to two-fifth agreed while a whooping half disagreed that the School supports them to attend in – service training to learn how to use mother tongue in teaching mathematics. Close to one-fifth of the respondents indicated strongly agreed, three-quarters indicated agreed while close to a quarter disagreed that they just love to.

Table 4: Result of Correlation Analysis between Motivation and Use of Mother Tongue in Teaching Mathematics

Variable	r-value	p-value
Motivation	0. 487	0.00

Source: Computed from Field survey, 2016

There is also significant relationship between teachers' level of motivation and use of use of mother tongue to teach mathematics. Result of the correlation analysis in Table 4 indicates that, respondents' level of motivation ($r = 0.487$, $p<0.00$) was significantly related to use of mother tongue to teach mathematics. This implies that the higher the level of motivation the hard, the higher the tendency to use mother tongue to teach mathematics.

Discussion of Findings

A Study conducted by Benne (2004) found that status of teachers in most countries had declined over the past decade and that professionalization of teachers is more pronounced in low income countries. Akunlola (1989) states that for teachers to be effective staff training, provision of adequate physical facilities and equipment, funding and teacher evaluation, promotion, motivation and morale must be attended to and given priority in schools. Yusuf (2003) observed that poor motivation of teachers will lead to truancy in students. He pointed that an important course of truancy in schools is the problem of incompetent and lazy teachers. This is because when teachers are not motivated they are lazy and feel uncompleted to work. Ofoegbu (2000) also pointed out that in this era teachers need to be adequately motivated and properly rewarded for work done, and when teachers are frustrated, they on their part cannot motivate students to learn. In the long run, the standard and quality of teaching in control the classroom will be threatened and when teachers are not motivated teaching will not be smooth and effective for the pupils to learn. Similar study by Menlo and Low (1988) found that when pupils pass their exams or score high in the competition, teachers are excited. The current study has found out the impact of teachers motivation on the use of mother tongue in teaching mathematics in lower primary schools.

International Journal of Educational Research and Management Technology
ISSN: 2545-5893(Print) 2545-5877 (Online)
Volume 3, Number 4, December 2018
http://www.casirmediapublishing.com

Conclusion

The relationship between teachers' motivation and use of mother tongue was highly significant. The result indicated that motivated teachers tend to use mother tongue more often than less motivated teachers. This clearly shows that teachers' motivation influences the use of mother tongue.

References

Adebayo, A. A. and Tukur, A. L. (1999). *Adamawa State in Maps,* Paraclete Publishers, Yola. P3.

Akinlola, J. *A (1989).Secondary Education in Transportation Problems and Prospects.* African J Journal of Educational Management, Vol 3 No 1 January.

Benne, P. (2004). "*Teachers Motivation and Incentive in Sub Sahara Africa and Asia, Knowledge and Skills for Development*". Brighton, W V.

Cummins, J. (2012), "Linguistic interdependence and the educational development of bilingual children", *Review of Educational Research,* 49: 222–251.

Chuen, K. (2012) *"The view of pre-service and novice teachers on mathematics teaching in south Africa related to their educational experience."* Education Research, 41(1), 23-34.

Dennis and Susan Malone (2011), "*Teacher education for mother tongue Based education programs".*

D. O. Durosaro (2006), *"Teacher Education in Nigeria: Past, Present and Future Challenges",* Journal of the Oyo State College of Education, Oyo, 13(1), 43-53

Ibrahim Mahmud Alhaji (2014). *Effects of mother tongue on academic achievement in biology among secondary school student in Niger state.* Nigeria.

Liassa, P. N. (1985). *Teaching mathematics in Nigeria secondary schools jobs.* University press.

Mbwesa, K. J (2006/ *Introduction to Management Research,* a student handbook. Jommo Kenyatta Foundation, Nairobi, Kenya.

Menlo, A., Low, G. T. (1988). *A Comparison of the Sources of Enthusiasm in teaching across Five Countries.* Paper presented at the Society for Cross Cultural Research Annual Meeting. Texas. USA

Muhammed Meera, et. al. (2010) profit kecerdasan Emosi Guru pelatin mengikut Tahun pengaijian GEMA online journal of language studies, 10 (10)

Ofoegbu, F. I. (2001). *Motivational Factors and the Achievement of Classrooms Effectiveness In Edo State Secondary Schools.* In Current Issues in Education Management in Nigeria (Eds) Nwagwu, In a Non Nwadiani. Nigerian Association for Educational Administration and Planning.

Orodho, J. A. (2009). *Elements of Education and social sciences Research methods* (2nd Ed). Maseno: Kenezja publishers

SACMEQ, I. (2000). Harare: SACMEQ.

Totto, M.T Shwille, J. Seank, Et Al (202). *Policy Practice And Readiness To Teach Primary And Secondary Mathematics* In 17 Countries Amsterdam, Netherlands. International Association for Evaluation of Education Achievement (UIEA)

UNESCO (2013/4) *Education For All Global Monitoring Report*. Teaching and Learning Achieving Quality for All, Paris: UNESCO

Ugwu, A.N. and Etiubon, R. U. (2011) Changing STM. Curriculum for the information age. Implications for the teacher's global journals online, http://www.globaljournalseries.com

Vroom V. H. (1964) *Work and Motivation*. New York: Wiley. PP 133

Yusuf, T.M (2003)/ *Truancy Management: A Panacea for Early School Failure and Drop Out*. Journal of Women in Colleges of Education Vol 7 October.