

# Acta Didactica Napocensia

Volume 15, Number 1, 2022 - DOI: 10.24193/adn.15.1.14

# SCIENCE TEACHERS' ATTITUDE TOWARDS THE USE OF MOTHER TONGUE FOR INSTRUCTION IN BASIC SCHOOLS

#### Adams Ogirima ONIVEHU, Joy Tolulope JAMES, Jamiu Temitope SULAIMON

Abstract: This study examined science teachers' attitude towards the use of mother tongue for instruction in Basic Schools, employing a descriptive survey design. The respondents were selected through purposive and convenience sampling techniques and data were collected from a sample of 162 Basic School Science. The questionnaire used for data collection was titled "Science Teachers' Attitude towards the Use of Mother Tongue in Instruction Questionnaire (STAUMTIQ)", which yielded a reliability coefficient of 0.83 using the test-retest method. Descriptive and inferential statistical tools were used to analyse the data. The findings showed that science teachers' attitude towards the use of mother tongue for instruction in Basic schools was negative. Teachers' gender, school type and teaching experience did not influence their attitude, while educational qualification influence their attitude towards the use of mother tongue for instruction in Basic Schools. It was recommended that teachers should be encouraged to implement the language policy provision on the use of mother tongue for instruction, especially in Basic Schools in Bayelsa State, Nigeria.

Keywords: Science, Teachers, Attitude, Mother Tongue, Instruction, Basic School

#### Introduction

Basic Education has become an important part of contemporary world. Basic education is, therefore, considered to be a vital component of the formal education system, which plays a seminal role in the development of the individual and the society at large. Various efforts have been made by stakeholders in the educational systems of nations, across the world to ensure that Basic education is effectively implemented. In Nigeria, for instance, the 9-3-4 system of education, which stipulates and mandates the provision of 9 years of Basic education, 3 years of senior secondary education and 4 years of tertiary education is being operated (National Policy on Education, 2013). Language plays an indispensable role as the primary medium of interaction among humans, especially in the school system. Language is, therefore, the prime means of instruction, transmission of knowledge, communication and feedback in the teaching-learning process in Nigerian Basic schools. Language facilitates the comprehension of various phenomena, ideas, concepts and knowledge in the school environment and the generality of the world (Adedeji, 2014; Alhassan & Ali, 2015; Emeka-Nwobia, 2015). In the 9-3-4 system of education, English Language, which is the lingua franca of Nigeria, is widely used as a language of instruction in Basic schools. However, the National Policy on Education (2013) clearly stipulates that, the mother tongue shall be the prime language of instruction for the first three years of Basic education. That is, the lower level of Basic education or primary 1-3, while English Language shall be the medium of instruction for the subsequent middle basic school and upper basic school levels. By and large, Basic school pupils or students speak one or several languages. However, the mother tongue is the language of a child's early social relations. The mother tongue is, therefore, also referred to as the first language, arterial language, local or native language. That is, the mother tongue is the language a child speaks fluently with less effort or has learned from the cradle and is, therefore, not necessarily the language of a child's biological mother (Oribabor & Adesina, 2013; Awopetu, 2016). The use of mother tongue for instruction has gained widespread attention in academic literature due to its numerous benefits in the field of education. The use of mother tongue in instruction facilitates the development of critical thinking skills and improved learning outcomes among learners, thereby significantly reducing the rates of repetition, school drop outs and in the educational system (Ball, 2011; Njoroge & Gathigia, 2011; United Nations, 2016). The mother tongue also helps Basic school students to perform better in the process of instruction, because it facilitates the development of the much-needed cognitive repository of knowledge, vocabulary, comprehension and reading ability (Akuta, 2021; Ball, 2011). Ezeokoli and Ugwu (2018) also reported that using the mother tongue in the teaching-learning process will facilitate student's participation in the classroom, thereby promoting their sense of ethnic identity and positive attitude towards the culture of Nigerians. In another study focusing on teacher factors influencing use of mother tongue in teaching of Mathematics in lower primary schools in Yola South Local Government Area, Adamawa State, Nigeria, Umar (2012) found that teachers rarely utilized mother tongue in teaching mathematics in lower primary schools. Likewise, Walter and Trammel (2010) found that grade and 2 pupils taught with the mother tongue (KOM) performed better in all subjects in relation to their counterparts taught with the mother tongue in Cameroun. Omonivi, Isreal, Olabode and Thomas (2013) examined the effect of the mother tongue on students' achievement and found that the pupils performed better in Mathematics when they were taught with the Yoruba Language in Owo Local Government Area, Ondo State, Nigeria. In a related study conducted by Charanchi (2011), in Katsina State, Nigeria, findings indicated that pupils taught using Hausa language, that is, the mother tongue of the environment, performed better than that of those taught with the English Language and Hausa. Awopetu (2016) investigated the impact of the mother tongue on the learning abilities of pre-school children in a Nigerian State and found that the children taught with the mother tongue performed better than their counterparts taught with a foreign language. Okonkwo (2018) examined the extent of utilization of languages of education in Ebonyi State, Nigeria and concluded that the extent of utilization was low. The findings of another study carried out by Ezeokoli and Ugwu (2018) reported that parents, teachers and students have strong positive beliefs about the utilization and integration of the mother tongue in secondary school in Akinyele Local Government Area, Oyo State, Nigeria. However, the mother tongue is not widely used as the medium of instruction in Nigerian Basic schools, especially in the teaching and learning of science subjects, as practiced in several nations across the world, due to a plethora of reasons, which include the attitude of teachers. Attitude is a critical part of human behaviour, which includes the willingness or readiness of Basic school teachers to use the mother tongue of school-aged children in Nigeria to teach various science subjects, such as Mathematics, Basic Science and Technology, Computer Studies and a host of others (Onivehu, Adegunju, Ohawuiro & Oyeniran, 2017). Needless to say, Basic school teachers who have a positive attitude towards the use of mother tongue in science instruction, might be apt to voluntarily utilize such language in the teaching and learning of science concepts, while Basic school teachers who have a negative attitude towards the use of mother tongue in science instruction, might be in the favour of the use the mother tongue in teaching and learning of science in Nigerian Basic schools. Therefore, attitude of teachers towards the use of mother tongue in instruction, which could either be positive or negative, might influence the importance or relevance associated with such language in the teachinglearning process. Thus, a growing body of research has focused on teachers' attitude towards the use of mother tongue in instruction. Khejeri (2014), for instance, investigated teachers' attitude towards the teaching and use of mother tongue for instruction in lower primary schools in Hamisi District, Kenya and found that teachers perceived the mother tongue to be very useful in teaching-learning process. However, the overall findings indicated that the attitude of teachers towards the use of mother tongue in instruction was negative. Nyarigoti and Ambiyo (2014) investigated the role of attitude in the implementation of mother tongue in instruction in Kenyan lower primary schools and found that the negative attitude of stakeholders in the society towards using mother tongue in education, and a host of other challenges, such as inadequate financial resources, ethnic diversity, diverse languages and inappropriate policies and practices were militating against the effective and dialects implementation of mother tongue in instruction. In the light of the established background, the present study investigated science teachers' attitude towards the use of mother tongue for instruction in Basic schools in Bayelsa State, Nigeria.

#### 1.1. Problem

Language is an important factor in the process of human development. Across the world, several stakeholders have often advocated for the use of mother tongue as the language of instruction in the teaching-learning process, especially among Basic school pupils, who are at the critical developmental period of childhood. For instance, Basic school pupils in China, Israel, Vietnam, Philippines, Czech Republic, Germany, Poland, Estonia, Romania, Russia, Norway, Finland, France, Spain and elsewhere learn science through the mother tongue, which might significantly facilitate the level of pupils' performance in science subjects. However, Nigeria is largely a multicultural and multiethnic nation where there are over 300 ethnic groups. As such, the adoption of English Language as the lingua franca and prime language of science instruction in Nigerian Basic schools is a common practice, which could cause poor performance among some Nigerian Basic school pupils in terminal and standardized examinations. Consequently, several scholars have incessantly promoted and advanced the use of mother tongue for instruction in Nigerian Basic schools as stipulated in the National Policy on Education. For instance, the classical study carried out by Fafunwa (1975), which is widely known as the Ife six year project, indicated that using the mother tongue for instruction significantly improved pupils' performance in Nigerian primary schools in Science and other subjects. In a like manner, several studies have indicated that the mother tongue facilitates students' performance in the teachinglearning process in Nigerian schools (Awopetu, 2016; Charanchi, 2011; Ezeokoli & Ugwu, 2018; Omoniyi, Isreal, Olabode & Thomas, 2013; Sulaiman, 2019; Umar, 2012). However, a cursory look at the Nigerian Basic school system, especially in Bayelsa State, Nigeria indicates that English Language is being used for instruction by Basic school teachers, due to several reasons that are not far-fetched (Ayodele, 2013; Balogun, 2013; Ogunmodimu, 2015). Given the role of teachers in the utilization of the mother tongue in instruction, it is needless to say that the extent to which the mother tongue of Bayelsans, such as Ijaw, Epie, Nembe, Ogbia and others is used in the teaching-learning process in Basic schools is a function of teachers' attitude towards the use of local languages in science instruction. However, there is a paucity of studies on science teachers' attitude towards the use of mother tongue in instruction in Bayelsa State, Nigeria. Consequently, the present study addressed the identified problem by investigating science teachers' attitude towards the use of mother tongue for instruction in Basic Schools in Bayelsa State, Nigeria.

#### 1.2. Research Questions

- 1. What are science teachers' attitudes towards the use of mother tongue for teaching in Basic Schools?
- 2. Is there any significant difference in science teachers' attitudes towards the use of mother tongue for teaching in Basic Schools based on gender?
- 3. Is there any significant difference in science teachers' attitudes towards the use of mother tongue for teaching in Basic Schools based on school type?
- 4. Is there any significant difference in science teachers' attitudes towards the use of mother tongue for teaching in Basic Schools based on teaching experience?
- 5. Is there any significant difference in science teachers' attitudes towards the use of mother tongue for teaching in Basic Schools based on educational qualification?

#### 1.3. Research Hypotheses

The following hypotheses were postulated to be tested by the study.

- 1. There is no significant difference in science teachers' attitudes towards the use of mother tongue for teaching in Basic Schools based on gender.
- 2. There is no significant difference in science teachers' attitudes towards the use of mother tongue for teaching in Basic Schools based on school type.
- 3. There is no significant difference in science teachers' attitudes towards the use of mother tongue for teaching in Basic Schools based on teaching experience.

4. There is no significant difference in science teachers' attitudes towards the use of mother tongue for teaching in Basic Schools based on educational qualification.

#### 2. Method

This study is a quantitative study which employed the use of descriptive survey research design, because the study involved collection of data in order to answer research some specific research questions. The population for this study was all Science teachers in Basic Schools in Yenagoa, Bayelsa State, Nigeria. One hundred and sixty-two (162) teachers were drawn from a population of Basic school teachers using the purposive and convenience sampling techniques. The main instrument for collecting the required information for the study was a questionnaire tagged "Science Teachers Attitude towards the Use of Mother Tongue for Instruction Questionnaire (STAUMTIQ)". Section A sought demographic information of respondents, such as gender, school type, teaching experience and educational qualification, while Section B with 15 items focused on science teachers' attitude towards the use of mother tongue for instruction. Section B was patterned in Likert scale format of Strongly Agree (SA) = 4 points, Agree (A) = 3 points, Disagree (D) = 2 points, and Strongly Disagree (SD) = 1 point. The content validity of the questionnaire was established by expert opinion, while a re-test reliability correlation coefficient of 0.83 was obtained for the STAUMTIQ, which was deemed reliable for the study. The data obtained was analyzed using percentages, summated mean ranking, and t-test statistical tools.

#### 3. Results

Table 1: Demographic Distribution of Respondents by Gender, School Type, Teaching Experience and Qualification

Variables	Frequency	Percentage (%)
	Gender	
Male	54	33.3
Female	108	66.7
Total	162	100.0
	School Type	
Public School	87	53.7
Private School	75	46.3
Total	162	100.0
	Teaching Experience	
1-5 years	66	40.7
6-10 years	54	33.3
10 years and above	42	25.9
Total	162	100.0
	Educational	
	Qualification	
NCE	36	22.2
BSc/ BEd.	90	55.6
Postgraduate Degree	36	22.2
Total	162	100.0

Table 1 shows respondents' gender, out of 162 respondents that were sampled, 54 (33.3%) of the respondents were males while 108 (66.7%) were females. Thus, male Basic School Science teachers and their female counterparts were fairly represented in the study. This finding could be attributed to the importance attached to the employment of male and female Science teachers in public and private basic schools in Bayelsa State, Nigeria. It is noteworthy that more female Science teachers participated more in the study than their male counterparts, which might be due to the fact that the study covered lower and middle basic schools in Bayelsa State that employ more female teachers, who are generally considered to be more humane and caring to attend to the various needs of children in the school environment as surrogate mothers. Table 1 also indicates that 87(53.7%) of the respondents are public school teachers while 75(46.3%) of the respondents were Science teachers in private Basic schools. Basic school education is largely subsidized by the government, and as such, it is possible that public

Basic schools in Bayelsa State, Nigeria have more resources and capacity to employ more Science teachers than their private school counterparts. More so, it is possible that some Science teachers prefer to teach in public than private Basic schools due to better remuneration and fringe benefits. With regards to the teaching experience of the respondents, 66(40.7%) of the respondents had 1-5 years of teaching experience, 54(33.3%) of the respondents had 6-10 years of teaching experience, while 42(25.9%) of the respondents had 10 years and above teaching experience. This indicates that most of the respondents had 1-5 years of teaching experience. Thus, most of the respondents might include graduates and youths from various Colleges of Education, Polytechnics, Universities and other higher institutions who are being employed by one or more Basic schools in the last five years. Furthermore, Table 1 also indicates that 36(22.2%) of the respondents had National Certificate in Education (NCE) as the highest educational qualification, 90(55.6%) of the respondents had BSc/BEd. qualification, while 36(22.2%) of the respondents had a postgraduate degree. Given that the NCE qualification is the minimum academic requirement or acceptable qualification for teaching in the Nigerian Basic schools, it is possible that some of the respondents have acquired the NCE, while others have also acquired their first and postgraduate degree certificates from various universities and teacher training institutions. Generally, it is possible that the study covered more teachers who have graduated from universities than Colleges of Education. More so, Science teaching at the Basic school level in Bayelsa State might be a considered to be a gateway or transient employment for some pure science graduates who have acquired non-teaching first degree or postgraduate degree. Thus, it is not surprising that the study covered more teachers who have the BSc/BEd. qualification.

**Research Question One**: What is science teachers' attitude towards the use of mother tongue for instruction in Basic schools?

Table 2:Mean and Rank Order of science teachers' attitude towards the use of mother tongue for instruction in Basic schools

S/N	Items	Mean	SD	Rank
12	I am prepared to implement the language provision of the National Policy on Education in teaching and learning of Science in Basic Schools	2.94	0.85	1 st
13	I am convinced that utilization of indigenous languages in the teaching-learning of science would provide a worthwhile outcome	2.67	0.95	2 <sup>nd</sup>
14	I think teaching with the mother tongue promotes critical thinking and creativity of Basic school pupils without teachers' interference	2.65	1.06	3 <sup>rd</sup>
15	I would be glad to expose Basic school pupils to various learning experiences using the mother tongue	2.61	1.05	4 <sup>th</sup>
10	I think rote learning would be reduced in science instruction if students are taught with the mother tongue	2.59	0.81	5 <sup>th</sup>
1	I believe using the mother tongue for instruction facilitates proper learning of school lessons	2.57	1.07	6 <sup>th</sup>
6	I am ready to leverage on the potentials of the pupils' mother tongue to explain various objects, ideas and actions in the science classroom	2.52	0.82	7 <sup>th</sup>
4	I believe teaching with the mother tongue would be too stressful	2.44	0.99	8 <sup>th</sup>
2	I think communicating with pupils with the mother tongue in the science classroom promotes the understanding of foreign science concepts	2.26	1.06	9 <sup>th</sup>
11	I think I lack the required language skills to effectively integrate the pupils' mother tongue in science instruction	2.24	0.86	10 <sup>th</sup>
3	I believe teaching pupils with the mother tongue would be hindered by the lack of relevant indigenous science textbooks		1.03	11 <sup>th</sup>
9	I think teaching with the mother tongue, makes teachers to be deficient in the use of English Language in the classroom	2.16	0.94	12 <sup>th</sup>
5	I am that convinced Science is too broad and foreign to be taught using the mother tongue, which is associated with the traditions and cultural heritage of the pupils	2.16	0.96	12 <sup>th</sup>
8	I think it takes more training and competence to effectively teach	1.89	0.74	14 <sup>th</sup>

	Basic School Science with the mother tongue			
7	I prefer to explain various science topics using the English	1.69	0.79	15 <sup>th</sup>
	Language than mother tongue			
	Overall Mean	2.37	0.93	

Table 3 revealed science teachers' attitude towards the use of mother tongue for instruction in Basic schools, Bayelsa State, Nigeria. Thus, it is deducible from the mean ratings of the positively keyed statements (12, 13,14,15,10, 1, and 6) that some science teachers indicated some degree of positive attitude towards the use of mother tongue for instruction in Basic Schools in Bayelsa State, Nigeria. However, it is evident from Table that science teachers' attitude towards the use of mother tongue for instruction was negative because the overall mean of 2.37 was lower than the cut-off mean of 2.50, which was adopted as the benchmark for positive attitude in the study. Thus, most of the science teachers indicated a negative attitude towards the use of mother tongue in instruction in Basic schools.

#### **Hypothesis 1:**

There is no science teachers' attitude towards the use of mother tongue for instruction in Basic schools based on gender

**Table 3:**Means, Standard Deviations and t-value on science teachers' attitude towards the use of mother tongue for instruction in Basic schools based on Gender

Gender	N	Mean	SD	Df	Cal. t-value	p-value
Male	54	34.50	7.33			
				160	1.42	0.16
Female	108	36.17	6.86			

Table 3 showed a calculated t-value of 1.42 and a p-value of 0.16 at an alpha ( $\alpha$ ) level of 0.05. Since the p-value of 0.16 was greater than the alpha level at 0.05, the hypothesis was accepted. Hence, there was no significant difference in science teachers' attitude towards the use of mother tongue in instruction for instruction in Basic Schools based on gender.

#### **Hypothesis 2:**

There is no science teachers' attitude towards the use of mother tongue for instruction in Basic schools based on school type

**Table 4:**Means, Standard Deviations and t-value on science teachers' attitude towards the use of mother tongue for instruction in Basic schools based on School Type

School Type	N	Mean	SD	Df	Cal.t-value	p-value
Private	75	36.44	6.12			
				160	1.39	0.17
Public	87	34.89	7.71			

Table 4 showed a calculated t-value of 1.39 and a p-value of 0.17 at an alpha ( $\alpha$ ) level of 0.05. Since the p-value of 0.17 was greater than the alpha level at 0.05, the hypothesis was accepted. Hence, there was no significant difference in science teachers' attitude towards the use of mother tongue in instruction for instruction in Basic Schools based on school type.

#### **Hypothesis 3:**

There is no science teachers' attitude towards the use of mother tongue for instruction in Basic schools based on teaching experience

**Table 5:** Analysis of Variance (ANOVA) Showing the Science Teachers' Attitude towards the Use of Mother Tongue for Instruction in Basic Schools based on teaching experience

Source	Df	SS	Mean Squares	Cal. F-value	p-value

Between Groups	2	118.857	59.429	1.201	0.304
Within Groups	159	7869.643	49.495		
Total	161	7988.500			

Table 5 showed a calculated F-value of 1.201 and a p-value of 0.304 at an alpha ( $\alpha$ ) level of 0.05. Since the p-value of 0.304 was greater than the alpha p-value at 0.05, the hypothesis was accepted. Hence, there was no significant difference in the science teachers' attitude towards the use of mother tongue for instruction in Basic Schools based on teaching experience.

#### **Hypothesis 4:**

There is no science teachers' attitude towards the use of mother tongue for instruction in Basic schools based on educational qualification

**Table 6:** Analysis of Variance (ANOVA) Showing the Science Teachers' Attitude towards the Use of Mother Tongue for Instruction in Basic Schools based on educational qualification

Source	Df	SS	Mean Squares	Cal. F-value	p-value
Between Groups	2	807.150	403.575	8.935	0.000
Within Groups	159	7181.350	45.166		
Total	161	7988.500			

Table 6 showed a calculated F-value of 8.935 and a p-value of 0.000 at an alpha ( $\alpha$ ) level of 0.05. Since the p-value of 0.000 was less than the alpha p-value at 0.05, the hypothesis was not accepted. Hence, there was a significant difference in the science teachers' attitude towards the use of mother tongue for instruction in Basic Schools based on educational qualification. Resultantly, the Duncan Multiple Range Test (DMRT) was used as a post-hoc test to determine the teaching qualification group's mean scores that led to the significant difference noted in the ANOVA results on Table 6.

**Table 7:** Duncan Multiple Range Test (DMRT) Comparing the Science Teachers' Attitude towards the Use of Mother Tongue for Instruction in Basic Schools based on Educational Qualification

Duncan's grouping	Mean	N	Group	Teaching Qualification
A	31.50	36	1	Postgraduate Degree
В	36.08	36	2	NCE
В	37.06	90	3	BSc./BEd.

The result in Table 7 was used to determine which of the teaching qualification group (s) mean score led to the significant difference noted in the ANOVA on Table 6. The DMRT results indicated that there were differences in mean scores of the Basic School Science teachers based on their teaching qualification group. Thus, it is deducible from Table 7 that all the group means differed from one another. But, the significant difference noted in the ANOVA results on Table 6 was as a result of the mean scores of teachers that fall within the group BSc./BEd, which has the highest mean (37.06). This thus implies that Basic School Science teachers who have acquired the first degree have a slight different form of attitudinal disposition towards the use of mother tongue for science instruction in Bayelsa State, Nigeria.

#### 4. Discussion

The importance of mother tongue as a medium of instruction in Nigerian Basic schools has generated a lot of debate among scholars for decades. Hence, the present study investigated science teachers' attitude towards the use of mother tongue for instruction in Basic Schools in Bayelsa State, Nigeria. The major finding of the study indicated that the respondents have some extent of positive attitude towards the use of mother tongue for science instruction in Basic schools. These are the teachers who are prepared to implement the language provision of the National Policy on Education in teaching and

learning of Science in Basic Schools and also convinced that utilization of indigenous languages in the teaching-learning of science would provide a worthwhile outcome. Furthermore, this category of teachers think teaching with the mother tongue promotes critical thinking and creativity of Basic school pupils without teachers' interference, would be glad to expose Basic school pupils to various learning experiences using the mother tongue, think rote learning would be reduced in science instruction if students are taught with the mother tongue, believe using the mother tongue for instruction facilitates proper learning of school lessons and ready to leverage on the potentials of the pupils' mother tongue to explain various objects, ideas and actions in the science classroom. This finding complied with the finding of Ezeokoli and Ugwu (2018), which ascertained that parents, teachers and students' had positive beliefs about the use of mother tongue for instruction in Akinyele Local Government Area, Oyo State, Nigeria. Thus, it is possible that the Basic School Science teachers, who indicated a positive attitude towards the use of mother tongue for instruction, are indigenes of Bayelsa State who are fluent in the speaking and writing of Ijaw and other native dialects or the mother tongue of Basic School pupils in Bayelsa State. It is also likely that some of the teachers who have a positive attitude towards the use of the mother tongue in science instruction are nonindigenes who have mastered the language of the immediate environment enough to teach pupils in their mother tongue. On the whole, however, the findings indicated that most of the Basic school science teachers showed a negative attitude towards the use of mother tongue in instruction. This category of teachers includes those who believe that teaching with the mother tongue would be too stressful, lacks the required language skills to effectively integrate the pupils' mother tongue in science instruction, believes teaching pupils with the mother tongue would be hindered by the lack of relevant indigenous science textbooks, thinks teaching with the mother tongue makes teachers to be deficient in the use of English Language in the classroom. Furthermore, such teachers think science is too broad and foreign to be taught using the mother tongue, which is associated with the traditions and cultural heritage of the pupils, think it takes more training and competence to effectively teach Basic School Science with the mother tongue and also prefer to explain various science topics using the English Language than mother tongue. This finding corroborates the finding of Nyarigoti and Ambiyo (2014), which found that the attitude of stakeholders in the society towards using mother tongue in Kenyan primary schools was negative. This finding might be attributed to the fact that most of the teachers are fluent and conversant with the use of English Language for science instruction in Basic schools in Bayelsa State, and might be reluctant to teach students with the mother tongue, such as the Ijaw language due to various personal and general reasons. It was found that teachers' gender, school type and teaching experience did not influence their attitude towards the use of mother tongue for science instruction in Basic schools. while educational qualification influence their attitude towards the use of mother tongue for instruction in Basic Schools. Thus, educational qualification mediated the attitudinal disposition of science teachers towards the use of mother tongue for science instruction in Bayelsa State, Nigeria.

### 5. Conclusion

This study investigated science teachers' attitude towards the use of mother tongue for instruction in Basic schools. Based on the findings of the study, it could be concluded that teachers had a negative attitude towards the use of mother tongue for instructions in Basic schools in Bayelsa State, Nigeria. Furthermore, teachers' gender, school type and teaching experience did not influence their attitude towards the use of mother tongue for science instruction in Basic schools, while educational qualification had an influence on towards the use of mother tongue for science instruction in Basic schools in Bayelsa State, Nigeria.

#### 5.1. Recommendations

Based on the findings of this study, the following recommendations are advanced:

- 1. Science teachers in Bayelsa State should be encouraged by the Science Teachers Association of Nigeria (STAN) and other relevant stakeholders to show a more positive attitude towards the use of mother tongue to teach Basic school science.
- 2. The school administrators and other stakeholders in the educational system of Bayelsa State should periodically organize workshops, seminars and capacity building workshops to improve the level of

competence of Basic school teachers in the implementation of the mother tongue policy in education, regardless of gender, school type and teaching experience differences.

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#### **Authors**

**Adams Ogirima ONIVEHU,** Department of Social Sciences Education, Faculty of Education, University of Ilorin, Ilorin, Nigeria, e-mail: adamsonivehu@gmail.com

**James Joy Tolulope,** Department of Counsellor Education, Faculty of Education, University of Ilorin, Ilorin, Nigeria, e-mail: jamesjoytolulope@gmail.com

**Sulaimon Jamiu Temitope,** Department of Adult and Primary Education, University of Ilorin, Ilorin, Nigeria, e-mail: sulaimonjamiutope@gmail.com

## Acknowledgement

We sincerely appreciate the respondents for participating in the study. More so, we are very grateful to the editorial team and peer reviewers for their unprecedented contributions and insightful suggestions.