Strategies for Reducing Mathemaphobia among Secondary Schools Students in Ebonyi State of Nigeria

Nweke Sunday Idakari1, Ali Peter Agbom2,*

1Department of Mathematics, Ebonyi State College of Education Ikwo
2Department of Physics, Ebonyi State College of Education Ikwo
*Corresponding author: petera754@gmail.com

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Abstract

The quest to improve the teaching and learning of mathematics in our secondary school prompted this study titled, ‘Strategies for reducing Mathemaphobia in Secondary School Students’ in Ebonyi State of Nigeria’. Four hundred secondary school students were sampled for the study out of the total 122,872 students in the 222 public secondary schools in Ebonyi state of Nigeria. Two research questions were developed for the study. The research questions were also used to develop seventeen items questionnaire for the study. The study adopted a descriptive survey research design. The copies of questionnaire were administered to the sample students and their responses were analyzed to answer the research questions using mean and standard deviation. The results of the analyses showed that inclusion of mathematics practical in lessons and examinations, use of practical and interactive methods of teaching mathematics, and introduction of award scheme to the best performing teachers and students will reduce mathemaphobia among secondary school students in Ebonyi state. Based on the results of the study recommendations were made that those variables discovered to have hand in students’ mathemaphobia should be addressed adequately by the relevant authorities concerned.

Keywords: mathematics, mathemaphobia, strategies, teaching and learning


1. Introduction

The need for scientific and technological development in Nigeria cannot be over emphasized especially considering that the country is still developing. There is every need to equip our secondary school students to face the all-important challenges that await them in developing the country technologically. The task of transforming this country to information and knowledge age is a very important one that must be achieved. The school curriculum is loaded with subjects that will provide enabling environment for this needed scientific and technological transformation.

Mathematics is one of the subjects that develop learners scientifically and technologically. Obodo,[1] observed that mathematics is the science of size and numbers, the soil on which science and technology grow. Anih, [2] also stated that, for education for all to be possible, there must be mathematics for all. According to him, this is so because the prosperity of any country depends on the volume and quality of mathematics offered in that country’s school system. This is to say that for any nation to develop scientifically or technologically, it must have developed mathematical abilities among its citizenry. Notwithstanding this importance of mathematics to the development of science and technology of any nation, pieces of evidence available have shown that there is a total poor achievement of secondary school students in mathematics. Ale, [3] concurred to this situation when he stated that students’ achievements in mathematics over the years have not been encouraging. Onoh and Obodo, [4] had the same view when they lamented, that despite the importance of mathematics many problems seems to operate against mathematics education in the country, which have resulted in consistent poor performance of students in the subject in both internal and external examinations.

The above situation has called for collective and concerted effort to proffer solution to this problem of students’ poor achievement in mathematics in Nigeria in general and Ebonyi state in particular. Research reports have offered several reasons for students’ poor achievement in mathematics. The reasons proffered by those researchers include lack of interest and/or negative attitude toward mathematics [3] , mathematics as being esoteric in nature [5] and dislike and hatred for mathematics [1]. A closer look at all these reasons adduced for poor students’ achievement in mathematics show that it centers on attitude and fear and not low intelligent level on the part of the students. In fact, majority of the mathematics authorities [1,5,6] attributed the poor students’ achievement in mathematics to fear of
Mathematics (mathemaphobia). All the suggested solutions to this problem of poor performance in mathematics seem not to be working hence the need to research more.

Mathemaphobia is coined out of two words “mathematics” and “phobia”. Mathematics is a science subject that studies size, numbers and number manipulation [7], while Phobia is an irrational (unreasonable) fear for something [7]. Putting the two together it becomes “mathemaphobia” meaning irrational (unreasonable) fear for mathematics.

It is based on the above situation that the study investigated the effects of inclusion of mathematics practical lessons in school curriculum, inclusion of practical mathematics in secondary school lessons and examinations, re-introduction of boarding houses/schools in our secondary school system and introduction of awards scheme for those who excel in mathematics as ways to reducing this mathemaphobia. All these constituted the bench mark criteria against which the needed innovative strategies were adduced.

1.1. Purpose of the Study

The main purpose of this study is to determine workable strategies that can reduce mathemaphobia among secondary school students in Ebonyi state of Nigeria.

Specifically this study seeks to:
1. determine if inclusion of mathematics practical lessons in secondary school curriculum will reduce mathemaphobia among secondary school students in Ebonyi state of Nigeria.
2. determine if introduction of award scheme for the best performing students in mathematics will encourage and reduce mathemaphobia among secondary school students in Ebonyi state of Nigeria.

1.2. Research Questions

The following research questions were posed to guide the study;
1. How does the inclusion of mathematics practical in secondary school mathematics curriculum reduce mathemaphobia among secondary school students in Ebonyi state?
2. How does introduction of award scheme to the best performing teachers and students reduce mathemaphobia among secondary school students in Ebonyi state?

1.3. Statement of the Problem

Mathematics is commonly known to be a subject of study in almost all levels of any educational system. Over the years the various groups of curriculum developers have insisted on inclusion of mathematics in the course of study in all levels of education. It was based on that, that Nigeria curriculum planners have to make mathematics a compulsory daily subject of study in pre-primary, primary and secondary schools. They also made mathematics a pre-requisite for admission into tertiary institution no matter the course of study, [8]. Still based on that, one will be moved to ask, what is the importance of this subject, mathematics to humanity and what would be the nature of this world without mathematics? The answers to these questions are necessary because nobody or nation will choose to embark on a job that has no beneficial effect to him or the people. In response to the above questions, Encarta [9], stated that, without mathematics to describe physical phenomena, we might be living in a world with beautiful art, literature and philosophy, but no technology, which invariably is the basis of modern society. Ezeamaenyi [10], states that, without mathematics there will be no science, without science there will be no technology and without technology there will be no modern society. And by rational thought every field or subject has its own science, which is rooted in mathematics, hence showing relevance of mathematics across and outside boundaries.

In spite of the numerous benefits of mathematics, its study has not been encouraging among secondary students in Ebonyi state of Nigeria. Anih [2], stated that the problem facing mathematics in Nigeria is mainly in its teaching and learning. He said that the problem cannot be dismissed with a wave of hand. He observed that pupils shy away from mathematics in the lower levels education, and also many students who are admitted for courses related to mathematics at higher levels of education. She said that some students gathered their indifferences and dislike of mathematics at the early stage of education. It was based on that observed dislike and the accompanying low achievement in the subject that motivated the researchers to sort to innovate strategies to reduce fear of mathematics among secondary school students in Ebonyi state of Nigeria.

1.4. Students’ Achievement in Mathematics

Every educational program has set objectives, aims or goals. After a given period of time in which a set of teaching and learning activities are completed for the achievement of such objectives, aims or goals, the organizers of such program will have to test the learner/s to know the extent at which such objectives, aims or goals have been achieved. The achievement of the set objectives, aims or goals makes the organizers of the educational program fill fulfilled. However, if it is on the contrary, the organizers are bound to questions on why the objectives, aims or goals were not achieved. It is the achievements of the students that normally determine if an educational program’s objectives, aims or goals have been achieved or not. In the case of mathematics, records have shown that the achievements of students have not been encouraging. This therefore implies that the objectives, aims and goals of Nigeria mathematics education have not been achieved. Uchenna and Agwagah [11], stated that students’ achievements in mathematics examinations, both internal and external, from year to year have never been encouraging. Ale [3], commented that, the students’ achievement in mathematics have remained poor and disturbing. Azuka [12], in his own stated that all the levels of the educational system primary, secondary and tertiary have witnessed so much deterioration in quality that Nigerians are wondering if the educational system will...
ever recover. He maintained that of the entire subjects studied in our educational system, mathematics is worst hit with the poor achievement records. This ugly situation in our educational system and especially as it concerns mathematics in particular; many researchers have made serious suggestions on a way out but to no avail as the problem seems to have defied all solutions hence the need for this study.

1.5. Concept of Mathemaphobia

The word mathemaphobia is derived from two English words ‘mathematics and phobia’. Mathematics is a course of study that uses numbers (symbols) and diagrams to study the relationship between man and his environment. Mathematics, studies the relationships among quantities, magnitudes, and properties and of logical operations by which unknown quantities, magnitudes, and properties may be deduced [9]. Phobia is an irrational (unreasonable) fear for something (mathematics) [9]. That is to say that mathemaphobia is an irrational fear for mathematics. Irrationality in the sense that there exists no basis for the fear.

Ezeamaenyi [10], states that, mathemaphobia among secondary school students have reached the extent that they became jittery and some even became sick or hopeless on hearing the word, ‘Mathematics’. In expatiating on the nature of mathemaphobia in our schools, he grouped students’ attitude toward mathematics into four, namely; phobia and potential (intelligent) group, phobia and dullard group, mania and dullard group and lastly mania and potentials (intelligent) group. He said that, phobia and potential group and phobia and dullard group belong to a common group of Mathemaphobia, whereas the mania and dullard group and mania and potentials (intelligent) group belong to another common group which he referred as Mathemamania or Mathemamanism. Meanwhile the issue of importance is what should be done to create and sustain students’ interest in mathematics. It is important to note that for interest to be created and sustained in secondary school mathematics, the above mentioned phenomenon of mathemaphobia must be totally eliminated from the mind of our secondary school students.

Contributing on the issue of mathemaphobia, Obodo [1], indicated that most students dislike mathematics as a subject. In buttressing his point he said that students keep away from mathematics lessons, pay little or no attention to the teacher during lessons. He further pointed out that the students’ dislike of mathematics brings among other things a general tendency for students to develop phobia (irrational fearful) whenever mathematics is mentioned. A phenomenon he also described as mathephobia, mathematicophobia or mathemaphobia. He said that when students are afraid of any task, they endeavour as much as possible to avoid such a task. On the other hand, if such a task must be done as the case of mathematics, which is compulsory for all secondary school students, the students will be studying it with complete lack of interest, which indirectly brings about failure, and that is the case of mathematics education in Nigeria today.

Obodo [1] and Ezeamaenyi [10], enumerated factors responsible for this phenomenon of mathemaphobia to include; attitude of students themselves, teacher’s method of teaching, peer group influence, parents and guardians negative roles, nature of mathematics as a subject, students’ poor mathematics background and cultural influences. Uchenna and Agwagah [11], identified that teachers do not use appropriate instructional materials to teach some mathematical concepts as one of the causes of mathemaphobia.

Anih [2], in a theoretical study of the modification of people’s attitude toward mathematics education in Nigeria emphasized that poor attitude to mathematics (mathemaphobia) as a subject was the major cause of poor achievement of majority of Nigerian students in science and mathematics education. He urged the teachers, students and the general public to develop positive attitude toward mathematics, as it will provide them with the base knowledge of science and technology. It is important to note that among previous researchers none has even considered inclusion of practical mathematics classes in the curriculum.

1.6. Inclusion of Mathematics Practical Lessons in Secondary School Curriculum

Science is knowledge attained through the study of the operations of general laws of nature especially that knowledge which is obtained, tested, approved and accepted through experimentation methods, [13]. The scientific methods include; observation, measurement, experimentation, manipulating techniques, formulating models etc. These processes are carried out in a science laboratory. Mathematics being one of the major science subjects which should be taught practically in a well-equipped laboratory unfortunately has no laboratory in almost all the secondary schools in Nigeria. An average secondary school in Ebonyi state of Nigeria has laboratories for physics, chemistry, biology, home economics, geography, etc but has no mathematics laboratory for practical. Why then is mathematics regarded as science subject if it cannot be taught practically? It is obvious that in all levels of our education system, mathematics practical is lacking. This situation may be responsible for students’ mathemaphobia. This situation makes the students not to be able to relate the learned abstract concepts into practical terms and also it reduces the level of the students’ understanding of the topics taught. Ezeamaenyi [10], asked a pertinent question on how can one reconcile a situation where an uneducated person can give correct balance to another person who buys wares from him but the same person could not evaluate for example, $7+2$, far simpler than giving a correct balance? But the answer to that question is simple in the sense that giving correct balance involves practical demonstration whereas $7+2$ is an abstract evaluation as it did not involve any physical objects.

The above is an indication that science and mathematics in particular will be better understood if taught practically in the laboratory. One will probably agree that the unproductive nature of our mathematics and general poor achievement of students in the subject is as a result of the way it is taught. The inclusion of mathematics practical in all the secondary schools mathematics lessons and examinations will not only make mathematics teachers to
make use of the laboratory and the teaching materials, but will also make them adopt practical method of teaching which is assessed by experts as the best method of teaching sciences.

1.7. Introduction of Mathematics Award Scheme

Almost all other painstaking professions like medicine, engineering, law, etc have special rewards that attract people to such professions. Such rewards ranges from better salary package, special allowances, scholarships etc. but mathematics in this country has never enjoyed such a privilege in spite of the general complaint of the difficult nature and its general applications in our everyday life. Azuka [12], recommended that incentives including special salary scale and allowances to be given to mathematics teachers to attract and retain the best brains in the job. Considering the harsh economic situation in the country no intelligent student will want to go into a profession that has no better economic reward. This creates a situation where the field of mathematics is filled with duffards. It also creates a situation where by only few students are usually admitted into mathematics courses in our tertiary institutions thereby creating scarcity of mathematics teachers in our secondary schools.

It is common these days that governments usually approve a higher bursary award for special classes of students like those studying medicine, engineering, law etc, whereas mathematics which has been described as the base of all these professions is relegated to the background. This situation calls for a concerted effort and well-articulated strategy to develop an attractive welfare package for teachers and students of mathematics in this country. This may go a long way in spurring their minds to putting in their best and also motivate more students to join the profession thereby reducing mathemaphobia.

2. Research Design

The study adopted a descriptive survey research design. This design was adopted because according to Ezeh [14], it enables the researcher to use reliable techniques to collect data from a well-defined population or systematically selected segments of a population for the purpose of determining the attributes of the population. Ezeh [14], explained that in a survey research design, the purpose is usually to identify the characteristics of a defined population with respect to specific variables. This study was interested in identifying new strategies that will reduce mathemaphobia among secondary school students in Ebonyi state of Nigeria.

2.1. Area of the Study

This study was carried out in Ebonyi state of Nigeria. Ebonyi state is in eastern part of Nigeria and is made up of three education zones namely; Abakaliki zone comprising Abakaliki, Ebonyi, Izzi, and Ohaukwu Local Government Area Councils. Onueke Zone comprising Ezza North, Ezza South, Ikwo and Ishielu Local Government Area Councils and Afikpo Zone comprising Afikpo North, Afikpo South, Ivo, Onicha and Ohaozara Local Government Area Councils.

These gave a total of thirteen Local Government Area Councils and have a total of two hundred and twenty two (222) public secondary schools with one hundred and twenty two thousand eight hundred and seventy two (122,872) students for the study [15]. The rational for choosing Ebonyi State as the area of this study is based on the need to improve the achievement of students on mathematics on the educationally disadvantaged state like Ebonyi State.

2.2. Population of the Study

The population of this study comprised 122,872 (60,360 male and 62,512 female) secondary school students in Ebonyi state [15]. This population was the most appropriate for these type of study because they were directly involved in everyday learning of mathematics in secondary schools. As they are directly involved they will be on the best position to respond to the items of the study.

2.3. Sample and Sampling Techniques

The study made use of 400 secondary school students of which 296 are male while 104 are female spread across the thirteen Local Government Area Councils in Ebonyi state. The researchers adopted a multi-stage random sampling technique to arrive at the sample. This multi-stage random sampling technique consists of a number of distinct stages. The first stage was using proportionate sampling technique to select 40 sample secondary schools across the thirteen Local Government Area Councils of the state. This is followed by a random sampling technique to select 400 students from the sampled schools, which in each of the forty sample secondary schools; ten (10) students were randomly selected for the study.

2.4. Instrument for Data Collection

The instrument for data collection of this study was a structured questionnaire developed by the researcher. It was called Strategy for Reducing Mathemaphobia Questionnaire (SRMQ). It was a four point scale questionnaire designed to elicit information on the two research questions. The first and second research questions have 9 items each and a total of 18 numbers of items. Each item of the questionnaire has a four point scale rating thus: Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

2.5. Reliability of the Instrument

The reliability of the instrument was ascertained using test - retest form of reliability. This form of reliability test allows the same instrument to be tested on the same subjects (respondents) in two different occasions separated by some time interval not less than two weeks. To this end the same instrument (SRMQ) was administered to twenty
secondary school students who were not enlisted for sample from Enugu Metropolis of Enugu state Nigeria. The test - retest took a time gap of two weeks. The mean value obtained using Pearson product-moment formula for correlation coefficients was 0.84. This high figure is an indication of high reliability of the instrument.

3. Method of Data Collection

The researchers visited the sample schools and with the help of the research assistants sample out ten students and administered the instrument to them. They gave the research instrument to the students and waited to collect it back when they finished responding to all the items. Research assistants were trained on the modalities of questionnaire administration to all the sample schools. These research assistants, assisted in the administration of the instrument in such schools.

4. Method of Data Analysis

The research questions were answered using mean and standard deviation. That is the mean response of the respondents to each item in the questionnaires was used to determine the answer to each question. While the research questions were answered by calculating the mean and the standard deviation of response of each cluster in the questionnaire. In order to interpret the result of the research question, a mean value of 2.50 was calculated as a limiting value.

Therefore, any mean value of 2.50 and above was regarded as positive and accepted while a mean of less than 2.50 was regarded as negative and was rejected.

5. Results of Research Questions

Research Question 1

How does inclusion of mathematics practical lessons in secondary school curriculum reduce mathemaphobia among secondary school students in Ebonyi state?

Table 1 is used to answer research question 1, which sought to find out if the inclusion of mathematics practical lessons in secondary school curriculum will reduce mathemaphobia among secondary school students in Ebonyi state. The results on Table 1 show that all the eight items 1, 2, 3, 4, 5, 6, 7, and 8 were all accepted because they all have mean values above 2.50. The grand mean is 2.90 which is above 2.50, hence, the respondents agreed that insertion of mathematics practical lessons in secondary school curriculum reduces mathemaphobia in secondary school students in Ebonyi state.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>(\bar{x})</th>
<th>SD</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Practical method of teaching mathematics should be applied in teaching secondary mathematics.</td>
<td>205</td>
<td>100</td>
<td>31</td>
<td>64</td>
<td>3.12</td>
<td>1.10</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>Mathematics practical equipment should be provided to all secondary schools.</td>
<td>157</td>
<td>53</td>
<td>53</td>
<td>137</td>
<td>2.58</td>
<td>1.31</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>Students should be guided to discover mathematics concept themselves.</td>
<td>156</td>
<td>125</td>
<td>74</td>
<td>45</td>
<td>2.98</td>
<td>1.01</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>Teachers should be emphasizing more on the practical aspect of mathematics.</td>
<td>156</td>
<td>125</td>
<td>74</td>
<td>45</td>
<td>2.98</td>
<td>1.01</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>Mathematics practical should be made compulsory in all secondary schools</td>
<td>163</td>
<td>128</td>
<td>69</td>
<td>40</td>
<td>3.04</td>
<td>0.99</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>There should be practical aspect of all topics in secondary school mathematics</td>
<td>221</td>
<td>41</td>
<td>36</td>
<td>102</td>
<td>2.95</td>
<td>1.29</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>Every class in the secondary schools should have time for mathematics practical.</td>
<td>160</td>
<td>78</td>
<td>65</td>
<td>97</td>
<td>2.75</td>
<td>1.21</td>
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</tr>
<tr>
<td>8</td>
<td>Students should be made to produce mathematics teaching aids for mathematics practical class.</td>
<td>161</td>
<td>94</td>
<td>49</td>
<td>96</td>
<td>2.80</td>
<td>2.20</td>
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<td></td>
<td>Grand Mean</td>
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<td>1.27</td>
<td>Accepted</td>
<td></td>
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Grand Mean

<table>
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<tr>
<th>S/N</th>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>(\bar{x})</th>
<th>SD</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>There should be award for best mathematics teacher in each school every year</td>
<td>151</td>
<td>50</td>
<td>96</td>
<td>103</td>
<td>2.62</td>
<td>1.23</td>
<td>Accepted</td>
</tr>
<tr>
<td>10</td>
<td>There should be award for best performing mathematics student in every class in each school every year</td>
<td>151</td>
<td>50</td>
<td>96</td>
<td>103</td>
<td>2.62</td>
<td>1.23</td>
<td>Accepted</td>
</tr>
<tr>
<td>11</td>
<td>There should be a scholarship scheme for students offering mathematics at tertiary level of education</td>
<td>170</td>
<td>142</td>
<td>48</td>
<td>40</td>
<td>3.11</td>
<td>0.97</td>
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</tr>
<tr>
<td>12</td>
<td>There should be special salary package for mathematics teachers</td>
<td>192</td>
<td>59</td>
<td>46</td>
<td>103</td>
<td>2.85</td>
<td>1.27</td>
<td>Accepted</td>
</tr>
<tr>
<td>13</td>
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<td>170</td>
<td>142</td>
<td>48</td>
<td>40</td>
<td>3.11</td>
<td>0.97</td>
<td>Accepted</td>
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<tr>
<td>14</td>
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<td>170</td>
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<td>48</td>
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<td>59</td>
<td>46</td>
<td>103</td>
<td>2.85</td>
<td>1.27</td>
<td>Accepted</td>
</tr>
<tr>
<td>16</td>
<td>There should be regular and expanded mathematics competitions among secondary school students</td>
<td>221</td>
<td>41</td>
<td>36</td>
<td>102</td>
<td>2.95</td>
<td>1.29</td>
<td>Accepted</td>
</tr>
<tr>
<td>17</td>
<td>Government should be giving full scholarship to students studying mathematics in higher institutions.</td>
<td>212</td>
<td>60</td>
<td>62</td>
<td>66</td>
<td>3.05</td>
<td>1.16</td>
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</tr>
<tr>
<td></td>
<td>Grand Mean</td>
<td>2.89</td>
<td>1.14</td>
<td>Accepted</td>
<td></td>
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</tr>
</tbody>
</table>
Research Question 2

How does introduction of award scheme to the best performing teachers and students reduce mathemaphobia in secondary school students in Ebonyi state?

Table 2 is used to answer research question 2, which sought to find out if introduction of award scheme to the best performing mathematics teachers and students will reduce mathemaphobia in secondary school students in Ebonyi state. The results in Table 2 show that all items 9, 10,11,12,13,14,15,16 and 17 were all accepted because they all have mean values above 2.50. The grand mean is 10.11,12,13,14,15,16 and 17 were all accepted because 2.89 is greater than 2.50, hence, the respondents agreed that introduction of award scheme to the best performing mathematics teachers and students reduces mathemaphobia in secondary school students in Ebonyi state.

6. Recommendations

Based on the findings the following recommendations were made of this study;

1. School administrators and the relevant stakeholders should introduce mathematics practical lessons in secondary school curriculum in all levels of secondary schools in Ebonyi State. They provide each school with functional mathematics laboratory equipped with modern and modern mathematics teaching aids. Mathematics as a subject should be treated as such by involving practical work in all aspects of its study.

2. Secondary school administrators should employ enough mathematics professional teachers who are grounded on the practical aspect to teach mathematics using practical-oriented and modern methods of teaching. Mathematics being a compulsory subject in all levels of our education should have enough qualified teachers that will teach it in all the various levels.

3. Modern methods of teaching mathematics should be adopted throughout the secondary schools in Ebony state. Such methods like problem solving approach, target task approach, laboratory approach, discovery approach, etc, should be adopted in teaching of mathematics in Ebonyi state. It is our belief that if this is implemented will reduce the abstract nature of mathematics and go a long way in reducing mathemaphobia among the students.

4. There should be enough motivation for mathematics teachers in the state. If they are properly motivated it will make them to put in their best. The motivation should be in the areas of provision of special salary package and allowances for mathematics teachers. Workshops, conferences and seminars should be organized for serving mathematics teachers regularly to update them on the recent developments in teaching and learning of mathematics and also to keep them a brace with the developments in the field of mathematics. These packages would attract best brains to teach mathematics in the secondary schools.

5. There should be scholarship programmes for students studying mathematics at tertiary education level. This would ensure that intelligent students are enrolled to study mathematics.

References