

## CAUSES OF MASS FAILURE OF MATHEMATICS IN SENIOR SECONDARY SCHOOL CERTIFICATE EXAMINATION IN BAYELSA STATE.

<sup>1</sup>Loko Onewunmi Perelah, <sup>2</sup>Maxwell Nelson, <sup>3</sup>Samson Isobo, <sup>4</sup>Kpe-nobama Priscilla Leka  
<sup>1, 2, 3</sup>Department of Mathematics,  
Isaac Jasper Boro College of Education Sagbama, Bayelsa State  
<sup>4</sup>Department of Mathematic/Statistics Ignatius Ajuru University of Education  
Rumuolumeni, Port Harcourt  
**Email:** perelahloko@gmail.com

### ABSTRACT

Mathematics being one of the most important subject in all areas of human endeavors. It must be practicable understood at all levels of academic in well conducive environments of learning which without pass in Mathematics, it is impossible to further one education because of its important. The article titled causes of mass failure of Mathematics in senior secondary school certificate examination in Bayelsa state which focused on some basic causes and efforts of mass failure in SSCE (Mathematics) in some selected schools in Yenagoa local government area. Total number of 120 questionnaires were randomly sent to these selected schools and found out that unqualified Mathematics teacher and non-availability of instructional materials are some of the causes among others. The study also revealed reduction in number of Mathematics teachers and loss of interest in academic pursuit by students as some of the effects of mass failure in SSCE Mathematics.

**Keywords:** Mass Failure, Analysis of the Causes, Teaching Methods

### INTRODUCTION

For Nigeria to realize her dream in the development of senior secondary school, the citizens of the country must show outstanding performance in all secondary school subjects in recent years, student academic achievement in senior secondary school certificate examination special in Mathematics has not be encouraging has expected by educational evaluators. The word "mathematics" is a Greek word, meaning things that are learned, Majasa (1995) further defined it as the science of counting, measuring and describing of the shape of objectives. It simply deals with logical reasoning and quantitative calculations. Mathematics as a school subject is recognized as the foundations of science and technology without which a nation will never become prosperous and economically independent. This one of the reason for making Mathematics compulsory and one of the leading core subjects in the secondary school's curriculum. Despite the effort put in by government, and various stakeholders of education, mathematics still remains one of the most difficult subjects in schools.

There is general impression that Mathematics is difficult by its very nature, and because of this impression, there is poor performance among senior secondary school students who are focus of this study. This poor performance in Mathematics has been attributed to two broad factors which include:

1. Hereditary
2. Environmental factors.

According to Ola (1998) that this factors can be subdivided into student, home, teacher, and school factors.

In the aspect of the student toward the Mathematics learning indicate that many student reason that Mathematics is highly structured and; is so abstract and required special intellectual attitude this; students see the subject as something esoteric. You will find out that if a student has a

positive attitude toward Mathematics, he will definitely be interested in it teaching and learning. On the other hand, if he has negative attitudes toward mathematics, he will not be interested in the subject in this case you see that negative attitude of student toward learning of Mathematics make them to performance very low and poor generating more failure in the subject area.

Parent attitude toward their children also determine a great success in the subject area. Parent need to monitor the activity of their children after school, they play an important role in guiding their children to read and in doing their assignment. Even some parent too has; their own negative ideal about Mathematics which, willingly or unwillingly they transfer to their children. The children emulate such attitudes consciously or unconsciously; and carry them to school. Most parents indoctrinate their children that Mathematics is difficult or that, is not useful to them with respect to the course they will study. Parent hardly required their children to explain the problem or joy found in their mathematics classes.

This count as one of the causes of poor performance of student in Mathematics.

Teacher's attitude can hinder learning especially when one does not present oneself as a high intellectual and formidable person. It is a common defect in our educational setup that most of the subject teachers are not adequately qualified in the subject concerned. It is an essential ingredient for good Mathematics teaching. Nigeria is faced with the problem of competent teachers in Mathematics which is one of the major causes of mass failure among the students in Mathematics. Some Mathematics teachers create the impression to students that Mathematics is difficult and not meant for everybody to study except for those with exceptional qualities like themselves who teach the subject. Some also exhibit extreme neurotic behaviors either in the class or outside the classroom. Student also see some Mathematics teachers as mad people, those who cannot dress well or comb their hairs; those who are impatient or hot tempered. Teachers been very fast while teaching could also serve as one of the factors which make the students not to understand the subject very well, because individual differences exist between students. Some teachers do not have the patience of time to work out problems in different ways or methods so that students can adapt to a convenient method; all this negative attitude of the teachers also contribute to most of the failures of the students in the subject area.

The school administrators also have a direct role to play as relates to the disciplinary of the students and the teacher supervision of teaching, learning and preparation of student well enough for examination. According to Ekemia "an effective mental health for principal includes emotional, stability, maturity of character and a large capacity of frustration tolerance with the strength to withstand the strain and stress inherent in running today's Nigeria secondary school without undue fiscal of psychological dispullibrai" many principals are faced with managerial difficulties especially those who lack human relationship cannot execute effective administrative duties in the schools. Through these factors enumerate above, it could be seen that, there are many causes attributed to mass failure in Mathematics examination in senior secondary school certificate examination. The senior Secondary school certificate examination is an external examination organized and conducted by the ministry of education. The establishment of this senior secondary school education by the state government in Yenagoa local government, area of Bayelsa state like any other states has the same aims and objectives as the national policy on education specified that secondary education is the education received after primary education and before the tertiary institution. Perhaps, not much attention has been given to the performance of students in senior secondary school subjects in recent: years. This neglect no doubt has relegated these senior subjects to the background in our senior secondary examination. A close look at the 2004/2008 SSCE result records, confirms that student's performance has been very poor generally and the increase number of school dropout in the area of study is a clear pointer of the theme.

**The poor performance is caused by many factors such as:**

- a. Students ineffective study techniques
- b. Quality of teachers and method of teaching
- c. The parent's inability to provide useful materials like textbook, exercise note books and school fees.
- d. Problem of inadequate instructional materials for teaching and learning of Mathematics in schools.

In philosophy view of these causes, this study there for is specifying designed to assess the causes and effects of mass failure of Mathematics in senior secondary school certificate examination in Yenagoa local government area of Bayelsa State.

Finally, it is obvious that the findings of the study will definitely aspire the researcher to seek for possible suggestions and recommendations to students, teachers, parents, sponsor and government to bring any end to student mass failure of Mathematics in a such external senior certificate examination and to improve student performance in the future examination in these schools and other part of the country having similar educational problems.

The main purpose of this study is to find out the causes and effect of mass failure of Mathematics in senior secondary school certificate examination. The interests of the researchers are to examine critically and identify the causes and effects of mass failure of Mathematics in senior secondary school certificate examination, specially, the study sought to find out if:

- a. There are sufficient number of qualified Mathematics teachers and instructional materials for teaching of Mathematics
- b. The previous socio-economic background of the students; affect them in studying Mathematics.
- c. The attitude and interest of students toward the; nature of Mathematics contribute deeply to their mass failure in "SSCE" especially in Mathematics. Parent inability to provide useful learning material also affects the effective learning of Mathematics.
- d. Teaching methods employ by the teacher during the teaching learning process contribute to the mass failure Mathematics.

**THE FOLLOWING RESEARCH QUESTIONS AIDS THE RESEARCH:**

**Research question one:** Is lack of qualified Mathematics teacher the cause of mass failure of student in SSCE Mathematics?

**Research question two:** Is lack of instructional materials in teaching Mathematics a cause of student's mass failure in SSCE Mathematics?

**Research question three:** Does the Socio-economic background of the students affect them in the study of Mathematics?

**Research question four:** Does poor attitude and low interest of students toward the learning of Mathematics contribute deeply to their mass failure in SSCE Mathematics?

**Research question five:** Does teachers'/students relationship contribute to the mass failure-of student in SSCE Mathematics?

**Research question six:** What are the possible effects of mass failure of Mathematics in SSCE to both the students and society at large?

## RELATED LITERATURE

Concept of causes of mass failure of Mathematics in senior secondary school certificate examination in Bayelsa State. Therefore, let us reflect of the origin and meaning of the concept Mathematics. The word Mathematics is a Greek word meaning things that are learned. Majasa (1995), further defined it as the science of counting, measuring and describing of this shape of object. It deals with logical reasoning and quantitative calculation. Mathematics as a school subject is recognized as the foundation of science and technology without it a nation will not be industriously prosperous and economically independent. Still stressing on the scientific importance of Mathematics. (Ababio 1989) stated that the general idea of science subject lies on the fundamental knowledge of Mathematics; this is to say that the study of science requires the basic knowledge of Mathematics. This underscores the important of Mathematics competence of all learners at all levels of education and a reason for making Mathematics compulsory and one of the leading core subject in the secondary school's curriculum. Secondly, as we have traced the origin, important and meaning of Mathematics, we can now look at the causes of mass failure of this very subject-Mathematics, mass failure means when the greater percentage (say 70%) of the student that registered for a particular examination fail that examination, so as a result of this mass failure, saw it as a social problem in our society, that is why we have found interest to find out some lasting solution to this mass failure of students in Mathematics. In this process the researcher has observed that any generation who does not review or make reference to the related works of our heroes past make more mistakes than their fore-father (Ozochi 2009). The related topic we are looking at with respect to this our study is identification and Remediation of the causes of student's poor performance in Mathematics.

According to Etuk N. Eluk., and Maria Afangideh (2013), Studies on Student's perception of Teacher's characteristics and their attitude towards mathematics in Ovon Education Zone, Nigeria The study Sought to find out the relationship between how students perceive their teachers in respect of knowledge of Mathematics content, communication ability, use of appropriate teaching strategies and teachers classroom management skills and students attitude towards mathematics. The population of the study comprised all the second year students in senior secondary school in Ovon Education zone. The study sample consisted of 640 students selected through cluster and simple random sampling techniques. Two instruments students perception of teacher characteristics questionnaires (SPTCQ) and students attitude towards mathematics Questionnaire (SATMQ) were developed and administered on the respondents A trial test of 50 students using spilt – half reliability test was carried out which yielded reliability coefficients of 0.86 and 0.94 for SPTCQ and SATMQ respectively Pearson product Moment correlation and test the hypothesis respectively. Findings show that the way students perceive their teachers in terms of knowledge of mathematics contents, communication ability, teaching methods and classroom management skills has a significant relationship with students attitude towards mathematics. When the student's perception of their teacher's characteristics is low, student's attitude towards mathematics is negative.

Olaleye., F.O. (2012). Carried out teacher's characteristics as predictor of academic performance of students in secondary school in Osun State. Nigeria the study investigated the perceptions of students' academic performance. The study was carried out in Osun State senior secondary school. A Population of 1600 purposively selected SSIII students from 16 rural urban schools were for the study questionnaire tagged teachers characteristics and students' academic performance (TCSAP) was used to elicit information from the students. Data collected were analyzed using simple percentage, Pearson product Moment Correlation and Chi – Square to test the hypothesis generated in the study. The findings showed that there was a significant relationship between teacher's characteristics on students' academic performance. It was recommended that a proper evaluation of teachers based on examination and supervision should be well organized before promotion and appointment. A situation where mass promotion based

on year graduation does not argued well for good academic performance of students.

Paula, V.M. and Davison, M. (2020). Studies causes of poor academic performance in mathematics at ordinary level to determine the causes of poor academic in mathematics at ordinary level. To achieve this, a case study was adopted which targeted one high school in Masvingo province of Zimbabwe. Participants were purposefully chosen and only those learners doing O' level mathematics were selected from the ordinary level group of 250 students. Teachers who taught mathematics at O' level were also targeted. The information was gathered through the use of questionnaire helped the researchers to have a wider view on the research problem. They were also physically administered by the researcher and his facilitated the return rate 100%. The results showed that teaching methods pupils, teachers, and parent's negative attitudes towards mathematics, lack of teaching experience by some teachers and instability of teachers and lack of adequate resources are some of the causes of poor academic performance in mathematics at ordinary level. A number of recommendations have been made which include motivation of students and staff development workshops

Popoola, F.R., and Olarewaju, R.R. (2010); they studies Factors responsible for poor performance of students in mathematics also investigated the factors that are responsible for poor performance of students in mathematics A random sample of 109 students from Best Start College Mango Kaduna was used. The research Instrument was a reliable and validated 20 items Likert type questionnaire which was administered on 109 secondary school students to obtain responses on the factors that are responsible for poor performance of students in mathematics. At 0.05 significant level was 0.469 and  $t$  – critical was 2.021. Since  $t$  – critical was significant the null hypothesis was retained. Thus, there was no significant difference among the respondents concerning the factors that are responsible for poor performance of students in mathematics in Nigerian Secondary Schools. One of the recommendations made was the need for efficient and effective teachers who are professionally and academically qualified to promote mathematics learning in schools.

Satish, K.K. and Azad M. (2013); they also studies causes of failure in Mathematics at high school stage stated that, the present study was carried out to identify causes of failure in mathematics at high school stage. A Sample of 125 (50 girls and 75 boy) failure students were selected reveals that the failure students were found to be older in age and low in socio – economic status, it seems that their parents being illiterate and poor, are not able to care for the education of their children by sending them to the school of appropriate age.

Salman, M.F., Mohammed, A.S., Ogunlade, A.A., and Ayinla, J.O., (2012); causes of mass failure in senior secondary school certificate mathematics examinations as viewed by secondary school teachers and students in Ondo, Nigeria. The senior secondary schoolteachers and students were involved as population for the study. 100 teachers and 400 senior secondary two students were purposively selected. The descriptive survey research was adopted for the study. The sampled teachers and students responded to researchers prepared questionnaire titled "Causes of student's mass failure in SSCE Mathematics examination". The causes considered were those by teachers, students, parents, and society, government, school and examination bodies. A sample of the items in the questionnaire include; lack of frequent practice by students, poor mathematics background, laziness on the part of student and teachers, among others. The response scales are; strongly agree, agree, disagree, and strongly disagree. Frequent counts and percentages were employed to answer the seven research question generated. Findings indicated that 98% of teachers and 76% of students viewed laziness on the part of students as a major factor responsible for student's mass failure in SSC mathematics examinations while 97% of teachers and 79% of students viewed lack of frequent practice by student as another responsible factor for mass failure in mathematics among others. The identified causes could be ameliorated through enhancing the teachers quality in terms of subject contents, providing them opportunities for

further studies, attending seminars and workshops for update because their quality has significant role to play in teaching and learning of the subject.

Umar, A.A., Ahmad Y., and Awogbenu C.A. (2013) carry out effects of teachers qualifications on performance in further mathematics among secondary school students and they examined the effects of teacher's qualifications on performance in further mathematics among secondary school students in Kaduna State. By purposive sampling 12 senior secondary school were selected from four inspectorate divisions in the state namely Anchau, Kaduna, Kafnchan and Zaria which participated in this study. In the selected stage, a random sample of 160 further mathematics students was finally selected across the four divisions. Two instruments teacher self-assessment test (TSAT) with reliability index of 0.87 and a 30 – items four option multiple-choice further mathematics Achievement Test (FMAT) constructed by the researchers (with Cronbach's alpha of 0.87 and item difficulty of  $0.40 < p < 0.82$ ) were administered. Two research questions and one hypothesis were formulated to guide the study. The analysis of variance (ANOVA) revealed that significant difference exists between students' performance on account of their teachers qualifications.

Yusuf Suleiman and Arba Hammed (2019); studies perceived cause of students failure in Mathematics in Kwara State Junior Secondary School. Findings of the study revealed probable causes of student's failure in mathematics, which include insufficient number of qualified teachers in mathematics, lack of teaching aids/instructional materials, frequent transfer of mathematics teachers from one school to another, poor socio-economic background of the students, poor teaching methodology. The findings also indicate that inappropriate period allocated for mathematics, as well as overpopulation of students in classroom caused students failure in mathematics. Based on the findings, it is suggested that educational managers need to avoid mass failure in mathematics teachers are available in their schools at all times so that students can be taught mathematics at all levels. Also, managers should ensure decongestion of classroom so as to enhance effective teaching and learning in mathematics.

### **MATERIALS AND METHODS.**

The sample of the study was initially drawn from the post primary schools Education Board (PPED) of Bayelsa State: which comprised total number of all the candidates that sat for the 2018 Senior Secondary School Examination. Stratified random; sampling technique was used in selecting (12) senior secondary school out of the various schools that register for the 2018 Senior Secondary School Certificate Examination. The names of the randomly selected senior secondary schools for this study includes the following:

- B.D.G. S Yenagoa
- Community Secondary School Famgbe
- S.J.G.S. S Amarata
- Community Secondary School Kpansia
- Community Secondary School Tombia
- Community Secondary School Bumoundi
- Community Secondary School Pulaku
- Community Secondary School Obuna
- Community Secondary School Zarama
- Community Secondary School Okordia
- Community Secondary School Biseni
- Community Secondary School Egbiri

Ten (10) respondents including teachers were chosen from the 12 Senior Secondary Schools through random sampling giving total of (120) respondents.

### **Research Types**

The study adopted descriptive survey types using of probability sampling techniques:

Statisticians have devised various methods of selecting the members for easy data analysis. Sampling techniques simply mean the style or system of choosing respondents or samples from the entire population for the purpose of generating data for a given study. There are two broad categories of sampling techniques. These are probability and non – probability sampling techniques but with respects to this study we are making use of probability sampling techniques.

Probability sampling techniques:

This is the general name given to all forms of sampling techniques in which the sample are selected according to know law of chance such that every member of the probabilities sampling techniques are:

- Simple Random Sampling
- Systematic Sampling
- Cluster Sampling
- Stratified Sampling

### **Simple Random Sampling**

This is the process of selecting simple from population whereby every member of the population has equal chance or probability of being selected in the sample. It is done through game of chance or same mechanical devices. Sample random sampling is of two kinds. These are random sampling with replacement and simple random sampling without replacement.

### **Systematics Sampling**

This method involves the selecting of the nth subjects or item form serially listed population or units where  $N = \frac{\text{total number of the population}}{\text{sample size}}$ . For instance, if our population for a particular study is 100 and our sample size is 10 we automatically get our nth by  $100/10 = 10$ . So 10 becomes our Sample interval. This decision to choose samples by systematic means is hardly done ambit rally. Before a researcher settle for a systematic sampling that mean, he must have list of the entire elements in the population.

### **Cluster Sampling**

This is a process of selecting sampling from subsets or group that may not necessarily be homogenous. In this case, member of the population of student be grouped in cluster before the actual sampling can be affected the members of a population are divided into subsets based on share commonalities.

### **Stratified Sampling**

This method deals with selecting sample from a population which involves restriction of heterogeneous population into relatively homogenous group base on some specific characteristic liker age, income, level, qualification, etc. it helps to reduce sampling error by grouping elements in a population into homogeneous subjects before selecting samples from each of the subjects.

This study makes use of stratified techniques in selecting the number of senior secondary schools. Stratified random sampling was use in selecting 12 senior secondary schools from Yenegoa L.G.A in other to cover the whole Yenegoa two schools where selected form each clan giving a total of 12 Secondary Schools. The reason why we use stratified sampling techniques is that the scope of the study is very large and for us not to be bias in the selection of school. Stratified random sampling will help to obtain a sample population that will best represent the entire population that is being studied.

### The Arithmetic Mean

Scores can be gotten by dividing the sum of individual observation by the Dumber of observation.

$$\text{Mean} = X = (\sum x)/N$$

Where, N = total number of responses.

$\sum x$  = Likert value multiplied by corresponding response category all summed up.

Demonstration of how the mean (arithmetic mean) will be calculated or Applied in this study. In this study Likert scale or otherwise palled summated rating scale is used. A Likert scale measures the degree of agreement or disagreement by the respondent to a statement that describes a situation, or item. Likert scale is used to test whether a research question is positive (accepted) or negative which dependent on the responses generated through the questionnaires. The number of items or answer scale that will be used. For this very study we use five point Likert scales which are;

Strongly Agree	SA = 5 points
Agree	A = 4 points
Strongly Disagree	SD = 3 points
Disagree	D = 2 points
No Response	NR = 1

### Analysis of Research Question

**Table I:** Response on research question one

S/N	Research	SA	A	SD	D	NR	N	??	Remark
a.	Are there Mathematics teachers in your school?	30	20	30	20	0	100	3.6	Accept
b.	Does lack of qualified Mathematics teacher make you loss interest in mathematics?	40	35	10	10	5	100	3.95	Accept
c.	Frequent transfer of Mathematics teachers affects students in studying mathematics	40	33	17	10	0	100	4.83	Accept
d.	Lack of exposition of Mathematics teachers also new skills and routines within the teaching profession can lead to poor academic of student performances.	33	29	19	12	7	100	4.69	Accept
e.	Lack of self-confidents some Mathematic teachers could lead to poor transfer of knowledge.	34	41	8	13	4	100	3.88	Accept

Grand mean =  $3.6+3.95+4.69+3.88+4.83 = 20.95$  (since we have 5 row)  $\frac{20.95}{5} = 4.19$ . From the above table the Grand mean of research question one (a) is 4.19 which is above 3.0 which is to say that research question one (a) is positive and accepted. Thus, we can conclude that lack of qualified Mathematics teacher can cause mass failure of student in SSCE Mathematics?

S/N	Research	SA	A	SD	D	NR	N	??	Remark
1.	Do Mathematics use instructional materials in your school?	33	20	30	17	0	100	4.86	Accept
2.	Does the use of instructional materials help you in Mathematics class?	50	35	7	5	1	100	4.28	Accept
3.	Does adequate use of instructional materials have any impact on students' academic performance.	57	28	10	5	0	100	4.3	Accept
4.	Lack of instructional materials due to non-availability can also affect student in study of Mathematics.	52	30	11	5	0	100	4.27	Accept

Grand Mean  $4.86+4.28+4.37+4.27=17.78$  (since we have 4 rows)  $\frac{17.78}{4} = 4.45$ . From the above tables, the grand mean of research question one (b) is above 3.0 which is to say that research question one (b) positive and accepted. This indicates that lack of instructional materials in teaching Mathematics can affect students in the study of Mathematics.

**Table 3:** Response on research question three

S/N	Research Question items	SA	A	SD	D	NR	N	??	Remark
1.	Lack of study materials (Textbook) can affect students in studying Mathematics.	70	25	5	0	0	100	4.55	Accept
2.	Lack of encouragement from parts due to poor academic background can also contribute to failure of students in Mathematics.	30	25	20	5	0	100	3.6	Accept
3.	Does extra moral classes have any positive effect on students' academic performance?	32	46	3	8	0	100	3.8	Accept
4.	Do financial background of students affects them in study Mathematics?	28	42	8	10	0	100	3.68	Accept
5.	Can student inability to attend standard school due to lack of finance affect them in the study of Mathematics?	19	23	20	23	0	100	3.08	Accept

Grand mean =  $4.55+3.6+3.8+3.68+3.08 = 18.71$  (since we have row)  $\frac{18.71}{5} = 3.74$ . From the above table the grand mean of research question two is 3.74 which implied that it is accepted. This means that socio-economic background of the students affects them in the study of Mathematics.

S/N	Research Question items	SA	A	SD	D	NR	N	??	Remark
a.	Students hate Mathematics it affect them in learning mathematics	30	46	10	10	0	100	4.28	Accept
b.	Students lack of constant study of Mathematics contributes to their failure	60	20	7	3	0	100	4.07	Accept
c.	Lack of student interest in Mathematics due to their poor background right from primary school also contributes to their failure in Mathematics.	23	35	20	20	0	100	3.42	Accept
d.	The period allocated for the teaching of Mathematics most time is, not appropriate for its easier assimilating.	28	39	15	10	0	100	3.39	Accept
e.	Poor teaching methodology of some Mathematics teacher can scare students from learning Mathematics.	18	30	17	35	0	100	3.31	Accept

Grand mean=  $4.28+4.07+3.42+3.69+3.31 = 18.77$ . (since we have 5 rows)  $\frac{18.77}{5} = 3.75$ . From the above table, the grand mean of research question three is accepted because it's above 3.0. Thus we can conclude that poor attitude and low interest of students towards the learning of Mathematics contribute deeply to their mass failure in SSCE Mathematics?

S/N	Research Question items	SA	A	SD	D	NR	N	??	Remark
1.	Frequent use of cane teaching Mathematics can affect the student negatively.	28	34	14	19	0	100	3.61	Accept
2.	The methodology the teacher uses in teaching the students can affect the learner in the study of Mathematics.	27	30	20	16	0	100	3.54	Accept
3.	The teacher approach to the student in the classroom can also make the student to lose interest in Mathematics.	40	30	16	17	0	100	3.87	Accept
4.	The use of foul language to the student by some Mathematics teacher can lead to loss of interest in mathematics	26	35	20	14	0	100	3.55	Accept
5.	Student negative attitude forward there Mathematics teacher can also contribute to their failure in Mathematics.	50	20	12	10	0	100	4.26	Accept

Grand mean =  $3.61+3.54+3.87+3.55+4.26 = 18.83$  (since we have 5 rows)  $\frac{18.77}{5} = 3.77$ . From the above table, we can see that the grand mean is above 3.0 from this we can conclude that teachers' / students relationships contribute to student mass failure of students in SSCE Mathematics.

S/N	Research Question items	SA	A	SD	D	NR	N	??	Remark
1.	Repeated failure of Mathematics in SSCE to loss of interest in education	34	30	20	16	0	100	3.82	Accept
2.	Can mass failure of Mathematics in SSCE lead to drug addiction?	23	27	24	19	0	100	3.4	Accept
3.	Mass failure of Mathematics in SSCE can lead to examination malpractice.	40	50	10	0	0	100	4.3	Accept
4.	Mass failure of SSCE Mathematics could lead to lack of Mathematics teachers in the education sector.	28	50	7	5	0	100	4.16	Accept
5.	Mass failure of Mathematics in SSCE can lead to over-loading of the few Mathematics teachers in the secondary schools.	40	50	7	3	0	100	4.27	Accept
6.	Mass failure of Mathematics SSCE could lead to unqualified Mathematics teachers coming in to the education sector.	29	21	30	12	0	100	3.6	Accept
7.	Mass failure of Mathematics in SSCE could lead to wastage of resources.	60	30	7	3	0	100	3.47	Accept

From the above table 6 we can see the mean of all the research question 6 items fall on the acceptance side. Thus we can conclude that all these effects listed from the research question items are likely to occur among others as a result of student's mass failure in SSCE mathematics.

### DISCUSSION OF FINDINGS

The findings revealed that non-available or shortage of instructional material for teaching mathematics contributes to student's mass failure of Mathematics in Senior Secondary School Examination, we are meant to understand that the students understand the subjects well whenever the teacher uses charts, models and specimen during teaching and learning. Also insufficient number of unqualified Mathematics teachers also serves as one of the major factor contributing to student mass failure in SSCE Mathematics. However, student in their own way see Mathematics as subject that is difficult and this impression has made them to develop hatred for the subject which invariably contribute to their poor performances in the subject area. From the finding we are meant to understand that socio-economic background of students also affects them in the study of Mathematics and teacher/students relation (that is how they relate right in the class) also have great influence on the student's academic performance.

Furthermore, the findings also revealed that repeated failure of SSCE Mathematics could lead to loss of interest in education. And mass failure of SSCE Mathematics could lead to lack of Mathematics teaches in the education sector which is not healthy for a developing nation. This implied that repeated failure of SSCE Mathematic will lead to shortage of Mathematics teacher in the near future to come. Finally, the finding also reveals that mass failure of Mathematics in SSCE could lead to wastage of resources.

## CONCLUSION

As earlier stated, this research work was designed to find out the causes of mass failure of mathematics in Senior Secondary School Certificates Examination in Bayelsa State. From analysis of the data obtained, the researchers found out that shortage of instructional materials, poor student's motivation in the classroom by the teachers, poor mathematics background from primary school, insufficient number of qualified teachers are the factors that cause the mass failure in Senior Secondary School Certificate Examination. Also provision of adequate instructional materials by the government to schools, teachers should motivate the student, proper use of Mathematical textbooks and conducive classroom environment where some strategies that are deduced from the study that can be used to improve student academic performance. It is believed that if the points mentioned above are given urgent attention, then an improved performance of students in mathematics may be in sight, teaching and learning Mathematics starting from lower level of learning that is from nursery schools to the higher level of learning that is from nursery schools to the higher level of learning so that the role of Mathematics as foundation in science and technology development in Nigeria will also be recognized.

## RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

- I. State governments should make available to schools all needed basic educational facilities, learning materials, libraries, standard classroom blocks and laboratories to enhance teaching and learning.
- ii. School principals should see that they carry out effective supervision in their schools regularly.
- iii. Parents should be able to access their children's progress in Mathematics and other subjects regularly.
- iv. A conducive classroom for Mathematics teaching should be created.
- v. Enough qualified and professional teachers should be employed to teach these disciplines right from primary to secondary level and they should be motivated that is to pay their salaries when due and provide them incentive periodically.
- vi. Teachers should also be given regular training on new skills and routines about their teaching profession. The researcher suggests that further research work should be carried out to find the causes of mass failure in Mathematics in Senior Secondary Certificate Examinations. The research suggests also that since only questionnaire was used as the instrument for data collection in this study, other researchers who want to engage in this type of study in addition should use oral interviews as the instrument for data collection.

## REFERENCES

- Etuk., N. Afangideh M.E. and Uya. A.O (2013) Students Perception of Teachers characteristics and their attitude towards Mathematics in Ovon Education Zone, Nigeria International Education Studies; 6 (2) PP. 1913 – 9020.
- Olaleye, F.O. (2012). Teacher's characteristics as predictor of academic performance of students in secondary school in Osun State. Nigeria. Global Journal of Human Social Science: Double Blend capital Reviewed International Research Journal: 2249 – 4600.
- Paula, V.M and Davison, M. (2020) causes of poor academic performance in mathematics at ordinary level. A case of Mavuzani High School, Zimbabwe international journal of humanities and social invention (IJHSSI). ISSN (online): 2319 7722, ISSN (prints): 2319 -7714. Vol. 9 Issue 6 ser. 1// June 2020 // PP 10 – 18.
- Popoola., F.R. and Olarewaju, R.R. (2010). Factors responsible for poor performance of students in mathematics in Nigerian Secondary Schools. Journal of Research Secondary School. Journal Of Research in Education and Society, Vol. Nos. 2 and 3
- Satish, K.K. (2013) A study of causes of failure in mathematics at high school stage. Academic Research International, Vol. 4 (5)

- Salman, M.F., Mohammed, A.S, Ogunlade, A.A., and Ayinla .J.O. (2012) Causes of Mass Failure in Senior School Certificate Mathematics Examination As viewed By Secondary School Teachers and students in Ondo, Nigeria *Journal of Education and practice* 3 (8)
- Umar, A. (2013). Effects of teachers qualifications on performance in further mathematics among secondary school students. *Mathematical theory and modeling*. Vol 3(11) Pp. 2225 – 6522.
- Yusuf Suleiman, Araba Hammed (2019); Perceived Causes of students failure in mathematics in Kwara state Junior secondary school, Implication for educational Managers. *International Journal of Education Studies in Mathematics*. Vol.6, Issue 1. pp. 19-93, 06.03.2019