FACTORS INFLUENCING LEARNER'S ACADEMIC PERFORMANCE IN MATHEMATICS IN SELECTED PRIMARY SCHOOLS OF

## OPEJO PARISH, CIFORO SUB COUNTY, ADJUMANI DISTRICT - UGANDA

## BY

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UNIVERSITY

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## DECLARATION

I Irra Severino Brunson, hereby declare that the work contained in this report is my original work and has never been presented on any University or institute for the award of the Bachelor of Education degree.

Sign:
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Date: $\qquad$

## APPROVAL

This is to certify that this research report entitled Factors Influencing
Learner's Academic Performance in Mathematics in Opejo parish, Ciforo sub county Adjumani district in Uganda has been under My supervision and it is now ready for submission to the Academic Committee of Kampala International University with my due Approval.

Signed:


## SUPERVISOR

MRS. TALIGOOLA DEBORAH N

Date: . $29.9 / 10$

## DEDICATION

This book is cordially dedicated to my lovely family members, Ambayo Joel, Eimani Eunice, Rebecca, Foni, my beloved Mother Late Rose Kade and Bruno who all contributed to my existence and my treasure in education.

## ACKNOWLEDEMENT

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#### Abstract

A descriptive study was carried out in Opejo Parish Ciforo Sub County, Djumani district, with a purpose of examining those factors influencing performance in Mathematics, in primary schools. The study was guided by the following objectives; to find out gender affects the children's performance in mathematics. To establish if the methods used in teaching mathematics are appropriate. To find out if the quality of teachers was good to carry out instruction in mathematics. To establish if teachers follow the policy recommendations for teaching mathematics. The population that was studied of comprised 66 teachers. From different schools of Opejo parish, Ciforo Sub county IN Adjumani district. The researcher used a questionnaire for collecting data. Finding revealed that a number of teachers had low qualifications which could not facilitate them to carry out effective instruction in mathematics, worse than that was that a number of teachers had not specialized in mathematics. It was also discovered using the reform based institutional strategies adopted were also found to be gender insensitive to the learners, and most teachers were not following the recommended policy implications for teaching the subject. The following were recommended: that government intensifies the specialization of teachers in mathematics sensitization of teachers through workshops and seminars.


## ACRONYMS

U.P.E - Universal primary education

## P.L.E - <br> Primary Leaving Examination

M.O.E - Ministry of Education

## CHAPTER ONE <br> BACKGROUND OF THE STUDY

### 1.0 Introduction

We are living in a changed world where mathematics can not be avoided in day to day life. Everything that surrounds us requires a great knowledge of calculation especially in the science world.

Mathematics has been greatly extended and there has been a fruitful interaction between the discipline and others like science to the benefit of all. Mathematical discoveries have been made throughout history and continue to be made today.

Mathematics arises wherever there are difficult problems that involve quantity, structure space or change. Nowadays all sciences suggest problems studied mathematics and many problems arise within mathematics itself. However despite all the values attached to the discipline. It has continued to be performed poorly as evidenced in national examinations at all levels.
A number of factors have been attributed to the poor performance in the subject notably learners attitude towards, mathematics, poor instructional strategies, cultural related factors, gender among others.

Adjumani district is not exceptional from those whose performance is poor in primary schools. The researcher set out to establish those factors that were responsible for poor performance in the subject.

### 1.1 Statement of the problem

There has been a common outcry nation wide about poor performance in aggregates because of mathematics low grades. A child may get distinctions in social studies, science and English, but when it comes to mathematics she/he scores either a pass 7 and or even a nine. This is frustrating to both the child and parent. The time is now to establish factors responsible for this poor performance.

### 1.2 Purpose of the study

This investigation undertaken to establish the factors that were responsible for poor performance in mathematics with the focus on; age of pupils, their gender teaching the subject.

### 1.3 Specific objectives

The following objectives guided the study.

1. To find out if gender affects performance in mathematics.
2. To establish if methods used in teaching affect performance in mathematics.
3. To find out if the quality of teachers affects performance in the subject.
4. To establish if the teachers follow the policy recommendations of teaching mathematics.

### 1.4 Research questions

1. Dues gender of children's affects their performance in math?
2. Do the methods used in teaching mathematics affect the children's performance in math? Taught
3. do the teachers follow the policy recommendations of teaching mathematics in primary schools
4. Are teachers well qualified to teach mathematics in primary schools?

## 1. 5 Scope of the study

This research was carried out in Opejo parish, Ciforo Sub County Adjumani District. Six primary schools out of 20 were sampled to examine the factors responsible for performance in mathematics. Focus was put on the following gender of learners, methods used to teach mathematics and policy recommendations of teaching mathematics. It was conducted between June 2007-2008.

### 1.6 Significant of the study

This research provided the Ministry of education adequate information about the performance of mathematics in schools.

It helped the students to add more efforts in improving on performance of mathematics.

Teachers to improve on their way of teaching of mathematics in those selected primary schools

## CHAPTER TWO

## REVIEW OF RELATED LITERATURE

## Introduction

In this chapter attempts were made to look at what other researchers had written about the factors responsible to affect performance in mathematics

Performance in mathematics in primary school has been an outcry to many Ugandans after year poor results in primary leaving examinations are released. While a number of children score distinctions in the rest of the subjects such as social studies, science and English, in mathematics, the average has always been credits. This is frustrating not only for the educational policy makers but also for the educational policy makers but also for the children and parents who pay school fees. Mathematics is one of the key disciplines that has contributed to the rise of technology.

According to the syllabus prepared by the Uganda National Curriculum Development Center (2000) the main objective of teaching mathematics as a subject is to assist in the producing of a person who will be numerical, orderly, logical accurate and precise in thought. It is further highlighted that a person should be competent in appraising and utilizing mathematical skills in playing a positive role in the development of modern society.

## We can not do without mathematics.

We are living in a changing world where we can not avoid mathematics in day today life. Every thing that surrounds us requires a great knowledge of calculation especially in the science world mathematics a rises quantity, structure, , space or change.

At first the above were suggested in common land measurement and later astronomy, now days all sciences suggest problems studied by mathematicians and many infinite sisal calculus was contributed by Leibniz with the exception of dot, above a variable to signify differentiation with respect to time.

## But there is a problem with mathematics

Mathematics has been reported to make students in universities study degree programmes that they have no interest in even after qualifying for other programmes with very high grades in other subjects except in mathematics. The policy inn Uganda is that at primary level, every Ugandan child must have passed mathematics and English if he or she is to be considered fit to continue with secondary school education. Further more at ordinary level, every student must pass mathematics to be considered as to have passed these national examinations.

Students who successfully pass mathematics examination at primary level are reported to experience few or problems in handling complex calculation as they advance in their education. Today many students especially at primary level dread mathematics just because they believe it is tough.

## Causes of poor performance in the subject

Cohen (1998) highlighted that mathematical language in which there is emphasis in the use of complex jargons and symbols fills the discipline with abstract ideas. He further protested that some of these symbols are not well elaborated. For beginners especially those in primary schools find it daunting because mathematics is full of abstract ideas it has to be carefully taught by teachers if they are to arouse the interest of learners in the subject.

## Recommended ways of carrying out instruction in mathematics

White (1988) advised that learning must not only be determined by the teachers but also by the learner's knowledge ability in which he or she is placed. He added that it was not possible to input information learners must actively assimilate new information with the ideas they already hold and in the processes construct new ideas.

Steward (1975) had highlighted before that a learner could understand a concept only as he sees it in a number of different kinds of situations. Children therefore learn better and best when they are given a wide rage of experiences which the object and situation.

Driver (1984) also contributed that the whole field of research has exposed the importance of pupils own beliefs and ideas during the development of their understanding of concepts.

There is a belief that the pre-conceived ideas held by pupils about the world around them could be one of the factors that cause difficulty in performance in the subject. Champagne (1983) agreed with the above view when he stated that there was evidence that pupils had different alternative ideas to explain the phenomenon of the world around then and that they hold on to these ideas even after they are taught correct concepts. Champagne further advised that it was vital to give learners opportunities to make their ideas explicit and pursuit those ideas. He further went on to advise that learners be encourage to challenge and scrutinize their ideas during the process of investigation and in the evaluation and reflection to follow.

In common topic Gagne (1976) observed that concepts a rose out of perceptions by putting together various experiences and drawing out what was common to
them. Children must therefore be allowed to use their own experience in learning mathematics.

One peaget (1958) a prominent behaviorist theorists asserted that learning of concepts be based on the conceptual stages of development consumer of information, instead it actively constructs its own influence.

Instruction in mathematics must therefore begin from what children know proceeding what they do not know. These calls for the use of the spiral approach in teaching mathematics, which has provisions for introducing a concept and to be re examined over and over but with different levels of difficulty as the children advance in their grades how science ideas must be mastered.

According to psychologists Winnie (1985) white (1982) Fontanana (1983); and driver (1984), scientific ideas can only be effectively internalized only if;

The teaching of sciences has a limited number of facts in each stage of learning for proper assimilation. That almost all the teaching and learning of sciences and evaluation emphasize the element of scientific knowledge which include concept, facts laws principles.

Psychologists above also agreed that learning goes in a sequence from concrete to abstract. Learners must therefore be aware of his/her experiences before new ideas are introduced.

They also agreed that learners should not be forced as the intellectual structure called schema may not allow in new experience.

The teaching of mathematics be practical, based on numerical concepts and that since learners differ variation of techniques should be given great consideration.

## The reform based method in teaching mathematics.

Research suggests that need to adopt the more recent instructional strategies and practices which have been utilized and overlooked such as individual exploration, peer instruction, and small group work each of which emphasizes the use of multiple approaches to problem solving, active student's inquiry and the importance of linking mathematics to the learner's daily life ( Barners, 1991). Leder 1987 highlighted some effects of these in structural reforms on the learner's achievement and attitude towards mathematics.

## Teaching and learning of mathematics in primary schools of Uganda of today

Currently there has been an increased pupil enrollment in government aided schools, universal primary Education. This increase has however not matched with the current number of teachers and classrooms.

The teacher pupil ratio is high thereby limiting teachers to use the appropriate methods of subjects. It is on the above note that Cohen (1997) reported that instruction remains over whelming teacher - centered with greater emphasis being placed in talk and chalk and text books rather than applying knowledge to real world situations.

Other factors that researchers believe contribute to the performance of mathematics in Uganda included Quality of teachers. According to the Government of Uganda report 2005 on human development, Teachers in Uganda like any other civil servants are poorly remunerated and many of them work in more than one school or coach students after school hours. Their therefore for preparation, teaching and assessment is considerably reduced. Such practices according to vision 2025(1998) the fore going practices have watered down the quality of instruction and consequently the quality of education.

In the same report, it was estimated that untrained teachers in public schools constituted $28 \%$. This is compound by teacher entry into the teaching profession by those with low secondary school grades. This could therefore negatively affect performance in mathematics.

## Gender and performance in mathematics

UNICEF (1989) reported an high illiteracy rate among female than males and highlighted the factors responsible for that were parents preference for boys education, female children involvement in domestic chores, early marriages and the need to get pride price and lack of support by the education system.

In the same report it was regretted that the school system continued to stereotype female learners to traditional carriers of nursing, secretarial services and home management which tend to be low paying. It went to state that science was still considered to be a preserve of men. The curriculum and literature used in schools reflected gender bias and stereotyping, which was compounded by the gender insensitive teachers and management of educational institutions. From the foregoing citation this could be a factor in poor performance in mathematics.

## Conclusion

From the above citations it now evident that mathematics is an abstract subject, it is not interesting and neither is it easy to learn. There are certain recommendations that a teacher must clearly and strictly follow if he/she is to succeed in teaching the subject. It requires a teacher to teach the numerical concepts from the child's own experiences and must allow opportunities to apply the mathematical concepts to real life situations if she/he is to make it interesting. Secondly mathematical concepts should be taught from simple to complex in that a child must be ready to learn certain concepts. Most important of all, there are some modern strategies that have been adopted to effectively
teach the subject. The questions asked at this point are; are the teachers well trained and therefore understand the implications of teaching the subject? If they truly understand them do they follow them strictly? Are the teachers gender responsive to the learners they teach? Have the teachers adopted the recent reform based instruction strategies of mathematics?

## CHAPTER THREE

## METHODOLOGY

### 3.0 Introduction

In this chapter, the methods used in carrying out this research and procedures taken were all described.

### 3.1 Research design

This study followed a descriptive research design. Both the qualitative and quantitative methods were used. The quantitative technique was used to analyze the data on factors influencing performance of children in mathematics.

### 3.2 Study area

The study was carried out in selected schools of Opejo parish, Ciforo Sub County in Adjumani district. There are 220 schools in district but the researcher selected only 6 schools given the limited time for this study.

### 3.3 Study population

The target population comprised all teachers in the 20 primary schools who were teaching mathematics. It so happened that almost all teachers taught the subject since they were class teachers of different classes teaching all subjects in their respective classes.

### 3.4 Sample size and sampling techniques

The number of respondents was 66 teachers who were randomly selected from the six schools

### 3.5 Methods of data collection instrumentation

In order to gather relevant data, a questionnaire was formulated for the teachers to respond to. The items included were mostly close ended questions. The researcher had to carry out observations in order to consolidate on the findings.

### 3.5.1 Piloting of the instrument

In order to get accurate data, the instrument had to be tested for its reliability. All those items that were ambiguous were removed.

### 3.5.2 Types of data collection

- Both primary and secondary data were gathered.
- Primary data was generated from the responses of the teachers, as well as analyzing the results P.L.E (20005) results.

Secondary data was obtained by reviewing what other people said about poor performance and the contributing factors.

### 3.6 Data analysis

Data from the field was first edited and the coded and treated statistically in order to interpreter it. It was analyzed using both qualitative and quantitative methods of data analysis. Pie charts, frequencies and percentages were also used and result tabulated.

## CHAPTER FOUR

## DATA PRESENTATION ANALYSIS AND INTERPRETATION

### 4.0 Introduction

The purpose of this study was to examine the factors affecting performance in mathematics.

The following objectives guided the study;
i) To find out if gender affects the learners performance in mathematics.
ii) To establish if the methods used in teaching mathematics affect performance in the subject and.
iii) To establish if the numerical concepts taught are under stable.

This chapter presented data on factors affecting mathematics $n$ primary schools data was then analyzed and the findings interpreted.

### 4.1 Background information

### 4.1.1 Gender and performance in mathematics

According to the report (1989) female children were facing Challenges in School such as gender insensitive curriculum, materials, gender insensitive teachers, stereotypic tendencies of parents. Any of the female children had to drop from school or perform poorly. In this analysis the researcher explored the teacher's views on why girls perform poorly than boys in mathematics after analysis P.L.E examination from the sample schools.

### 4.1.2 Gender and interest in mathematics

Gender related differences were one reason the researchers forwarded for being responsible for the disparities in performances of Mathematics. According to Cohen (1994) girls tend not to take interest in the subject.

Table 1: Shows the performance in mathematics tests by gender

| Percentages | Mean score for girls | Mean score for boys |
| :--- | :--- | :--- |
| 100 | - | - |
| 90 | - | 5 |
| 80 | - | 18 |
| 70 | 3 | 19 |
| 60 | 2 | 20 |
| 50 | 7 | 30 |
| 40 | 10 | 4 |
| 30 | 19 | 10 |
| 20 | 24 | - |
| 10 | 28 | 2 |
| 00 | 20 | - |

Source: Field data 2010

Quite from the table number, Results showed that in a number of schools, boys performed better than girls. What then could be the reason for this?

### 4.1.3 Reasons for boys performing better than girls

The researcher wanted to find out why boys performed better than girls. These were some of the views that were contributed by the teachers.

Table 2: Showing why boys performed better than girls

| Teachers responses | frequency | $\%$ |
| :--- | :--- | :--- |
| Boys have more time than girls | $38 / 66$ | 58 |
| Boys are more confident than girls | $46 / 66$ | 70 |
| Girls do not like the subject | $62 / 66$ | 94 |
| Claming that it is too tough | $31 / 66$ |  |
| Girls are just lazy | $36 / 66$ | 47 |
| Mathematics is not for girls | $\mathbf{6 6}$ | 55 |
|  | $\mathbf{6 5}$ |  |

## Source: Field data

From the above table it is clear that a number of teachers are make stereotypic comments about girls. It showed that teachers were aware that girls could not perform well in the subject, but this could be changed if they were greatly encouraged.

It also brought out the gender roles that give males more opportunities to success at the expenses of girls whose gender is regarded as the "subordinate gender."

### 4.2 Methods used in teaching mathematics.

The reform based type of instructions asserts that the reform based methods such as group instruction, individual active inquiry, and relating mathematical problems to everyday life should be the ways in which children could be encouraged to learn mathematics with interest.

In the following analyses these were investigated what type of methods are commonly used in school? Teacher's ability to involve the learners in inquiry activities when teaching mathematics and relating mathematical concept to daily life.

### 4.2.1 Common methods used in teaching / learning of mathematics:

Teachers were asked to state the methods they commonly use in teaching mathematics.

Table 3: shows the methods that teachers commonly use

| Methods of teaching mathematics | Frequency | \% |
| :--- | :--- | :--- |
| Teachers centered / talk and chalk | 32 | 48 |
| Problem solving | 11 | 17 |
| Inquiry | 08 | 12 |
| Individual instruction | 09 | 14 |
| Total | $\mathbf{6 0}$ | $\mathbf{2 8}$ |

Source: Field data 2010

Findings showed that $48 \%$ the teachers used the traditional method of teach mathematics. $17 \%$ allowed the children to solve mathematical problems, $12 \%$ guided the learners into inquiry although none of the teacher knew what was meant by individualized instruction. This is clear that majority of teachers did not were not helping the children they teach to participate actively in the lesson, it shows that teachers are not effectively teaching mathematics using the reform based types of instruction.

### 4.3 The context of learning mathematical concepts:-

According to stewards (1976), since mathematics was a science, it is advised that it is taught beginning from what learners already know.

Brain (1985) advised of maturation of children before they are exposed to math's concepts hence the need to use spiral curriculum. Osborne clearly outlined that learning of mathematics should be sequential, should be forced and should practical. In the analyses that follows all the above had to be examined.

### 4.3.1 Teaching of mathematics using the spiral curriculum

It is through the use of the spiral curriculum approach that teachers. Should be able to teach from what the learners now. That is why the researcher asked the teachers about what approach they used to teach mathematics.

Table 4: Shows the response of teachers about whether they use the spiral approach

| Use of spiral approach | frequency | Percentage |
| :--- | :--- | :--- |
| Agree | 37 | 56 |
| Disagree | 13 | 20 |
| Not sure | 16 | 24 |
| Total | $\mathbf{6 6}$ | $\mathbf{1 0 0}$ |

## Source: Field data 2010

Out of the 66 teachers 37 teachers admitted to using the spiral approach 13 teachers however disagreed and as many as 165 teachers were not sure of using the spiral curriculum.

These findings clearly are teaching mathematics from what the learners knew, as had advised by Steward (1976). But over a half of the teachers were not teaching from known because they not know what to do. This could be one reason why learners were performing poorly in mathematics.

### 4.3.2 Practical teaching of mathematics

The researcher wanted to find if teachers taught the subject practically Table -presented the responses of teachers on how practical they were in teaching mathematics

Table 5: Presented the responses of teachers on how practical they were in teaching mathematics

| Approaches of teaching mathematics | frequency | Percentage |
| :--- | :--- | :--- |
| I use simulations of teaching | $02 / 66$ | 3 |
| I demonstrate to learners | $66 / 66$ | 100 |
| I allow learners to demonstrate | $41 / 66$ | 62 |
| I guide the learners to discover for themselves | $27 / 66$ | 41 |
| Total | $\mathbf{3 6 / 2 6 4}$ | $\mathbf{5 1 \%}$ |

## Source: Field data 2010

Finding above showed that out of 66 teachers interview, only 2 could use simulations to teach the subject. All teachers however were able to demonstrate to the learners and 41 of them allowed learners to demonstrate during the mathematics lesson. 27 teachers contributed that they could guide the learners in discovering for them selves. These findings sow that primary school teachers are just trying to teach mathematics practically however with difficulty. This cold be linked to a number of factors such lowly qualification of teachers.

### 4.3.3 Variation of techniques when teaching mathematics

The researcher tried to find out whether teachers varied the techniques when teaching mathematics.

Table 6: shows the variation of techniques when teaching mathematics

| I vary my techniques when teaching | Frequency | Frequency |
| :--- | :--- | :--- |
| Agree | 31 | 47 |
| Sometimes | 32 | 48 |
| It is not necessary | 3 | 5 |
| Do not know | - | - |
| Total | $\mathbf{6 6}$ | $\mathbf{1 0 0}$ |

## Source: Field data 2010

From the above table 31 teachers out of the 66 varied techniques when teaching the subject, 32 did it sometimes but not always. 3 teachers filled it that it was not necessary. This analysis showed that half of teachers were not following the recommendations of how the subject should be taught. This is could be another factor for poor performance in the subject.

## CHAPTTER FIVE

## SUMMARY, CONCLUSION, RECOMMENDATIONS

### 5.0 Introduction

The study was undertaken to examine the factors affecting mathematics. The questions that were asked from the started included;

- Are the teachers well prepared to teach mathematics?
- Does gender influence the learners performance in mathematics
- Are the teachers following the given recommendation for teaching the subject?

In this chapter, the findings from the study were summarized and further discussed, a conclusion made and recommendations given.

### 5.1 Summary of findings

At the end of this study it was revealed that a number of teachers were lowly qualified, with many of them having certificates of primary education. Findings however showed that a number of teachers were in the process of up grading to diploma in primary_education this was really good. Another finding showed that many teachers teaching the subject had not had specialized training since preservice teacher training at certificate level had no provision for specialization in any subject; instead they were given a package of all the subjects.

## Suitability of methods

Findings showed that majority of the teachers were using the teacher centered type of instruction with greater emphasis on talk and chalk. They were not helping the learners to think critically across the subject areas and apply their knowledge to the real world as sighted by Cohen. (1997)

This was evident in the teachers being unable to adopt some of the recent reform-based instructional methods and strategies such as small group discussions, individual exploration, using of multiple approaches to problem solving, and active students inquiry. This ignores the advice Stein (2000).

Findings also showed that gender playing a significant roe in influencing performance in the subject with girls performing a bit lower than boys. This was due to the gender irresponsive environment most especially to girls. Findings show that teachers had a tendency of stereotyping girls even in their performance in the subject. They believed girls were just average performers.

A numbers of teachers were also found not to be strictly following the appropriate recommendations of teaching the subject. For example some teachers were not using a spiral approach to teach the subject. They were therefore introducing the abstract numerical concept to learners before they acquired a fuller degree of cognitive maturity as advised by Osborne (1985). Findings also showed that teachers were not fully aware of the practical based instruction in mathematics and a few varied techniques. All the above were lowering the learners interest in the subject and hence poor performance.

### 5.2 Conclusion

Mathematics is an abstract subject which we cannot avoid in our every day life. Every thing that surrounds us requires a great knowledge of calculation especially in the science world. Given its nature teaching and learning of mathematics becomes a challenge which can only overcome when the teachers a prepared to handle the subject, the learning environment is responsible and supportive to both genders and the reform based instructional strategies adopted. Without the above changing performance in the subject will remain on average. Leder (1997) teacher student interaction. A case study, educational studies in mathematics; Cohen.L. and Manon (1992) research methods in
education Routledge London. Fennema .E and Leder, (1990) Mathematics and gender, New York Teacher College press.

### 5.3 Recommendations

The following were recommended basing on the findings:
Now that it is evident that teachers have little or no expertise, there is need for government to invest in training of teachers especially for teaching mathematics. The training must emphasize on equipping the teachers with skills and knowledge to carry out instruction using the reform based strategies of teaching mathematics.

For teacher in the field, must regularly attend mathematics workshops, seminars to help strengthen the teaching of the subject in primary schools. The teachers must also be sensitized on how to create a gender responsive environment for learning of mathematics.

For the learners, they should be given as many opportunities as possible to individually explore mathematical concepts; if possible peer instruction can be encouraged as early as primary six. They should also be urged to solve problems and try as much as possible to link mathematical concepts with their daily lives.

Teachers when teaching must try as much as possible to vary methods of teaching during the mathematics lessons, since they are dealing with individuals.

### 5.4 Future research areas

Some variables such as age, culture and curriculum were not fully examined. There is therefore need to carry out research about the above factors influence on pupils performance in mathematics.

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## APPENDICES

## APPENDIX Å: QUESTIONNAIRE FOR HEADTEADTEACHERSS

## Dear Respondents

I am a student of Kampala International University carrying out research on the effect of age difference on the specific learner's academic performance in mathematics in Opejo parish, Ciforo Sub County, Adjumani district. Any information given will be highly appreciated.

## Instructions: tick or fill in the blank spaces

School: $\qquad$ Sex: $\qquad$

1. Do your teachers conduct mathematics lessons effectively?
(i) Yes
ii) No
2. Do they consider the age differences when conducting lessons?
(i) Yesii) No
3. If Yes/No give reasons $\qquad$
4. How are the pupils' responses towards mathematics lessons?

Give reasons $\qquad$
$\qquad$
5. Do you travel to find out why pupils have negative attitudes towards mathematics lessons in your school?
(i) Yesii) $\mathrm{No}_{\square}$
6. If Yes or No, what have you done?? $\qquad$
7. Do you supply teachers with instructional materials to be used during mathematics lessons?
(i) Yes
ii) $\quad \mathrm{No} \square$
8. If Yes/No, why? $\qquad$
9. What do you do to pupils who dodge mathematics lessons?
(i) Yesii) No
10. Comment on the general performance of mathematics in your school.

## APPENDIX B: QUESTIONNAIRE FOR PUPILS

Dear Pupils,

I am a student of Kampala International University carrying out research on the effect of age difference on the specific learner's academic performance in mathematics in Opejo parish, Ciforo Sub County, Adjumani district. Any information given will be highly appreciated.

## Instructions: tick or fill in the blank spaces

School: $\qquad$ Class: sex: Age:

1. Do you enjoy mathematics periods in your class?
(i) Yesii) $\mathrm{No} \square$
2. If Yes/No why?
$\qquad$
$\qquad$
3. Do your teachers punish you whenever you fail number?
(i) Yes
ii) No
4. If $\mathrm{Yes} /$ No why?
$\qquad$
$\qquad$
5. Which topic do you like most in mathematics and why?
$\qquad$
$\qquad$
6. Does your age affect your performance in class?
Yes
ii) No
7. Do your teachers cater for individual differences?
(i) Yesii) $\operatorname{No} \square$
8. If so how? Give reasons
9. What instructional materials do your teachers use when teaching mathematics lessons?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## APPENDIX C: QUESTIONNAIRE FOR TEACHERS

Dear Respondents

I am a student of Kampala International University carrying out research on the effect of age difference on the specific learner's academic performance in mathematics in Opejo parish, Ciforo Sub County, Adjumani district. Any information given will be highly appreciated.

## Instructions: tick or fill in the blank spaces

School: $\qquad$
Instructions: tick or fill in the blank spaces

1. Is the attendance of pupils good during the mathematics period?
(i) Yesii) No
2. If Yes/No how is the response during the activities given to pupils?
$\qquad$
$\qquad$
3. Do the pupils dodge your mathematics period?
(i) Yes
ii) No

If Yes / No. why? $\qquad$
4. Do they sleep during the mathematics lessons?
(i) Yes
ii) No
5. What do you do to make them pick interest in mathematics lessons?
6. Do you punish those who dodge your lessons?
(i) Yesii) No
7. Do you cater for individual differences during your lessons?
(i) Yesii) No
8. Give reasons to why you do so?
$\qquad$
9. How do you find the pupils in your lessons according to their different age? Comment:
$\qquad$
$\qquad$
10. Do you use instructional materials when conducting your lessons?
(i) Yes
ii) No
11. if Yes/No give reasons
$\qquad$
$\qquad$

Kampala International University Institute of Open and Distance Learning P O Box 20000 Kansanga, Kampala, Uganda $25641373498 / 25641373889$ (Jg) ${ }^{\circ} 25420246275$ (Me)

## Office of the Director

## TO WHOM IT MAY CONCERN:

Dear Sir/Madam,
RE: INTRODUCTION LETTER FOR MS/MRS/MR./RRA...SEVERIN.NO..........N.NON REG.\#...D.P..........20..4.50.1.7.2..D. Du......

The above named is our student in the Institute of Open and Distance Learning (IODL), pursuing a Diploma/Bachelors degree in Education.

Ile/she wishes to carry out a research in your Organization on:
FACTORS INFLUENCING LEARNERS ACADEMIC
PERFORMANCE IN MAITLEMAIILS IN SELECTEA
PRIMARY SCHOOLS OF OPEJO PARISH, UFORO Sub country addumani dcsizici.

The research is a requirement for the Award of a Diploma/Bachelors degree in Education.
Any assistance accorded to him/her regarding research will be highly appreciated.

Yours Faithfully,

