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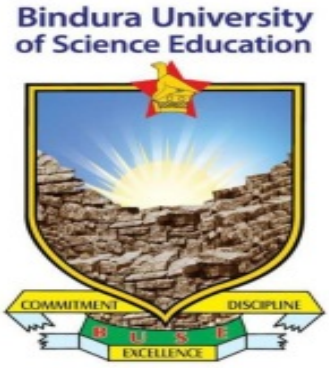

AN INVESTIGATION ON THE CAUSES OF POOR PERFORMANCE IN MATHEMATICS BY ORDINARY LEVEL PUPILS AT KAUNYE SECONDARY SCHOOL IN MUTOKO DISTRICT.

BY

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE BACHELOR OF SCIENCE HONORS DEGREE IN MATHEMATICS EDUCATION

JUNE 2024

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Title of the dissertation: An investigation on the causes of poor performance in mathematics at Kaunye Secondary school in Mutoko District.

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   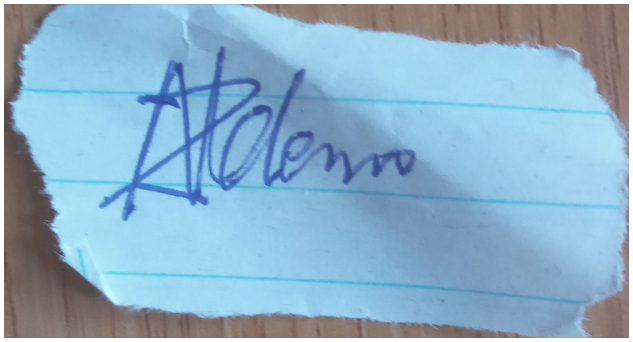

   16/10/2024

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Degree Title: Bachelor of Science Honours Degree in Mathematics Education.

Year of completion: 2024

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AKNOWLEDGEMENTS

First and foremost I would like to thank the Almighty God who provided me wisdom and strength to navigate through the research process. I would also like to extend my gratitude to my dissertation supervisor, Dr Mutambara who guided me through every detail of the project through reading, editing and polishing the ideas of the write-up. All the credit goes to her for suggestions and valuable comments on this research; this would not be possible without your support and guidance.

I also thank the administrators of Kaunye Secondary School for allowing me to carry out the researches at their institutions.

DEDICATION

This study is dedicated to my lovely wife Anna Taundi who encouraged me through all circumstances to reach beyond the stars I am so thankful. To my sons and daughter Trevor, Tinotenda and Trinity Brown and my late brothers' family, you are the reason I have so much courage to move on when the road gets tough.

ABREVIATIONS/ACCRONYMS

HBSCED- Honours Bachelors Science Education Degree

ZIMSEC- Zimbabwe Schools Examination Council

ABSTRACT

1.1 Abstract:

The study investigates on the causes of poor performance in mathematics by ordinary level pupils at Kaunye Secondary School in Mutoko. The study employed both qualitative and quantitative research approach which utilized a descriptive research design. The targeted population was 97 (90 students and 7 teachers). The sample of the study included seven teachers sampled purposively and twenty three learners which we sampled randomly. Questionnaires, interviews and observations were the research instruments used to collect the required information.

The collected data was analysed using descriptive statistics. The findings revealed that poor performance in mathematics at ordinary level was and is a contribution of different factors which includes shortage of resources, wide curriculum and assessment methods, teaching and learning methods being employed, economic conditions and cultural beliefs. From this research, it is evident that improvement in mentioned factors will saw improvement in performance.

CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDIX

Appendix 1

Appendix 2

Appendix 3

Appendix 4

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter highlights the background of the study, problem statement, objectives, research questions, justification, delimitations and limitations on the causes of poor performance in mathematics at Kaunye Secondary School in Mutoko.

1.1 Background of the study

According to Hanushek and Mann (2007), the bright future of a country depends upon the education system that builds morality and behaviours of its citizens. Thus education is considered as the optimal instrument used for integration of the individuals with the society for the sack of developing national goals and achieving high levels of progress, promotion of unity, self-actualization, social evolution, economic welfare, cultural consciousness technology progress and for scanning such multi-tasks, Mathematics is studied as fundamental component of education.

In spite of the great role mathematics plays, most learners find it as a difficulty subject to pass and even continue with it at graduate levels. According to Nyatanga and Ndudzo (2015), one of the reasons behind this discontinues and failure in mathematics directly indicates attention of mathematics teachers towards poor mathematical background at secondary level.

Tshabalala and Ncube (2013) are of the view that mathematics is a bed rock and an indispensable tool for scientific technological and economic advancement of any nation. In support to this, Hanushek and Mann (2007) say, “Things ranging from the hydrogen bombs to compact discs would not have been possible to build without the knowledge of mathematics. In other words whatever the invention in the world, mathematics is called for, meaning mathematics works as a tool to understand many other subjects and languages. To be more precisely, mathematics forms the basis of many sciences which includes general science, physics, chemistry, biology, and engineering among others.

In Zimbabwe, Mathematics is a main subject that is required in taking admission for engineering and technical sciences and polytechnic colleges, educational colleges and universities. Thus it

plays a vital role in the economic growth and development of the country. Additionally, mathematics is considered part and parcel of human thought and logic which is needed on almost daily basis as one attempts to understand the world and self.

If mathematics is poorly taught at ordinary level, or if it is taught by un-qualified and non-professional teachers, learners lacking interest to mathematics, if the curricular is improper, the school environment is not favorable and parents and guidance are not supportive, this may also result in poor performance in mathematics.

It has been noted that the ordinary level were not performing well in most of the given, exercise; homework and test and external examination. The external examination poor performance has been noted for a number of years through decrease in school pass rate as shown in table 1.1 below.

Table 1.1 Zimsec Mathematics Results for Kaunye Secondary School for the past five years

Year	**Pass rate**
2019	21%
2020	7%
2021	12.8%
2022	11.11%
2023	4.17%

It then become the researchers' concern to find out what might be the causes of poor performance, as the performance differs from that of the previous five years. Pass rate records of the previous five years show that pupils used to obtain good grades on public examinations, score good marks in exercise, tests, and assignments and finally obtain better grades in external examinations. The researcher went on to consult other teachers to find out if this was the same with their subjects, but this was not the same, constant performance was being noted in other learning areas and even improving for the better.

It is therefore from this background that the researcher was motivated to investigate the causes of poor performance in Mathematics and find a way forward.

1.2 Statement of the problem

The government of Zimbabwe is convinced that for secondary education to make optimum contributions to national development, mathematics is essential ingredient through taking it as a core subject and also one of the minimum requirements for one to again entry into colleges and universities. The diffusion of mathematics into the programs of higher education in general is dependent upon government policies. Based on the foregoing indicators of the demand of mathematics, the researcher decided to carry out this study to find out what are the causes of poor performance in mathematics at Kaunye Secondary School since the subject has become a necessity in the country Zimbabwe.

1.3 Objectives of the study

To unravel the problem the researcher focused on the following Objectives:

1. To establish reasons why ordinary level pupils at Kaunye Secondary perform poorly in Mathematics.

2. To suggest possible ways of improving learners performance in Mathematics at Kaunye Secondary School.

1.4 Research Questions

The research questions that will guide the study are:

1. What are the causes of poor performance in mathematics at ordinary level?

2. What can be done to improve performance in Mathematics of ordinary level learners at Kaunye Secondary School?

1.5 Significance of the study

There was greet need to investigate the causes of poor performance in mathematics at Kaunye Secondary. This study is expected to help teachers, parents and learners to know the major

causes that propel poor performance in mathematics. The study was an effort to explore the causes of poor performance in mathematics for the sack of teachers' guidance and also parental and guidance awareness. Moreover it was expected to give humble knowledge about stumbling blocks on the way to achieve good passes.

Thus the findings are expected to radically change the attitude of ordinary level learners towards Mathematics. And also help Mathematics teachers to find better ways of arousing interest in learners. Moreover it will help the teaching staff in the department of Mathematics in crafting effective and efficient teaching strategies.

1.6 Assumptions of the research

The researcher assumed that: The Head of Kaunye Secondary School will allow this research to be carried out. Also the Mathematics Head of Department and other staff members will provide with necessary information required for the research. The ordinary level learners doing Mathematics will contribute and cooperate during the research.

1.7 Delimitations

The study was carried out at Kaunye Secondary School in the rural areas of Mutoko. The study focused on views of the Head of Department, senior staff, mathematics teachers and ordinary level learners doing Mathematics and only issues around the poor performs of learners in Mathematics were investigated.

1.8 Limitations

A number of limitations were noted which included lack of financial resources which limited the mobilisation of crucial resources. Again it was the researchers' first degree research, hence the issue of inexperience was another limitation. Moreover, the sample used was statistically small for findings to be generalized.

For the fact that this study is restricted to Kaunye Secondary School learners in Mutoko District in Zimbabwe, it is not certain if the same results would be obtained if the research is done on different school and different geographical area as well as the research design and the instruments used would suit other schools in the zone, district, province and the nation.

Other limitations arise from the uncooperative attitude of some respondents and their attitude. This affects the validity of their responses. As such incoming students as well as other researchers who may wish to conduct further research should take these into consideration.

1.9 Definition of terms

Group-work According to Tarrant (1980:92),"group work has a specific purpose and direction". This in other words means a group work is combination of effort within pupils to solve a problem.

Rewards- refer to any positive or negative thing/things done or given to motivate or extinguish a behavior for example, praise comments and/or money.

According to Stewart (2014), Performance refers to the action or process of performing a task or function. Thus in other words it's an act of discharging or effectuating a play, concert, or other form of entertainment.

1.10 Summary

This chapter has highlighted the background of the study, problem statement, objectives, research questions, delimitations and limitations. The next chapter reviews literature related to the causes of poor performance in ordinary level.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The previous chapter put much attention on the rationale of studying mathematics and students' performance so as to provide justification for this research. This chapter concentrates much on the framework of variables influencing teaching and learning of mathematics as well, as empirical studies on factors influencing students' performance in mathematics.

2.1 Conceptual Framework

The conceptual framework hereunder presented variables that influence teaching and learning of mathematics subject. Sitko (2013) defined conceptual framework as the system of concepts, assumptions, expectations, beliefs, and theories that support and inform about the research. Students' performance in mathematics is influenced by a number of factors; among them are teaching and learning methods and students' cultural backgrounds.

Teaching methods are grouped into two, that is teacher centered methods, and learner centered methods. Learning methods includes experiment, group discussions, then solving problems and individual work as provided by the teacher or as in textbooks. The relationship between teachers and students, the way students are motivated and the frequency of giving homework and exercise also influence student's performance in mathematics Sitko (2013). Moreover, the learning environment, also affected students' performance.

2.2 Theoretical Framework

A number of authors mentioned different reasons, perspectives and theories which try to put forward causes of poor performance in mathematics. Among them Plato and Socrates' Perspectives on teaching and learning methods in Maganga (2013), as he analyses Plato and Socrates work, he found that the knowledge of geometry have been in possession even before the birth of a child. When Plato says, "it is known that the ideas or general concept behind the concrete entities were experienced through senses, by means of questions set that awaken knowledge or understanding of such ideas behind concrete phenomena". This implies that students could become good in mathematics when teachers give them more questions to awaken their knowledge and understanding on mathematics concepts. As it is said that ideas existed in our mind even before our birth, Plato and Socrates in Maganga (2013). This prior knowledge means knowledge is independent of any experience. Therefore questions came on how teachers keep in mind that their learners had concepts or ideas that they should help them develop such ideas and cultivate what is in their experience as they immerse in the subject or topic under study.

Knowledge of Practice

According to Lock in Tarcov (1989) empiricism is an epistemological position which contends that genuine knowledge is what comes to us through our senses. This means that the only sources

of genuine knowledge are senses of sight, hearing, touching, smelling and tasting. Lock in Tarcov, (1989), stated that the child's mind is like a white sheet of paper on which experiences are recorded. This means that teaching methods in mathematics needs to involve five sense organs of students in the class. When teaching, learners must be given questions to attempt with guidance from the teacher; they must see clearly what is written on the chalkboard and also practically solve given mathematics problems. Teachers should be able to teach learners in such a way that students can practically do what they are taught, hearing it well by minimizing external and internal noise in a class and ensure concussive environment for teaching and learning of mathematics, (Maganga, 2013).

Therefore the researcher wanted to know whether in actual teaching if learners practically learn mathematics and how teachers help students to solve, interact with teaching materials as well as the impact of school environments to students learning. An influential thinker about education in the late 20th Freire was the first philosopher to concern himself with oppressed people whose natural rights to liberty and property were violated. In his book Freire (1970) ―Pedagogy of the Oppressed he suggested that educational activities should be conducted under existing experiences of the participants, (Maganga (2013). In support, Smith, (2002) suggested that teachers should discuss with their students and help them in re-labeling or generating new ideas. This means mathematics teachers are supposed to teach learners in the actual living environments of the learner. Learners can be taken to field such as school garden, netball and football grounds to learn many forms of diagrams as examples. This will make learners not to forget what they have practically learned.

According to Maganga (2013), the use of dialogue method whereby teachers discuss with their learners about their learning environments is also important. This method of involving learners discussing together or conversing, rather than using written books and syllabuses in a curriculum of study is called learner centered education by Freire in Maganga (2013) which is the opposite of banking system of education where the teacher just dish knowledge to learners.

2.3 Empirical Literature Review in Mathematics World Wide

According to Smith (2004), family background influences student performance in mathematics, it is identified that students' cultural backgrounds differ and can affect students' influences to

study mathematics. Furthermore, students from different cultural backgrounds are influenced differently based upon parental experiences, interests in mathematics and cultural views and attitudes of mathematics education.

Additionally, Smith's research indicates that students who are in upper forms doing mathematics are influenced differently as compared to students who are studying lower level mathematics or chose not to study mathematics at all. One of the most stable and consistently observed phenomena (Sirin, 2005) in the field of education is the impact of students' home background on achievement. Students whose parents have a higher level of education, a more prestigious occupation, or greater income tend to have higher achievement than students whose parents have a lower standing on such socio-economic status indicators. According to UNESCO (1984), a necessary condition for teachers to teach mathematics was not only to know mathematics but also to be competent in understanding the basic contents, concepts and the associated skills. The teacher must know what it means to do mathematics so as to make students achieve good performance. Teachers must consider student's perceptions and the ideas the students brings into the classroom. It was therefore important that teachers should find what their students already know about the concepts or the topic that are to be introduced.

According to Limb and Fullarton (2001), there was an importance of classroom, teachers and school factors on students' performances in mathematics. Some of the school factors are gender, family cultural resources, language background and attitudes towards mathematics, which have significant negative effect on students' performance. Limb and Fullarton (2001), in the study made at US and Australia on TIMSS (Trends in International Mathematics and Science Study) they found that students with more family cultural resources such as books at home and those from two parent rather than single parent families tend to have higher achievement levels in mathematics. Students from English speaking families have good performances in mathematics than non-English speaking families. In classes where teachers set more homework they have associated with higher levels of performance. They supported that grouping practices employed by teachers shape the classroom learning environments and improve students' performance.

2.3.1 Empirical Studies in Africa

The study in Lesotho by Iheanachor (2007) on the influence of teachers' background, professional development and teaching practices on students' achievement in mathematics in Lesotho, have positively associated students' performance in mathematics and teaching methods in mathematics. He revealed that teaching methods, teacher qualifications, subject majors and the years of experience are predictors of students' achievement in mathematics. Thus the study reveals that some mathematics teachers have majored in mathematics or mathematics education and others have majored in professions other than mathematics but employed to teach mathematics. This implies that almost half of the mathematics teachers may not have enough mathematics knowledge and skills that affects their teaching methods.

In Tanzania this is evident in 2006 - 2008 where the government had introduced an induction course famous known as crash program (SEDP 2004). The program, which produced ill, trained teachers as they attended the college in one month only and then posted to teach in schools. The study made by Tshabalala et al. (2013), revealed that student's performance in mathematics was mainly affected by teaching methods, material resources, teacher behavior, as well as fear of the subject.

The mediating variables such as attitudes towards mathematics, perceived importance of mathematics and time spent on mathematics homework were influential predictors of student's performance in mathematics. Ali, et al. (2010), identified in her study that many students were considered underachievers in mathematics. Students were average or above average in their intelligence but their actual performance in mathematics did not coincide to their intellectual capabilities.

According to Suan, (2014), several factors had been identified which seems to be the reason for student's poor performance in mathematics. First was teacher factor, such as teaching methods, mastery of the subject content, teaching techniques and strategies, classroom management, communication skills, and personality. Second was student factor like study habits, time management, attitude and interests towards mathematics. Third was environmental factor such as parents' values attitudes, learning environment and peer groups.

Teachers were responsible to the learning and experiences (Iheanachor, 2007) the students might engage everyday as well as setting of educational goals and total personality development. This

must be in line with professional development of teachers on content and instruction, which has remarkable effect on student achievement. Suan (2014), as she cited from Hill, Rowan & Ball (2005), and Quimbo (2010), asserts that teachers who have mathematical knowledge, good attendance and participate in programs development have the students with good performance in mathematics. This can be the case in Zimbabwe considering teachers' mathematical knowledge, teachers' attendance profile as well as if they upper six or form four final examinations.

2.3.2 Studies conducted in relation to Zimbabwe

The current mathematics syllabus (2015 - 2023) thus the revised process of mathematics syllabus for Zimbabwean schools, observed a change in model (paradigm shift) from content based to a competence-based curriculum. The teaching methods with respect to this new syllabus are learner centered and activity oriented methods.

The expectation in competence-based curriculum is learners to be engaged by teachers in a variety of problem solving activities, which end up in learning. This revision had taken into consideration the Nziramasanga Commission whereby some basic contents have been integrated in mathematics syllabus. The general competencies are; by the end of four years course, the student should have the ability to: Think critically and logically in interpreting and solving problems; to be able to use mathematical languages in explaining and identifying mathematical ideas and to apply mathematical knowledge and techniques in other fields. Actually today students have not attained the expected level of above objectives identified in the revised syllabus such as to critically and logically solving mathematical problems.

Mtitu, (2014), have made an assessment on the implementation of learner centered teaching approaches as directed by the 2015 competence based curriculum. Though his study was specifically in Geography subject, but the method was recommended to be applied in teaching all subjects including mathematics. However in this study it was observed that teachers in their teaching process in classrooms, dominated most of the learning activities. When teachers give pupils group activities, effective guidance and facilitating of pupils' group activities was notably absent.

In Zimbabwe the curriculum change was a long time idea. There was a need for a curriculum to be tailored on the teachers' and pupils' daily life and the teaching methods needed to connect

pupils' real life in actual practice. The methods require teachers to actively engage learners in their teaching and learning processes by allowing students to tell what they know about the content under study in the classroom. Thus the curriculum and the teaching methods have an important effect on teaching and learning process in mathematics basing on 2015 competency based curriculum.

However the study made by Ali et al. (2010), came out with findings that problem solving method could help pupils perform better in mathematics than those taught by traditional method. The methods exposed pupils to take responsibility of their own learning with the teacher acting as the facilitator. This was termed learner centered teaching by Mtitu. Kita (2004) explored a number of factors that consistently affect performance in mathematics among ordinary level secondary school students in Tanzania. These were such as schools being occupied by unqualified and under qualified teachers that had problems with pedagogical knowledge and teaching skills. According to Kita (2004), schools where said not have enough and relevant materials for teaching mathematics that's why there was low students' performance in mathematics. In the syllabus, Mtitu, (2014) emphasized that teaching methods in mathematics should be learner-centered but the materials available in schools, especially the textbooks, do not reflect this approach of teaching.

According to Kafyulilo et al. (2012), in their study done at Mbeya, they found that, teachers claimed to have high ability to implement competency-based teaching. Teachers were able to properly state the competency based objective and able to properly state the teachers' activities, students' activities and assessment plans. But their conclusion was that competency based teaching approaches are not well implemented in schools and teachers have limited ability to demonstrate it. This showed that competency based teaching approach is superficially implemented and hypothetical rather than practical to the extent pupils fail examination in important subjects like mathematics.

2.4 Research Gap

Despite noticeable unsatisfactory performance in mathematics, a review of the related literature above indicated a significant gap in the area of study, factors leading to poor performance in mathematics subject. These areas required in-depth investigation to enlighten the factors for poor

performance in mathematics subject. The researcher considered the influence of school management system to the whole process of teaching and learning and learners' performance in mathematics, which existed, insignificant in the reviewed literatures. The research conducted was for a secondary school in Mutoko district, and put much attention in other factors like teachers' backgrounds, professional developments, and scarcity of resources in mathematics teaching practices. Moreover the sample suggested in this study would differ from other studies as the researcher involved mathematics teachers, pupils and head of departments.

2.5 Summary

This chapter has presented the conceptual framework, theoretical framework and empirical studies that informed about the study. In conceptual framework the researcher has given out assumptions on factors that have an influence on student's performance in mathematics. These assumptions have been enlightened with theoretical and empirical literatures reviewed. It was noticed that students' performance is the function of teaching and learning methods, teachers'-students' relationship, school learning environments and school management system. Lastly the research gap was developed whereby the researcher wanted to asses factors leading to poor performance in mathematics subject.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This chapter presents a description of the methodology which will be used by the researcher when carrying out the research. It describes the research design, the sources of data to be used and instruments used to collect data for the research. It also highlights the sampling procedures used in the study. It also looks into the study population, sample size, sampling techniques, validity and reliability of data presentation.

3.1 Research Paradigm

Mills (2014) defines a research paradigm as a philosophical framework that the research is based on. Thus it offers a pattern of beliefs and understanding from which the theories and practices of the research project operates. A research will adopt a positivism philosophy which makes use of a qualitative research method. Positivism philosophy believes that there is a single reality that is easy to measure and understand Stewart (2014).

3.2 Research Design

According to Creswell (2003), a research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Thus in other words, a research design is a detailed strategic plan that a researcher chooses to integrate the different components of the study in a coherent and logical way. The research design will effectively address the research question and hence it constitutes the blueprint for the collection, measurement and analysis of data. In this research, a descriptive research will be used to discover new ideas and insights into a field of study.

This research will apply both quantitative and qualitative research approaches. Quantitative approach helped to quantify the problem by way of generating numerical data or data from the field and transform it into useable statistics. Qualitative approach helped to study attitudes, opinions, behaviors, and other defined variables of the population.

3.3 Population

Meyers (2010) defines population of study as all members, groups or elements from whom the researcher hopes to gain information that will be represented in the study and from which the researcher draws conclusion from. This implies that population is a group of people that a researcher want to select as participants for his / her research problem. In this regard the researcher worked with Form Four Mathematics pupils at Kaunye Secondary School in Mutoko District. The total population targeted was ninety 97 (90 students and 7 teachers). Out of seven teachers, two were mathematics teachers.

3.4 Sample and size

The sample size of the research is 30 participants which are composed of 23 learners and 7 teachers. This is calculated by Yamane (2011) simplified formula at 90% confidence level 0, 1 precision level. The formula shows that for a target population of 90 learners and 10 teachers, the sample size should be at least 30- that are 23 learners and 7 teachers.

3.5 Sampling Procedures

Jonkowicz (2013) defines sampling as the selection of a subset of individuals from within a statistical population estimate characteristics of the whole population so that the cost is lower and data collection is faster. For the purpose of this study, the researcher used random sampling procedure to select pupils. The method ensures fairness and best result of the study. Pupils were asked to pick some cards in a box. In the box were ninety cards written one to ninety numbers and those who picked numbers ranging from one to twenty three were automatically chosen ones. However though this practice reduces favoritism and provides equal opportunities of selection of pupils, the researcher discovered that this is not a good method for it left some interested parties thereby hindering smooth progress of the study. The researcher used purposive sampling to select teachers who participated in the study because of the limited numbers of teachers in the study area.

3.6 Research Instruments

Gary (2016) defines research Instruments as, tools designed to measure the research variables. Thus in other words research instruments refer to the strategies used by the researcher to gather facts about the study. Research instruments comprise of questionnaires, interviews and observation just to mention a few. The researcher is going to use questionnaires and interviews as research instruments in this study.

3.6.1 The questionnaire

According to Gunton (2013), it refers to pre-written structured questions arranged in logical order to allow one to reach a conclusion. This in other words mean question is used to prove for information relating to a problem. Thus on this note the researcher used questionnaire to collect data from twenty three learners and seven teachers involved in the research. The way questions in the questionnaire were structured assist the researcher to identify where the discussed problem emanated taking into account that the instrument has its pros and cons.

The questionnaire was used because it provides immediate feedback and it's less time consuming. Again it encourages freedom of expression. However the main disadvantage noted is time consuming to structure and also some respondents might fail to respond on time and may require follow up and some respondents might go through the questionnaires hurriedly without careful analysis of questions.

3.6.2 Interviews

This involve direct questioning of the interested party to get immediate feedback, supporting this Gary (2016) suggests that interviews are interaction in which oral questions are posed by the interviewer to elicit oral response from the interviewer. The researcher will make use of interviews because they facilitates communication hence information obtained is more comprehensive and complete because clarification will be obtained, provide high rate of despondence as respondents are willing to discuss and response is instant and faster.

On the other hand there is danger of bias especially during clarification of certain questions as some of the respondents might be reluctant to disclose some information they regard as confidential.

3.6.3 Observations

This refers to the action or process of closely observing or monitoring something or someone, of the same view is Creswell (2003), when defined observation as watching or monitoring an event or act for the purpose of reporting or drawing conclusion. It is regarded as the fastest method of data collection besides its criticism of being more biased when compared with other data collection methods.

3.7 Data collection procedures

The research was conducted using both primary and secondary sources of data collection. Primary data was collected using questionnaires. The questionnaires were distributed to twenty three learners and the seven selected teachers at Kaunye Secondary School. The respondents indicated their views on the questions asked. The questions were structured into two sections (open ended and close ended) questions.

Data was also collected from selected teachers by means of interviews. Interviews were conducted to teachers only (Head of Departments and mathematics teachers) which were sampled purposively to capture their views concerning causes of poor performance in mathematics. The dates for the interview with teachers were set in advance before setting appointment with the respondents.

Observation was another method employed to collect data in this study. The researcher was given the opportunity to observe teachers delivering lessons especially those in the Science Department. This helps the researcher to come up with first-hand information on some of the causes of poor performance in mathematics.

3.8 Data presentation and analysis

Data was gathered by means of interviews, observations and questionnaire which were largely made up of close-ended questions. These instruments were employed because they ensure participation to every respondent and also preserve anonymity which encourages honesty. However questionnaires are inflexible in that they do not allow ideas or comments to be explored in-depth and many questions are left unanswered. The research distributed the questionnaires to both learners and teachers and collected them after a week, he also interviewed the selected teachers and also observed teachers conducting lessons.

The data collected using questionnaires and interviews were analysed employing descriptive statistics. According to Wedenoja (2020) these techniques can present quantitative description and give summary of data in a manageable form. Demographic data will be analysed in the next chapter using frequency and percentages then presented in the form of pie charts and bar graphs.

3.9 Research Ethical Consideration

The researcher will be given a clearance letter from Bindura University of Science Education to carry out a research which he will used to be granted permission by Kaunye Secondary School to carry out a research. The researcher to communicate to the participants individually and explain the nature and the purpose of the study. Participation in the study will be voluntary and everyone had the right to withdraw at any time, or decide not to answer any of the questions when they did not feel comfortable to do so.

3.10 Validity and Reliability of instruments to be used

Validity is the degree by which the sample of test items represents the content the test is designed to measure, Mugenda and Mugenda (2003). A research instrument is said to be valid if it measures what it is intended to measure, Pervez (2010). To ensure validity of the research the researcher used multiple sources of evidence. Data will be collected from both taking into consideration gender balance to try to capture the views of everyone. This helped to ensure that the data gives a true picture of what is being studied since information will collected from all members of the targeted population.

3.11 Summary

To sum up this chapter, the researcher took different actions in trying to develop the pupils to potentially grasp concepts taught and apply them. Thus in brief, research design was explained and the sample and sampling procedures discussed in bide to try and address the problem at hand.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This chapter focuses on data presentation and analysis of the research findings obtained through observations, questionnaires and interviews conducted. Data is presented in the form of tables, graphs and pie charts with explanatory notes to give a better interpretation and understanding of the data.

In this research, instruments for data collection that were used to collect data are observations, interview and questionnaires. Findings were presented according to themes in the instruments. The researcher was able to supply questionnaire papers to the mathematics teachers, head of departments and learners. Interviews were conducted with sample teachers and observations

were made during the research process. The findings of the research process, was guided by the research objectives.

4.1 Response rate

Table 4.1: Response rate of questionnaires distributed

Questionnaire	Frequency	Percentage
Returned	23	76%
Not Returned	7	24%
Total	30	100%

The researcher distributed 30 questionnaires to teachers and learners at Kaunye Secondary School. The response rate was 76% since 23 questionnaires were answered out of the 30 questionnaires which were distributed. According to Tulbure (2012) a 63% response rate is good while a 75% response rate and above is excellent. The researcher expected a response rate of at least 63% based on the Tulbures' findings therefore the response rate was acceptable since it was more than 63%.

4.2 Demographic data

4.2.1 Gender of respondents

The researcher pursued to find the gender of the respondents just for general demographic pattern. The response rate was analysed and the results are shown in table 4.2 below which shows the distribution of the respondents according to their gender.

Table 4.2: Gender of respondents

Gender	Frequency	Percentage
Male	16	53%

Female	14	47%
Total	30	100%

From table 4.2 male respondents constituted 53% while female respondents constituted 47%. This indicates that majority of the teachers and learners at Kaunye Secondary School who participated in the research are male. This shows that the teachers and learners at Kaunye Secondary School are not equally distributed in terms of gender. This reveals that gender imbalance persists at the school regardless of the sensitisation call by the ministry of primary and secondary education for the balance of the two. This was cemented by Tulbure (2012) who said that fewer women take mathematics when compared to men because of cultural beliefs and poverty.

4.2.2 Demographic Profile of Teachers

This section presents the demographic profile of teacher participants. Demographic profile includes the gender, educational attainment, number of years at work and the length of teaching experience.

Table 4.3: Demographic Profile of Teachers

Educational Level	**Frequency**	**Percentage (%)**	**Cumulative Percentage (%)**
Masters in education	0	0	0
Degree in education	2	29	29
Diploma in education	5	71	100
Total	7	100	100
Working experience	**Frequency**	**Percentage (%)**	**Cumulative Percentage (%)**

Below 5 years	3	43	43
6 to 10 years	1	14	57
11 years and above	3	43	100
Total	7	100	100
Gender	**Frequency**	**Percentage (%)**	**Cumulative Percentage (%)**
Male	3	43	43
Female	4	57	100
Total	7	100	100

The table above show how teachers were rated on different teaching and learning factors. Effective teaching and learning of mathematics require competent teachers, teaching experience, and availability of resources, parental involvement, and a good mathematical background.

4.2.3 Educational Attainment

Educational attainment as presented in Table 4.3 showed that 29% of the teacher participants were bachelor degree holders while non-have master's in education or in other professions as well and 71% of the participants have diploma in education. The level of education was also noted to play a role in the performance of learners as teachers need to teach learners following modern trends which are less acquired at diploma level than at degree and masters.

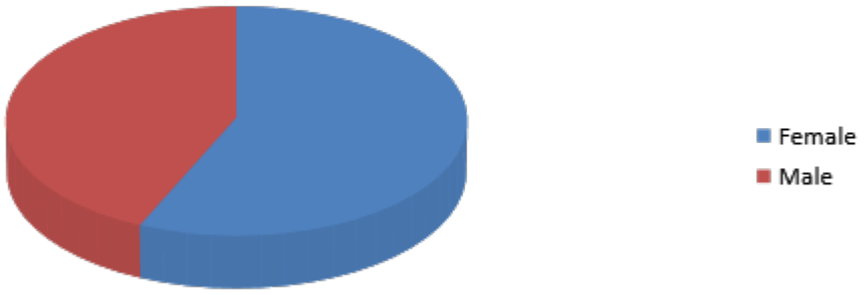
4.2.4 Length of Teaching Experience

Based on the data presented in Table 4.3, results implied that majority of the teacher participants have good teaching experienced. 43% of them have been teaching for more than 10 years and another 43% were teaching for at most 5 years. 14% of the teachers had teaching experience of 6 to 10 years. However, at Kaunye Secondary School, it was noted that there was a shortage of mathematics teachers for the past two or more years. This result in learners lacking basic

mathematical concepts which need to be natured up to ordinary level. Additional the teachers lack the necessary teaching experience and resources to effectively teach the subject. This was noted to be one of the leading causes of poor teaching methods, which can hinder learners' understanding of mathematical concepts.

4.2.5 Gender

Fig 4.1 Teacher Participation by Gender



It is evident in gender category in table 4.3 and figure 4.1 which shows that out of 7 teacher participants, four (57%) were female and three (43%) were male teachers. The findings of this study are evident that female teachers outnumbered male teachers.

4.2.6 School Administrators

Among the five head of departments who were interviewed, the researcher observed that there is a little bias in terms of maintaining gender balance in leadership. Two departments were lead males, three were led by females. In terms of academic and mathematics department, the school combined mathematics and sciences departments and was led by a male non mathematics or science teacher. This was noted to be one of the factors leading to poor performance, (assignment of duty to un-qualified personal). This mean assignment like supervision in the

department were done by someone with little or no content of the subjects under this department, hence compromising the quality of results.

4.3 Learners' attitudes and beliefs

When learners were asked to answer the questionnaire, section 4 of the questionnaire guide had the following questions which focus on learners' attitudes and beliefs:

a. Do you enjoy studying mathematics?

b. Do you believe that mathematics is a difficult subject?

c. Do you believe that mathematics is important for your future career?

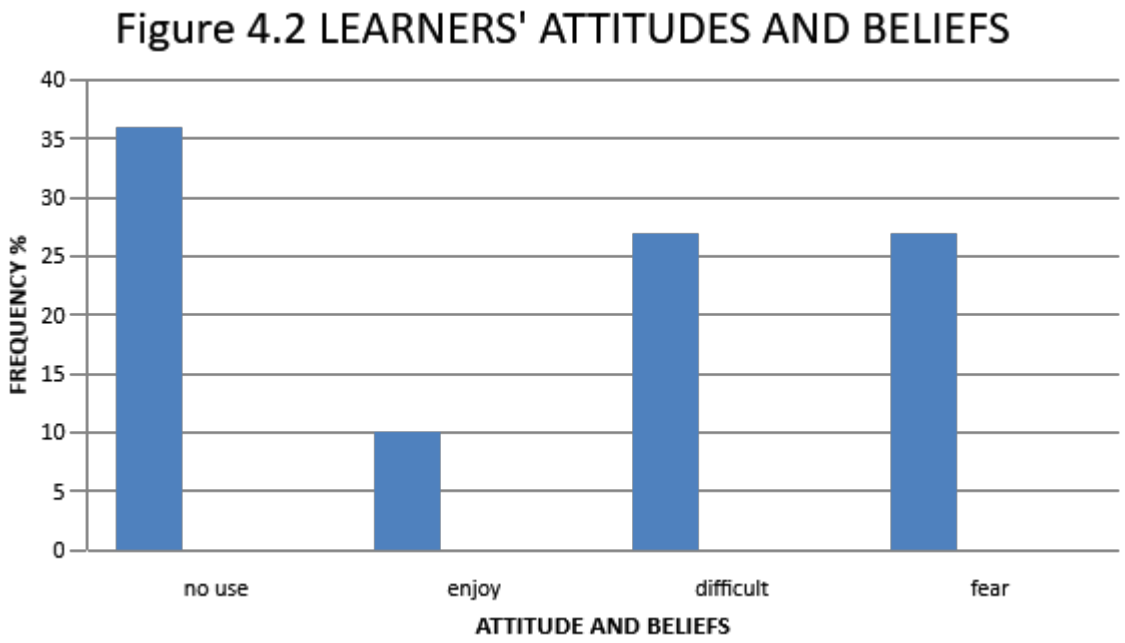
d. Do you have any fears of anxieties related to mathematics?

The response of the learners were captured and tabulated as below;

Table 4.4 Learners' attitude and beliefs

LEARNERS' ATTITUDE AND BELIEFS	**FREQUENCY**
No use	8
Enjoy	3
Difficult	6
Fear	6

The information of in the **table 4.4** above is presented on the bar graph in **figure 4.2** below.



Basing on the bar graph in figure 4.2, it has been shown that learners' attitudes and beliefs towards mathematics significantly affect their performance in the subject. Learners who view mathematics as a difficult subject or have developed a fear of mathematics, known as math phobia, are performing poorly. This fear leads to negative attitudes towards mathematics, which in turn discourage learners from engaging with the subject and hinder their ability to learn and understand mathematical concepts.

In addition Smith (2004), it is identified that learners' cultural backgrounds differ and can affect learners' influences to study mathematics. Learners from different cultural backgrounds are influenced differently based upon parental experiences, interests in mathematics and cultural views and attitudes of mathematics education. Additionally, Smith's research indicates that learners who like mathematics at ordinary level are influenced differently as compared to learners who are studying lower level mathematics or chose not to study mathematics at all. One of the most stable and consistently observed incidents in the research was the impact of learners' home background on the learner performance in mathematics subject. Learners whose parents have a higher level of education, a more prestigious occupation, or greater income tend to have good performance than learners whose parents have a lower standing on such socio-economic status indicators.

4.4 Teaching and Learning methods and strategies

The researcher wanted to find out how does teaching methods in mathematics influenced learners' performance in mathematics subject. To understand some of the things that had the influence on teaching and learning methods in mathematics on students' performance the researcher distributed questionnaires to both teachers and learners. Teachers were also interviewed on this matter. The findings made revealed that mathematics teachers used a variety of teaching methods. Teachers were also observed conducting lessons by the researcher and it was noted that they mainly used learners centered teaching methods, which some teachers perceive to be helpless to make students do best in mathematics. When they were asked why so, they answered complaining that the school is not providing them with enough teaching and learning materials to support the learner centered teaching methods

One of the teachers reviewed that to him teacher centered was good as most of his students' do not have good background in mathematics. This is contrary to the requirements of 2015 to 2022 Zimbabwe Schools National Syllabus as it makes students to be just recipients of the knowledge hence banking system of teaching rather than problem solving. This does not help students to remember mathematics concepts very well as they didn't do any problem solving in classroom with the guide of the teacher.

When teachers were asked methods they used to help learners understand mathematics easily, they said it is through group discussions, experimentation, and group work and self-practice by the learners. Although some teachers claimed to apply participatory and learners' centered methods but through lessons observations done by the researcher, it was proved that teachers were applying teacher centered methods. The main reason reviewed to the researcher being that learners were not active as they found it difficult to derive mathematics concepts, this end up forcing teachers to apply teacher centered methods in actual teaching practice.

In addition, when learners were asked to say something on the way teachers teach them, they said that their teachers teach them well but not all of them. They added that a teacher teaches everything first and lastly gives them some questions as an exercise.

Table 4.5 Teaching methods used

Method used	Theoretically	Observed
Learner Centered	4 (57%)	1 (14%)
Teacher Centered	1 (14%)	4 (57%)
Participatory	2 (29%)	2 (29%)

Table 4.4 shows different teaching and learning methods which teachers say they employed during interviews and what they were observed using. As shown in the data above, the findings revealed that 57% of teachers said they applied learner centered methods approach and 29% used participatory methods. The other 14% was for teachers who used teacher centered teaching and learning methods. This was reviewed during interviews but when they were observed delivering the lessons, it was the opposite, 14% employed learner centered teaching and learning methods while 57% was for teacher centered teaching and learning methods. The reason being that learners are not active as they found difficulty in deriving mathematics concepts this end up forcing teachers applying teacher centered methods in actual teaching practice. This banking method ensures content and concepts grasping for a short period of time, thus when examinations time comes learners would have forgotten what they learnt, this led to failure.

4.5 Economic Conditions

Economic conditions were also noted to affect learners' performance in mathematics. Learners from less privileged families who have capacity to buy necessary resources, such as textbooks and other learning materials needed by competency based curriculum, which affect their ability to learn and understand mathematical concepts. Additionally, learners who are engaged in income-generating activities to support their families have less time to study and engage with the subject, leading to poor academic performance.

4.6 Curriculum and Assessment Factors

The curriculum and assessment methods used in teaching mathematics can also affect learners' performance in the subject. The Zimbabwean curriculum policy emphasizes the establishment of a strong mathematical base for economic development. However, the curriculum may not be

adequately aligned with learners' needs and abilities, leading to poor performance. Additionally, the assessment methods used does not measure mathematical skills acquired by learners but understanding of mathematical concepts, leading to poor performance.

4.7 The Nature of School Environment

Mathematics teachers and Heads of department were provided with questionnaires to answer some questions questioning on the nature of school environment were teaching and learning process is being practiced. They were interviewed as well on the nature of school environment. Learners were involved in discussion and they were very free to discuss how their school environments affected their learning process. Observations were also done on the nature of school environments and its quality to performance of students in mathematics subject. Despite having mathematics teachers, the school has got a poorly furnitured library with outdated books which mathematics teachers forced to use as they are the only source of learning content available. Despite having outdated learning materials in the library, there were no records that learners were given or borrowing mathematics books for self-study and self-practice.

4.8 Summary

Poor performance in mathematics at ordinary level in Zimbabwe is a complex issue that is influenced by various factors, including learner attitudes and beliefs, teaching and learning factors, economic conditions, and curriculum and assessment factors. To address this issue, there is a need for a comprehensive approach that addresses these factors and provides learners with the necessary support to succeed in the subject. This can include providing competent teachers, adequate resources, and appropriate curriculum and assessment methods that align with learners' needs and abilities. Additionally, addressing learners' attitudes and beliefs towards mathematics and providing support for learners from low-income families can also help to improve learners' performance in the subject.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter looks into the conclusions that the researcher made after obtaining and analyzing data in chapter 4. It also looks into the recommendations that were made by the researcher in order to curb poor performance in mathematics at ordinary level.

5.1 Summary

This study examined the causes of poor performance in mathematics at ordinary level at Kaunye Secondary School. The study had three specific objectives. These objectives were what are the causes of poor performance in mathematics at ordinary level? What are the benefits of knowing causes of poor performance in mathematics by ordinary level learners? and what can be done to improve performance in Mathematics of ordinary level learners?

The research was conducted following both quantitative and qualitative research designs methods were questionnaires, interviews and observations were used as data collection tools. There were 30 respondents selected based on the stratified random sampling. Quantitative data were organized and coded. The researcher employed descriptive statistics such as frequency, percentages and pie chart. The following are summarized main findings based on the specific objectives of the study.

After analyzing all the data obtained from the research study, the researcher concluded that poor performance in mathematics at ordinary level at Kaunye Secondary School is a result of combined reasons. Also, basing on the findings the learners and teachers were aware of problems which caused poor performance. From this research it is evident that improved availing of resources like books, increased number experienced teachers, increase time of contact with pupils, reduce tuition fees and motivate both learners and teachers may also improve performance in mathematics.

5.2 Conclusion from findings

The researcher answered three questions from the research. The first question was what are the causes of poor performance in mathematics at ordinary level? The second question was what are the benefits of knowing the causes of poor performance in mathematics at ordinary level? Finally, the study strives to identify ways to curb the causes of poor performance in mathematics. The following was concluded;

5.2.1 Learners attitudes and beliefs

The researcher identified four major causes of poor performance in mathematics at ordinary level which include learners' attitudes and beliefs, teaching and learning factors, economic conditions and curriculum and assessment factors. If these factors are given much attention, an improved performance in mathematics can be greatly achieved.

On learners' attitudes and beliefs, the researcher find out that only 10% of the population sample enjoyed mathematics, 27% fear the subject, and 36% take mathematics as a very difficult subject. 27% of the population sample takes the subject as of no use or irrelevant to future life. Thus these percentages are a clear indication of negative attitudes in learners and how serious they take the subject.

5.2.2 Teaching and learning factors

Teaching and learning factors involves lesson attendance which contributed 36% together with teachers' performance. Availability of resources has a total of 2/30 respondents, thus 7% acknowledge the presence of resources and also interference of lessons by other unplanned activities. 14% showed that they understand mathematics concepts learnt. The percentages and frequency is a clear indication that these accepts that make up teaching and learning effective need proper attention so that learners performance can be improved for the better.

5.2.3. Economic conditions

Economic conditions were also noted to affect learners' performance in mathematics. Learners from low-income families faced challenges in accessing the necessary resources, such as textbooks and other learning materials required in the new curriculum which the school has got limited capacity to procure. Additionally, learners absent themselves from school engaging in income-generating activities to support their families and in turn have less time to study and engage with the subject, leading to poor academic performance.

5.2.4. Curriculum and assessment factors

The curriculum and assessment methods used in teaching mathematics were also noted affect learners' performance in the subject. The Zimbabwean curriculum policy emphasizes the establishment of a strong mathematical base for economic development. Thus the national curriculum from which the school syllabus is extracted from is congested with information to be

learnt, this forced the school syllabus to be compressed too to accommodate completion of the syllabus. However, the curriculum may not be adequately aligned with learners' needs and abilities, leading to poor performance.

Additionally, the assessment methods used may not accurately measure learners' understanding of mathematical concepts. This is so because learners' assessment in Zimbabwe is done at the end of the ordinary level and learners are graded bested on how they performed on that final assessment without consideration of how they performed in lower forms or grades.

5.3 Recommendations

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

5.3.1 Mathematics Teachers

The researcher recommends mathematics teachers to consider students cultural and learning backgrounds in choosing teaching and learning strategies. Suggestions are that they align teaching and learning methods with the assessed learning needs and capabilities of students. Teachers should attempt to find a balance of teaching strategies rather than teaching student to pass examinations, hence few understand the subject and at last many fail the subject. They may be able to realize the importance of recognizing learning styles, identify students' differences, and adjust the teaching and learning methods accordingly. By doing this, teachers would be able to deliver content clearly, making every student understand mathematics, motivate students leading to better performance in mathematics subject.

Lastly, it is also suggested that teachers to learn to improvise on teaching and learning resources especially if their school do not resources to support the teaching and learning activities. They may learn to develop their profession and innovativeness in teaching in order to maximize the use of available resources of the school to improve students' performance in mathematics subject.

5.3.2 Learners

The researcher highly suggest that learners take in hand their perception and feedback towards their teachers' teaching and learning methods in order for the teachers to effectively bring into

line their way of teaching to the learners' way of learning. It is recommended that for learners to learn effectively, they need to be flexible by using strategies outside their preferences in order to meet the demands of the challenging environment. Learners must be ready to be guided in mathematics using learner centered methods, which are very effective ways of teaching and learning. Learners must be encouraged to do self-practice daily. They are also encouraged to actively participate in classroom activities in order to have enjoyable and satisfying results.

5.3.3 School Administrators

For school administrators, it is recommended to ensure availability of teaching and learning materials and favorable environment for the execution of different teaching methods that are aligned with the teaching methods and students' learning in classrooms. Effective teaching and learning can only be achieved in the presence of teaching and learning materials. It is also highly recommended that school leaders provide more in-service seminars, trainings and workshops for the teachers focusing more on how the teachers would enable themselves to align their teaching and learning strategies which they prefer and use to the learning preferences and capacities of the learners. Moreover, teachers are also encouraged to pursue post graduate studies in order to upgrade their teaching competencies even if they have degrees in teaching profession. Lastly head of mathematics departments must be empowered to manage teaching and learning in mathematics. They must be provided with all guides and teaching resources.

5.4 Future Research

The researcher is recommending research to be done in future on identifying learners evidenced based teaching strategies that will enhance the quality of teaching and learning to enhance learners' performance in mathematics. Individual factors that make them fail in mathematics while performing better in other science subjects. The research must also be conducted on individual teacher factors that affect the teaching practice to the extent learners are poorly performing in mathematics. This is highly suggested in order to widen the scope of the current study and initiate the process of creating evidenced based teaching and learning strategies that may enhance the quality of teaching and learning to enhance learners' performance in mathematics.

5.5 Summary

This chapter contained a summary of the findings attained by the researcher as well the conclusion that she made pertaining to the finding. The chapter also highlighted the recommendations made by the researcher to the firm

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BINDURA UNIVERSITY OF SCIENCE EDUCATION

Date: 9 APRIL 2024

TO WHOM IT MAY CONCERN

NAME: BROKN REGISTRATION NUMBER: B2250498

PROGRAMME: HBScEdMt PART: 2.2

This memo serves to confirm that the above is a bona fide student at Bindura University of Science Education in the Faculty of Science Education.

The student has to undertake research and thereafter present a Research Project in partial fulfillment of the HBSc Ed Mt programme. The research topic is:

AN INVESTIGATION ON THE CAUSES OF POOR PERFORMANCE IN MATHEMATICS BY ORDINARY LEVEL PUPILS AT KAUNYE SECONDARY SCHOOL IN MUTOKO.

In this regard, the department kindly requests your permission to allow the student to carry out his/her research in your institutions.

Your co-operation and assistance is greatly appreciated.

Thank you

BINDURA UNIVERSITY OF SCIENCE EDUCATION
DEPARTMENT OF EDUCATIONAL FOUNDATIONS
9 APR 2024
P. BAG 1020
BINDURA

Z Ndemo (Dr.)
CHAIRPERSON - SAMED

Reference: P/Brown T

E. C. No.: 5403510E

All communications should be addressed to
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ZIMBABWE

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Mashonaland East Province
P.O. Box 752
Marondera
Zimbabwe

21/05/24

Mr./Mrs./Miss Tinotara Brown

Kaunye Secondary School

P.O. Box 285 Mutoko

PERMISSION TO CARRY OUT RESEARCH IN SCHOOLS FOR EDUCATIONAL PURPOSES: MR/MRS/MISS Brown T **E. C. NO.** 5403510E

STUDENT I. D. B2250491B **TEACHER AT** Kaunye T. **SCHOOL**

Reference is made to your minute dated 20 May 2024
Please be advised that permission has been granted that you carry out research work in our schools. You are accordingly being asked to furnish the Ministry with information about your findings so that we share the knowledge for the benefit of the system as well as our nation at large.

We wish you all the best and hope to hear from you after completing your project work.

MIN. OF PRIMARY & SECONDARY EDUCATION
HUMAN RESOURCES
MASHONALAND EAST PROVINCE
21 MAY 2024
P.O. BOX 752, MARONDERA
ZIMBABWE TEL: 0279-216

MUTSIPA

HUMAN RESOURCES OFFICER – DISCIPLINE
FOR PROVINCIAL EDUCATION DIRECTOR
MASHONALAND EAST PROVINCE
/mm

APPENDIX 3

QUESTIONNAIRE

My name is Brown Tinofara, a final year student at Bindura University of Science Education. I am studying for a Bachelor of Honours Degree in Mathematics Education. In partial fulfillment of my degree program requirements I am conducting a research on the causes of poor performance in Mathematics at ordinary level at Kaunye Secondary School. I am kindly asking you to complete this questionnaire which will be useful in drawing conclusions for the research. Please be assured that is for academic purposes only and the responses for the questionnaire shall be kept confidential and as such no personal details shall be requested for in the document.

Introduction:

This questionnaire aims to gather information about the factors contributing to poor performance in mathematics at O-level at Kaunye Secondary School. The findings will be used to develop strategies to improve the understanding and performance of mathematics among students.

Section 1: Background Information

1. What is your age?

   13 -20 years ☐ 21 – 30 years ☐ 31 – 40 years ☐ 40 years and above ☐

2. What is your gender?

   Male ☐ Female ☐

3. What is your current form?

   Form 1 ☐ Form 2 ☐ Form 3 ☐ Form 4 ☐

Section 2: Mathematics Performance

1. How would you rate your current performance in mathematics?

   - Excellent ☐

- Good ☐
- Average ☐
- Poor ☐
- Very poor ☐

2. Have you ever failed mathematics at any level?

- Yes ☐
- No ☐

If yes, what do you think were the reasons for your failure?

.....

.....

.....

Section 3: Teaching and Learning of Mathematics

1. How often do you attend mathematics classes?

- Always ☐
- Most of the time ☐
- Sometimes ☐
- Rarely ☐
- Never ☐

2. How would you rate your mathematics teacher's ability to teach the subject?

- Excellent ☐
- Good ☐
- Average ☐

- Poor ☐
- Very poor ☐

3. Do you have access to textbooks and other learning materials for mathematics?

- Yes ☐
- No ☐

4. Do you have any difficulties understanding the mathematics curriculum?

- Yes ☐
- No ☐

5. Do you have any extra-curricular activities that interfere with your mathematics studies?

- Yes ☐
- No ☐

Section 4: Attitudes and Beliefs

1. Do you enjoy studying mathematics?

- Yes ☐
- No ☐

2. Do you believe that mathematics is a difficult subject?

- Yes ☐
- No ☐

3. Do you believe that mathematics is important for your future career?

- Yes ☐
- No ☐

4. Do you have any fears or anxieties related to mathematics?

- Yes ☐
- No ☐

Section 5: Suggestions for Improvement

1. What do you think can be done to improve the performance of students in mathematics?

   .....
   .....
   .....
   ....

2. Do you have any suggestions for improving the teaching and learning of mathematics in your school?

   .....
   .....
   .....

Thank you for taking the time to complete this questionnaire. Your feedback is valuable and will help us develop strategies to improve the performance of students in mathematics at the ordinary level in Zimbabwe.

APPENDIX 4

INTERVIEWS GUIDE

My name is Brown Tinofara a final year student pursuing a Bachelor of Honours Degree in Mathematics Education at Bindura University of Science Education (BUSE). I am carrying out a research on the causes of poor performance in Mathematics at Kaunye Secondary in Mutoko District in Mashonaland East Province in Zimbabwe.

You have been selected to participate in this research because you are an administrator or teacher in the science department. The information you will provide is purely for academic use and will be treated with high degree of confidentiality. You are therefore required to be as objective and truthful as you can be in your responses.

Interview Questions:

1. Can you elaborate on your experiences with the current performance of students in mathematics at ordinary level at Kaunye Secondary School?.....
   .....
   .....
   .....
2. In your opinion, what are the main factors contributing to the poor performance in mathematics at ordinary level at Kaunye Secondary School?.....
   .....
   .....
3. How would you assess the quality of mathematics teachers at Kaunye Secondary School?.....

.....

.....

4. Can you provide an evaluation of the availability and quality of resources for teaching mathematics at Kaunye Secondary School?

.....

.....

.....

5. How do you think parental involvement impacts the performance of students in mathematics at Kaunye Secondary School?

.....,.

.....

.....

6. What is your perspective on the current curriculum for mathematics at O-level at Kaunye Secondary School?

.....

.....

.....

7. Can you discuss the impact of using calculators in mathematics instruction on the performance of students at Kaunye Secondary School?.....

.....,.....

....

8. What strategies do you believe should be implemented to improve the performance of students in mathematics at O-level at Kaunye Secondary School?.....

.....

.....

.....

9. Can you identify any challenges that may arise in implementing these strategies?

   .....

   .....

   .....

10. How do you envision the future of mathematics education at Kaunye Secondary School and what steps should be taken to ensure its success?.....

    .....

    .....

    .....

    .....