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AN ANALYSIS ON THE EFFECTS OF STREAMING TO ORDINARY LEVEL MATHEMATICS IN FIVE SCHOOLS OF CHEGUTU DISTRICT.

BY

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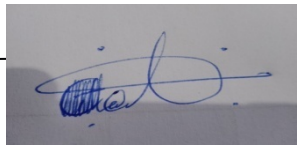

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DEDICATION

This study is dedicated to my precious daughters Tatiana and Tanita, your presence has been my source of joy, motivation and encouragement. To my lovely wife Tshitshi Uladi, you have been my guiding light throughout this journey. To my dear friends and colleagues I am thankful for all the encouragements you have given me.

ABREVIATIONS/ACCRONYMS

ZIMSEC- Zimbabwe Schools Examinations Council

HBSCED- Honours Bachelors Science Education Degree

ABSTRACT

The purpose of this study is to investigate the impact of streaming on the teaching and learning of ordinary level mathematics in five schools within the Chegutu district. Streaming, a common practice in many educational systems, involves the division of students into different classes based on their perceived academic abilities.

This research aims to assess the effectiveness of this practice in the context of mathematics education, focusing on student performance, teacher perspectives, and overall classroom dynamics. By employing a mixed-methods approach, including interviews and academic performance data analysis, this study seeks to provide valuable insights into the implications of streaming for ordinary level mathematics education.

The findings of this research are anticipated to inform educational policies and practices, ultimately contributing to the enhancement of mathematics teaching and learning in the Chegutu district and beyond.

TABLE OF CONTENTS

Contents

LIST OF TABLES

Page

LIST OF FIGURES

LIST OF APPENDICES

CHAPTER 1: INTRODUCTION

For centuries, there has been ongoing discourse among students, teachers, administrators and researchers regarding how classes should be organized. This research looked at the effects of streaming Mathematics students on final performance in secondary schools. Five secondary schools in Chegutu District were used for this research. This chapter focuses on the background of the study which illustrates the history behind the study; the statement of the problem puts the research into perspective, purpose of the study and significance of the study which shows the relevance of research. The research questions shows the focus and boundaries of the study, operational definitions of terms gives the specific meanings of the key terms, assumptions of study highlights beliefs or suppositions that guides the research and influence interrelations and delimitations which gives the boundaries of the research.

1.1 BACKGROUND OF STUDY

When national pass rate for both Advanced Level and Ordinary Level are announced in Zimbabwe, people receive them with different perception. The national pass rate for the year 2023 for Ordinary level was 29.41% according to ZIMSEC (2024) media publication. This is a figure that forced a number of civilians, academics and senior researchers as well as government officials to give various comments on the media. Different issues or possible reasons were highlighted as the cause for the students' failures. Other people felt that Information Communication Technology is the major contributor while others blame teachers themselves for failure to archive good results. I was motivated to carry out this research in order to closely assess the contribution of ability grouping on the performance of Mathematics students at O level.

Slavin (1990) explained that, streaming is the ability grouping procedure which is the practice of dividing students for instruction on the basis of the perceived capacities of learning. According to Fiedler et al (2002) ability grouping relates to the homogeneous regrouping of students for the purpose of providing learning aimed at a common instruction level for a specific group of learners with the same abilities and specific identified potential. This means that the premise of streaming rest in the rational adaptation of students inborn different ability. Over the years researchers have struggled to find answersto the questions about abilitygrouping which include- does anyone benefit or harmed by it? Who benefits most or who is harmed most? In the process ofeducation from elementary to secondary levels, students find themselves divided/grouped in different classes. Placement into these different groups is usually done after considering interest and abilities are usually placed in the same class. This world-wide practice of ability grouping clearly has important implications on the students performance on public examinations to the extent that most people in life are who they are today because of ability grouping during their education process.

This system of streaming is being practiced world-wide in countries such as United States of America, Britain, Japan, Finland and China as well as Singapore (Robbins and Judy, 2018). In Africa the system of streaming is being practiced in Nigeria, Ghana,South Africa, and Zimbabwe (Glamorgan 2002, Cheung &Rudowicz,2003; Adodo&Agbayewa,2003; Chisaka&Vilakasa, 2003). Different perceptions have been put across by different educationist, scholars and even politicians on the issue with some believing that the system yields positive results while others believe that it has negative results on the different groups of students under this system.

As early as 1967, the United States Supreme Court ruled separation of students into different classes resulted into unconstitutional segregation of the minority and non-minority student

(Glamorgan, 2002). In Britain when David Cameron became the Prime Minister, he promised to promote the system of ability grouping, since the system is still being practiced by almost half of the schools in Britain (Adodo and Agbayewa, 2011). The general survey shows that the system, though not gazetted anywhere in educational policy of Zimbabwe it is highly practiced in the Zimbabwean Secondary Schools (UNESCO, 2011).

The Ministry Of Primary and Secondary Education has nine administrative education regions and each region is further divided into administrative districts which vary in terms of numbers but add up to fifty nine. The education districts are then divided into zones and clusters for easy management of the system from bottom to top. Despite all this none of these regions ever sanctioned ability grouping but it is being practiced in all regions (ZBC, 2023).

It was discovered that when Zimbabwe got her independence in1980, she introduced education for all and the result was that many people got enrolled into primary schools. A large number of learners started to spill to the secondary level and some schools could not cope with the increase of students and some schools as a measure began a system of streaming in order to preserve their prestige (Zvobgo, 2003). Currently, the majority of schools are now practicing streaming in order to accommodate a wide curriculum while others are just doing it in order to preserve their own hard worn traditional image of the school (Wasakara & Pasimire, 2007). It was also observed that the most affected groups of schools is secondary school students. This however has prompted the researcher to come up with this topic concerning the effects of streaming Mathematics students at ‘O’level.

1.2 STATEMENT OF THE PROBLEM

In what ways and to what extent does ability grouping affects or influence the performance of the students at ordinary level.

1.3 PURPOSE OF STUDY

The purpose of the study is to:

- Identify different reasons and methods used to group students in class.
- Advise the policy makers on the merits and demerits of streaming.
- Suggest possible measures that can be put in place inorder to improve the teaching and learning using streaming.
- Find out the positive and negative effects of putting students in groups.

1.4 RESEARCH QUESTIONS

The following research questions were addressed in this study:

1. What are the criteria used to group students in different classes?
2. What are the effects of ability grouping on teacher's performance?
3. What are the effects of streaming on students' performance on the public examination (ZIMSEC)?

1.5 SIGNICANCE OF STUDY

This study will be of paramount importance to various people such as students, teachers, policy makers and the corporate world. To students, rightful placement might benefit students since it will ensure effective learning and high achievement.Teachers and administrators will implement correct measures pertaining placements of students in groups to ensure high achievement. Policy makers, directors, and Permanent Secretary will come up with policies that accommodate all

students. In addition, the findings will help corporate world to know who benefits and who is disadvantaged? What will help the society at large to come up with rightful decisions on the provisions for fair education system which will then ensure great achievement on public examination?

1.6 OPERATIONAL DEFINITION OF TERMS

Streaming: Is the practice of dividing students for instruction and learning on the basis of their perceived capacities for learning (Slavin, 1990). Matavire et al(2012) gave almost the same meaning of the term when he referred to streaming as the grouping of pupil according to their academic performance or achievements'.

Within class grouping-is done under either the system of homogeneous or heterogeneous grouping and it refers teachers' practice of dividing students of similar ability into small groups for special assignment.

Between class groupings- Refers to schools practices of separating students into different classes, courses or course sequences or curricular tracks based on their academic achievements.

Performance-refers the standard to which some does something such as a job or examination.

1.7 ASSUMPTION OF STUDY

This study is made on the assumption that ability grouping affects the performance of students and teachers on examinations to the extent that it will not be enough to analyse the reasons for high or low achievements without mentioning ability grouping. Since the majority of the schools in Chegutu practice this system of information must be readily available especially from interviews and source documents and whatever conclusion which is going to be reached will be

an informed one. However, the study will expect some bit of resistance especially on releasing the official results analysis with the heads taking precautions on the integrity of their schools.

1.8 DELIMITATION OF THE STUDY

In this study the researcher focused mainly on the effects of streaming on Mathematics students at ordinary level students in the Chegutu District, the criteria used to group students in different classes and the effects of streaming on students' performance on the public examination (ZIMSEC). The researchers was not much concerned with the general effects of ability grouping but its effect on overall ordinary level results in the Zimbabwe public examination. This research concentrated on the finding of five schools out of sixty eight secondary schools in Chegutu District, Mashonaland West Province.

1.9 LIMITATIONS OF THE STUDY

The following are limiting factors the researcher encountered when conducting the research:

Cost: The research was a self-sponsored project hence the researcher faced challenges on finance to effectively conducts the research. Money was needed for stationery, transport to and from sampled schools in Chegutu District. Financial expenses were also incurred when typing and printing the project.

Official Secrecy Act The Official Secrecy Act prohibited the head teachers from disclosing information related to their O level results analysis. This restricted the head teachers from divulging information that was of value to this study. In this regard, the researcher conducted the research within the confines of the research ethics.

Time The researcher was a permanently employed teacher and this study was conducted within one year, thereby limiting time devoted to this research. This adversely affected the researcher in

coming up with a detailed study. The research would have been of greater depth and detail had it been conducted over a longer period. The limited time also affected the validity and reliability of the research. However, the researcher worked closely with the supervisor and responded in time to all comments and advice.

1.10 SUMMARY

This chapter revealed that the study was carried out in Chegutu district. The background of the study outlined gaps in knowledge where research on streaming in mathematics is lacking. The statement of the problem, research questions, research objectives and significance of the study were outlined in this study. It was also revealed that the researcher faced some challenges in carrying out this research; the challenges included financial constraints and less time for the study. The next chapter focus on the review of the related literature which depends upon the researches that were done by others which are more aligned to the topic at hand as well as the literature from other academics and researchers.

CHAPTER 2: LITERATURE REVIEW

2.0 INTRODUCTION

This chapter concentrates on reviewing the related literature. Literature review is meant to give detailed information on the issue under study from the works of various scholars. It is from this reviewed information that the researcher establishes the research gap. In this study literature is reviewed in line with research questions and objectives.

This research specifically investigated the effects on secondary school students, particularly their performance in ZIMSEC public examinations. Additionally, it explored the impact of ability grouping on teachers' performance. Unlike previous research that focused solely on student perspectives, this investigation sought the insights of teachers and school administrators regarding ability grouping.

The following aspects were explored to enhance the literature review: historical context, different types of ability grouping, criteria used for student placement, its impact on teacher effectiveness, and its influence on student performance in public examinations.

2.1 HISTORY OF ABILITY GROUPING

The practice of ability grouping in education has been prevalent since the inception of universal education. In the United States and the United Kingdom, this system has been in place for over a century (Gamoran, 2002). Similar practices exist in Western countries such as France, Germany, Italy, and Belgium. In Asian nations like China, South Korea, India, and Malaysia, ability grouping has also been prevalent (Gamoran, 2002). In Africa, it is likely that the system was introduced by former colonial powers that already used it, such as in Nigeria, Ghana, Tanzania, Kenya, South Africa, and Zimbabwe (Mutseyekwa, 2010; Adodo &Agbayewa, 2011).

The origins of ability grouping in Zimbabwe can be traced to the colonial education system, where it was employed selectively to identify and train a small number of Black students for specific roles (clerical, supervisory, or manual labour). Students deemed academically capable received intensive instruction, while those considered less academically inclined pursued vocational training Zvobgo, 1986). .

After Zimbabwe gained independence in 1980, the government adopted a socialist ideology emphasizing "education for all" to provide equal opportunities for Black Zimbabweans. Despite not requiring students to pass their grade seven exams, secondary school opportunities were extended to all grade seven graduates. This led to a significant increase in form one enrolment rising from 22,201 in 1980 to 83,491 in 1981, as reported by Chivore (1996).

As a result of aggressive implementation of this policy, enrolment in secondary schools surged, exceeding 500,000 by 1986 (Smith, 1986). This surge in enrolment included students with varying literacy and academic skills. Despite the increase in student numbers, educational resources remained insufficient (Matavire, Mpofu, & Maveneka, 2013). To maintain standards, schools implemented ability grouping, assigning students to different streams based on their abilities (Muronda, 1997). Slower learners and underachievers were typically placed in lower streams and focused on practical subjects such as Agriculture, Fashion and Fabrics, and Woodwork. Conversely, higher-performing students were enrolled in academic and science streams (Chinyoka, 2011).

Prior to 1999, a Presidential Commission of Inquiry raised concerns about the need for significant reforms in Zimbabwe's education system. Despite this, employers' preference for good Ordinary Level results has perpetuated the practice of ability grouping in schools. Ability grouping was initially implemented to accommodate a broader curriculum, encompassing arts,

sciences, practical subjects, and commercial subjects (Chivore, 2011). However, it has also been the subject of ongoing debate between rationalists and egalitarian/democratic philosophers (Gamoran et al, 2003). Rationalists maintain that ability grouping is a logical response to the inherent differences in students' abilities (Oakes, 2005).

Proponents of ability grouping argue that it improves student and teacher outcomes. However, egalitarians reject this claim, asserting that there is no objective way to divide students into ability groups. They contend that ability grouping is inherently unequal and violates the principle of equal educational opportunity.

2.2 THE CRITERION FOR PLACING STUDENTS INTO ABILITY CLASSES/GROUPS

Globally, schools frequently employ standardized test results to categorize students into classes based on their perceived abilities (Slavin, 1991). Similarly, Hayland (2006) supports this approach, indicating that ability groups are typically formed based on composite scores from standardized tests that assess fundamental skills. Studies in Nigeria, such as that conducted by Adodo and Adbayewa (2011), demonstrate that performance in Mathematics and Science is a critical factor in determining ability grouping. Students are streamed into specialized tracks based on their scores in these subjects, with higher scores indicating pursuit of science or practical fields, while lower scores lead to arts-related studies. In Japan, however, ability grouping is less common. Instead, schools consider both students' abilities and interests when placing them into different classes (Rogers, 2002).

In Japan, ability grouping aligns with a tracking system, influencing students' educational pathways. Similarly, in Germany, students' performance in the final year of primary school determines their secondary school placement and the type of education they pursue (Allan,

2003). In Zimbabwe, the results of Grade 7 examinations are utilized in secondary schools to classify students into ability-based classes (Matavire et al., 2012).

In the seventh grade, students' academic performance is measured by the total number of units they earn across six subjects, with each subject graded on a scale of 1 to 9 units. A lower total number of units indicate higher academic achievement. Students with a total score of 6 units are considered highly capable, while those with 54 units have performed poorly. Accordingly, students with fewer units are placed in higher classes, while those with more units are placed in lower classes.

In addition to the grade seven results, only a small number of schools administer their own locally designed assessments. This practice is more common in boarding schools, which are excluded from this research. Standardized tests face significant criticism from teachers, who believe they are selective and may not accurately assess the material students have learned. This can be detrimental to students, who are then placed in classes based on their test scores. Cheung (2003) emphasizes that there is no objective criterion that can be used to stream or group students based on ability, regardless of the efforts made by educators.

Based on existing literature, it becomes evident that segregating students into ability-based classes presents two primary challenges: establishing appropriate criteria and defining the concept itself. Previous research has primarily focused on evaluating the criteria used for grouping but has overlooked the long-term impact on student performance in public examinations. Consequently, the majority of studies have centered on whether or not ability grouping should be implemented in Zimbabwean schools. While studies conducted by researchers such as Chisaka and Matavire have addressed related issues like attitude problems, they have not specifically examined the effects of ability grouping on student performance in

ZIMSEC Public examinations (Chisaka & Valakisa, 2003). Nevertheless, these studies remain relevant to this investigation as they highlight general factors, such as attitude problems, that can influence student performance in public examinations. The current study aims to determine whether the use of ability grouping methods has a significant impact on teacher and student performance.

2.3 TYPES OF ABILITY GROUPING

Within-class ability grouping involves grouping students within the same classroom based on their ability levels. Teachers assign students to different groups for specific tasks or assignments to enhance effective learning. This approach aims to provide differentiated instruction to students with varying abilities.

Between-class ability grouping involves creating different classes or tracks for students based on their overall academic ability. Students are placed in classes with peers of similar abilities to receive instruction at a pace and level that is appropriate for them. This approach aims to reduce the range of student abilities within each class, enabling teachers to focus on specific student needs and provide targeted instruction.

When applying within-class differentiation, students are separated temporarily during specific lessons that necessitate group work. This strategy primarily relies on the discretion of the teacher, and as Rees (1998) notes, it can operate informally within a school without the knowledge of the headteacher. Hallam and Ireson (2005) suggest that within-class and between-class grouping are essentially equivalent, with the distinction being that one is informal while the other is formal. While this study excluded within-class grouping as it does not permanently separate students, the potential effects of this system were acknowledged. In light of this, the

study focused on one school that employed this type of grouping to a limited extent, recognizing its potential impact on student outcomes.

This study aimed to determine the impact of student grouping practices on teacher performance and student pass rates in subjective areas. Specifically, between-class ability grouping refers to the practice of dividing students into separate classes, courses, or sequences based on their academic achievement. This practice segregates students with similar academic abilities for instructional purposes, as defined by Slavin (1990) in his "Best Evidence Synthesis." Rudowick (2003) describes between-class ability grouping as an educational strategy that divides students into distinct classes based on their inherent academic disparities. This grouping system assumes that students possess varying innate abilities and that placing them in classes with similar academic levels promotes optimal learning outcomes. Therefore, between-class ability grouping involves the long-term separation of students of comparable age and educational attainment into academic tracks based solely on their academic performance.

The central focus of this research was the unique ability grouping arrangement implemented at all educational levels within the selected school. Previous scholarly definitions and implications fail to fully address the effects of ability grouping in the Zimbabwean context. Similarly, studies on streaming in Zimbabwe have not specifically examined its impact on student performance in public examinations administered by ZIMSEC. Moreover, prior research on ability grouping in Zimbabwe has primarily focused on schools in Harare and Mashonaland Central, while this study investigates five schools in the Chegutu District of Mashonaland West, thus providing a distinct perspective.

2.4 EFFECTS OF ABILITY GROUPING

The implementation of ability grouping in schools, as an alternative to mixed ability classes, demonstrates that advocates of this system believe it offers several advantages for student performance. These same benefits are hypothesized to apply to ZIMSEC public examinations (Chinyoka, 2011). While previous research has acknowledged the system's positive effects on students, it has not specifically addressed its impact on teachers' performance. Therefore, this study aims to investigate the multifaceted effects of ability grouping on both student achievement and overall pass rates in subject examinations.

Ability grouping enhances teacher performance, particularly when students are categorized based on their abilities. This allows teachers to customize the pace and content of their instruction to cater to the specific levels and needs of students within each ability group (Adodo and Agbayewa, 2011). This approach enables teachers to differentiate their teaching, ensuring that high-ability students receive a more challenging curriculum at a faster pace, while lower-ability students engage with easier material at a slower pace. The study explored the impact of personalized learning strategies, which involve tailoring instructional content and pacing to the unique needs of students, on the effectiveness of classroom instruction. By analyzing the potential benefits of individualized learning approaches, the research aimed to provide educators with practical guidance on how to enhance their teaching practices for diverse student populations, ultimately leading to improved learning outcomes.

Ability grouping facilitates teaching and classroom management for teachers. Lou, Spence, Poulsen, Chambers, and Appolonia (1996) assert that it simplifies their tasks. Teachers can tailor instruction and manage classes efficiently because students share similar abilities. For low-ability classes, teachers provide more repetitive support. For high-ability classes, they prepare advanced

instruction (Ireson and Hallam, 2001). Ability grouping allows teachers to cover more subject matter in high-ability classes while focusing on foundational concepts in low-ability classes, according to the students' abilities.

In ‘O’ level mathematics classes, students may complete the full syllabus , while in lower-level classes, teachers may prioritize covering only half of the material. The remaining time is allocated to remedial assistance and revisions to enhance student outcomes in all classes. This approach optimizes instruction by accommodating the varying abilities of students grouped by ability level. It allows educators to tailor teaching resources and methodologies to meet the specific needs of each group (Martimore, 2013). The study examined whether these adjustments improve teacher effectiveness, ultimately leading to enhanced student performance in ZIMSEC examinations.

Ability grouping fosters teacher motivation by providing educators with the opportunity to teach capable students. Research suggests that teaching highly capable students instills high expectations and motivates teachers to invest greater effort in their instruction. This motivation stems from a desire to nurture the potential of these students and promote their academic success.

Furthermore, ability grouping offers practical advantages for teachers. It reduces the time, space, and resources needed to provide individualized instruction to students with varying abilities. This streamlining allows teachers to focus more effectively on the specific needs of their students within each ability group.

In homogeneous classes, where students are grouped by ability, instructors benefit from universal comprehension of instructional material. This reduces the need for differentiated instruction and resource allocation for struggling learners, unlike in heterogeneous classes. While

ability grouping offers pedagogical advantages, the study aimed to determine whether these advantages translate into enhanced student performance on national examinations within the Zimbabwean educational context.

In the prior section, it was emphasized that teachers are motivated by high-performing groups of students. However, the same teachers experience low motivation when assigned classes with low academic abilities (Gamoran et al., 2000). This scenario leads teachers to harbor low expectations for their students, hindering them from exerting maximum effort that could enhance the students' performance on public examinations. This study aimed to examine the impact of teacher expectations in Zimbabwe's Chegutu District on their classroom instruction, which ultimately affects student outcomes on public examinations.

Chisaka and Valakisa (2003) assert in their study that ability grouping does not enhance instruction or pedagogy but rather poses a continuous challenge for educators. This challenge stems from the necessity to instruct segregated classes whose students perceive no shared experiences beyond their isolated academic environments. Consequently, educators face the arduous task of teaching disparate student groups with distinct learning trajectories. This predicament was examined to determine its impact on teacher effectiveness and overall student achievement in public examinations.

Veldman and Sanford's (2001) study revealed significant disparities in teacher behavior based on student ability levels. Teachers in low-ability classes allocated more time to discipline, while those in high-ability classes engaged more with their students. This disparity stems from the constant need for teachers in low-ability classes to address student behavior, which disrupts their focus on academic instruction. This situation hinders teachers' ability to effectively meet the educational needs of these students.

Various scholars have highlighted the advantages of ability grouping for student performance. Lou et al. (1999) emphasize the ethical obligation to support high-ability students by placing them in groups where they can learn at a faster pace. In contrast to mixed-ability classrooms, where they may be tasked with assisting others, ability grouping allows these students to focus on acquiring new material. Consequently, it enhances their performance on standardized exams.

This study aimed to evaluate the impact of ability grouping on the performance of students in Zimbabwe's ZIMSEC examinations. Ability grouping offers several advantages, including:

1. Motivation for high achievers: Homogenous classes created through ability grouping maintain the interest and drive of high-performing students (Adodo & Agbayewa, 2011).
2. Support for low achievers: Low-performing students benefit from being grouped with others of similar ability levels, which provides opportunities for individualized support and targeted instruction.

According to Mickelson (2003), low and average ability students benefit more from observing learners with similar abilities than from watching highly skilled individuals. This suggests that ability grouping can be beneficial for both low and high-achieving classes. Low-performing students are not pressured to meet the standards of high achievers, while high achievers are motivated to maintain their excellence amidst the increased competition within their classes.

This study aimed to determine the presence of competition among students of similar abilities who are placed in the same class in the Zimbabwean context. It also sought to assess the extent to which this competition has influenced the academic performance of these students in various subjects. Previous research, such as that conducted by Adodo and Agbayewa (2011), suggests that ability grouping can provide an advantage by allowing students to progress at an appropriate

pace within their own ability level without experiencing discouragement or undue pressure. This research investigates the impact of grouping students with peers of similar academic abilities on their overall achievement and performance. The fundamental assumption is that this grouping strategy fosters harmonious classroom environments, which in turn facilitates individual progress and enhances student outcomes.

Ability grouping can have negative effects on students' performance in public examinations. Critics argue that it leads to racial and economic segregation, as students are often grouped based on these factors rather than solely on their abilities (Heffernan, 2001). This view is supported by the 1967 US High Court ruling that condemned streaming as unconstitutional segregation (Gamoran, 2000). From a socio-judicial perspective, ability grouping is seen as discriminatory and does not contribute to improving the performance of teachers and students in public examinations.

Maintaining separate classes based on students' perceived abilities can create a self-fulfilling prophecy where students in lower-performing classes may develop a negative mindset that inhibits their progress. Reynolds and Cuttance (2002) suggest that this approach assumes that some students are destined to underachieve. Other studies have shown that ability grouping negatively impacts students placed in lower ability classes, leading to a decline in motivation and interest in schoolwork, and even resentment towards the education system (Grix, 2001).

Emily, Robert, and Michael (2003) contend that ability grouping deprives low-achieving students of learning opportunities and diminishes their motivation due to negative expectations from peers, teachers, and even parents. Such low expectations create a detrimental environment for these students, making it challenging for them to succeed on public exams and limiting their potential. The study investigated if students in Zimbabwe exhibit these attitudes when placed in

low-ability classes with low expectations from their surroundings. Unfortunately, student placement in different classes is not always based on a thorough assessment of their interests and abilities (Payne and Payne, 2004). Consequently, ability grouping that lacks such evaluation fails to fulfill the system's purpose.

For instance, if low-performing students are mistakenly placed in a class with predominantly high performers, they may experience challenges due to the teacher's rapid instruction pace, assuming all students have similar abilities. This can create unnecessary pressure for low-performing students, similar to the challenges faced in mixed-ability classes.Ultimately, this system undermines the achievement of positive examination results for low-performing students if not implemented with due care. This study aimed to assess the reliability of methods used by schools to form ability-based classes and examine their impact on students' academic performance in both the classroom and on standardized exams.

Previous research by Ireson and Hallan (1999) indicates that grouping students into different ability levels can have negative consequences, particularly for those placed in lower streams. They observed that these students may experience negative attitudes toward school and feelings of alienation. Moreover, the social environment in ability-grouped classes is often vastly different, with high-ability classes fostering a supportive and competitive climate, while low-ability classes are marked by higher levels of anger and hostility. Consequently, ability grouping may hinder rather than enhance student performance on public examinations.

Research by Chisaka (2002), a renowned Zimbabwean scholar, suggests that ability grouping fails to enhance teaching, instruction, and learning. Instead, it fosters social stratification, where students in higher and lower ability classes perceive themselves as distinct even beyond the classroom. This permanent separation hinders collaboration among students within the same

school, limiting their ability to achieve academic success due to the perceived differences between them. In 2002, the researcher's study of Harare schools revealed that ability grouping benefits 10-15% of students. However, the findings of local experts such as Chisaka and Valakisa (2003) should be considered, as their research was context-specific.

Despite ability grouping's purported benefits, studies have shown that it does not provide equal opportunities for all students. As Loveless (2013) notes in "Considering Individual Differences," it primarily advantages a small group of students, leaving the majority behind. Such programs may be counterproductive if they consistently fail to meet the needs of the majority. This study aimed to examine resource allocation among different ability levels and assess the potential impact of uneven distribution on student performance.

Research indicates that ability grouping may disadvantage low-achieving students, as they tend to be assigned less experienced and sometimes ineffective teachers (Kulick & Kulick, 2010). In streaming models, where students are grouped based on ability, high-achieving students receive priority access to skilled and experienced instructors, while low-achieving students may encounter subpar teaching. Consequently, streaming can lead to unequal outcomes compared to mixed-ability classrooms, where administrators strive to distribute teachers of comparable competence across all classes.

This study explored the allocation of teachers among ability-grouped classes in secondary schools within the Chegutu District. Specifically, it examined whether less qualified and experienced teachers are disproportionately assigned to lower-ability classes. Additionally, the research investigated the potential consequences of such allocation practices, should they exist in the sampled schools.

2.5 SUMMARY

This chapter covered on the literature review where a number of issues were discussed as they are presented in the related literature. The topic discussed a number of issues which include the history of streaming, types of ability grouping, and effects of ability grouping on the teacher and student performance. Efforts were made to show the relationship of the related literature to the three research questions of the study.

CHAPTER 3:RESEARCH METHODOLOGY

3.0 INTRODUCTION

The chapter specifies the materials and methods that were incorporated in this research. It critically examines the research methodology and the process of data collection and the validity and reliability of the chosen methods of data collection employed to gather all the relevant required information. The researcher used the descriptive research design approach, employing both qualitative and quantitative data gathering techniques. This chapter intends to discuss the research design, population of the study, sample and sampling techniques, research instruments, validity and reliability of instruments, procedure for data collection and the proposals for data presentation and analysis procedures that the researcher used to investigate the effects of ability grouping on students' performance in public examinations (ZIMSEC).

3.1 RESEARCH DESIGN

A research design is a strategic plan for a research project or programme, setting out the outline and key features of the work to be undertaken, including the methods of data collection and analysis to be employed, showing how the research strategy addresses the specific aims and objectives of the study (Marshall, 2008). According to Wills (2009) a research design is something which works as a systematic plan outlining the study, the researcher's methods of compilation, details on how the study will arrive at its conclusions and the limitations of the research. He went on to suggest that research design is not limited to a particular type of research and may incorporate both qualitative and quantitative analysis. In this particular study the researcher used both qualitative and quantitative research methods so as to prove the effects of ability grouping on the performance of students on public examinations (ZIMSEC). In this study

the researcher used the descriptive survey method to come up with answers to the research questions of this study. According to Awoniyi, Aderantia and Tayo (2011) the descriptive survey method is aimed at fact finding of the present situation/condition of a given matter. The descriptive survey also seeks to find out the conditions or the relationship that exist as well as attitudes and beliefs. On the descriptive survey, the researcher discovered through interviews and school official documents; and the researcher picked the sample from the certain schools in Chegutu, from students and teachers and administrators. Through these, the researcher successfully managed to investigate the contribution of ability grouping to the performance of students on public examinations.

3.1 POPULATION OF THE STUDY

The term population in research is described by Moyo et al (2002) as referring to the total number of elements or cases that one can investigate. It is not always possible in most research studies to investigate on and every member of a given population because of the constraints of time, space, resources, urgency and practicability. Borg and Gall (1996:240), defines population as a, 'group of individuals that may portray one or more characteristics in common and that is of interest to the researcher.' Hence,this particular study covers the Chegutu Educational District, which consists of 68 secondary schools. The views of the teachers, students and school Head in this district were used to come up with the answers to the different research questions of this study.

3.2 SAMPLE AND SAMPLING PROCEDURES

Jewel (2009) defines a sample as a survey involving less than the whole population. He further asserts that; it provides information that is valid for the population as a whole. Therefore, a

sample is a representative group of population extracted from the whole target population and whose results can be generalized to represent the conclusions of the whole population. The sampling techniques used were stratified and random respectively.

3.3 RESEARCH INSTRUMENTS

These are the data gathering techniques which the researcher uses to collect information so as to draw valid conclusions. These are tools used for collection of information needed to find necessary information and solutions to the problems under investigation. To aid credibility and validity of the research, the researcher employed two different methods of data collection, namely interviews and documentary

3.3.1 INTERVIEWS

Wisker (2009) explain that interviews enable face to face discussion with human subjects. An interview schedule can be drawn to allow similar questions to be administered rather than to ask varying questions which may be difficult to analyze. Chiromo (2009) argues that, the interviewer can pursue in-depth information around a topic and also may be useful as follow-up to certain responses to questionnaires. It is also true that during a person's responds, facial and bodily expressions, tone of voice, gestures, reactions, feelings, attitudes, evasiveness and non-cooperation can be easily detected and recorded (Chiromo, 2009). Jobber (2010) reiterated that face to face interviews makes refusal less likely.

In this particular study formal interviews (informal conversations to a less extent) were conducted with participants at different levels, namely teachers, head teachers and students from different learning ability classes at the school found in Chegutu. However, it has to be noted that

they have their own advantages as well as disadvantages as instruments of data collection. In this particular case the researcher capitalised on the advantages and tried as much as possible to suppress the disadvantages of the interview method of data collection. Below are the merits and demerits of using interviews as a tool for gathering information. These include the researcher's own real life experiences during the course of the study.

Advantages of this instrument include that an interview provides an opportunity to the researcher to ask questions on various areas of inquiry. It permits greater depth in responses which is not possible through any other means (Cohen et al, 2011). It allows a more liberal atmosphere than in the use of other techniques of investigation (Cresswell, 2012). In this respect the researcher realised that he would always rephrase or repeat questions not readily grasped by the respondents and in other rare cases the researcher would give proper emphasis and explanations where necessary. In this case people have the tendency of just focusing on the general effects of ability grouping not really focusing on its effects on student performance on public examinations (ZIMSEC). With the interview technique the researcher could interact well with the sources (respondents) and sometimes asked questions wherever he felt need for further explanations or clarifications.

The interview technique has its weaknesses which include that it is usually a time-consuming technique. However, throughout the research I tried to minimise this by going to the respondents already equipped by precise and structured questions and trying to control the respondent as much as possible. The use of the interview usually has a great danger of subjectivity on the part of the interviewer, that is the researcher and this will always lead to one getting biased (one sided) information (Cresswell, 2012; Cohen et al, 2011). The researcher tried to overcome this

by coming with structured questions which were designed in such a way that they will not suggest the needed answers but gave the respondent the ground to answer freely.

The interview technique may give responses which are less accurate due to memory failure. To overcome this weakness, the researcher interviewed more people pertaining one issue, in this particular study the researcher interviewed a total of 17 people. The interview technique was applied where structured open – ended questions were designed and were uniformly used to the concerned groups of people. To this effect, there were three sets of different questions, one for the teachers, one for the administrator (school Head) and one for the students.

3.3.2 DOCUMENTARY ANALYSIS

Document analysis is a form of qualitative research in which documents are interpreted by the researcher to give meaning about an issue being assessed. (Bowen, 2009). This instrument was used because it is an effective and efficient way of generating information. Documents are stable meaning they can be read and reviewed multiple times and remain unchanged by the researchers influence or research process (Brown, 2009). Data generated from documents provided details that informants have forgotten and contain data. Like interviews this technique has its own advantages and disadvantages as outlined below.

Documents such as official records are useful in knowing and the past events and trends so as to gain perspective on the present and future. If they are just normal records they may present some life facts truthfully, for example in these case school official ZIMSEC results analysis sheets. Just like any other instrument, documents are also liable to subjectivity in line with special interests of the creator or author of the particular document.

3.4 DATA COLLECTION PROCEDURES

Data collection procedure is the term used to describe a process of preparing and collecting information on the subject of research. The researcher started by asking for a letter of introduction from the Bindura University of Science Education which was granted through the programme coordinator. The access to different source documents and conduct of interviews was done following permission by the responsible authority, in the schools in this case the school heads. Three sets of standardised interview questions were used; one set for the school Head; the other one for teachers and the third one for students. Information was then collected in line with the research sub questions.

3.5 DATA PRESENTATION

Both descriptive and statistical methods were used which showed the response of teachers, school Head, as well as the students. Tables, graphs, are to be used for data analysis. These methods are easier to use when dealing with the collection, analyzing and interpreting of data involving numbers. They provide a visual appealing advantage which does not compromise the richness of the collected data. Pie charts, line graphs and bar graphs ensure easy interpretation and easy quantification of data to be done. They are smart and trends can be easily defined by non-numerical users.

A comparative approach was applied in order to analyse the effects of ability grouping on the performance of student' performance in public examinations, where results of heterogeneous classes are compared to those of homogenous classes, low ability and high ability classes are compared and the overall results were analysed. The responses to the research sub questions are discovered from both the interviews and documents were integrated and analysed.

3.6 SUMMARY

This chapter intended to show the research design and methodology which was used in this research, the instrumentation as well as the data collection and presentation procedures which were used in this research.

CHAPTER 4: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

In this chapter research findings were analysed. The chapter describes and interpret the extracted information concerning an analysis of the effects of streaming to Mathematics students on ZIMSEC pass rate at ordinary level for five selected schools in Chegutu district of Mashonaland West Province. The data presented was categorised and presented according to the main research questions in three main sections. The use of interviews and their results shall be revealed in accordance to the order and category which it falls under. The last section of this chapter shall reveal documents analysis as recorded from ZIMSEC results. The results are documented and act as a trusted source of material since they can be verified at any given time. For the sake of smooth presentation and easy understanding on the part of readers, tables and statistical graphs were used to present the findings of the study. The first part shall expose the biographical information of the research participants which were chosen through random sampling on the part of students and through purposive sampling on the part of administrators.

DATA PRESENTATION

4.2.1 BIOGRAPHICAL INFORMATION ON RESPONDENTS

The five selected schools consist of three day schools and two boarding schools purposefully selected for the sake of proximity to reduce transport costs of visits to extract data. In this study letters A – C were used in place of Day Schools for the sake of ethical considerations.

Table 4.1: Data of five schools under study

School Type	No. of female pupils	No. of male pupils	Total
Day School A(Peri–Urban)	5	5	10
Day School B(Urban)	5	5	10
Day School C (Rural)	5	5	10
Boarding School 1	5	5	10
Boarding School 2	5	5	10
Total	25	25	**50**

Table 4.1 shows that the study involved 50 students. 50% were males while the females made up the other 50%. These pupils were extracted from streamed classes across the level to find out their thoughts about streaming and its effects on Mathematics.

Mathematics teachers were purposefully selected for interviews for them to air their views as far as streaming is concerned towards the welfare of their subject. The total number of teachers interviewed was 20. The majority were males constituting 75% of the total Mathematics Staff of 20 members in five schools. All members are fully qualified professional teachers holding a college educational diploma with five of the 20 holding degree plus a college diploma. The views of interviewed teachers are therefore trustworthy. The experience of interviewed teachers ranges between three (3) and twenty four (24) years of teaching experience in various schools were streaming and non streaming was being implemented.

Table 4.2 Biographical Data of School Teachers

Respondents	Biographical Variable	Variable Description	Frequency	Percentage
Teachers and school head	Gender	Males	15	75%
		Females	5	25%
	Qualifications	Masters	3	15%
		Degreed	7	35%
		Diploma	10	50%
	Experience in service	10 Years plus	10	50%
		10 Years or less	10	50%

Table 4.2 shows that the research involved the 20 school teacher. 10 of the staff members have 10 years and below of experience and 10 have 10 or more years of teaching experience. This indicates that the majority of them started teaching in the 1990s. This was also an advantage because the researcher knew that from such experienced people reliable information can be harvested

Each school consists of four main administrators who include the head teacher, the deputy head teacher, senior teacher and senior lady. These are policy makers at a school level. They determine the pace of educational attainment standards and general administration activities such as discipline handling, liaising and communicating with the district educational superiors. They are regarded as production level supervisors and therefore, they choose out of their will whether to enforce or implement streaming or not.

4.3 The criteria used to group students into different classes

The criteria used to stream pupils into ability grouping are similar. Of all the five selected schools the acceleration of pupils in maths and science is a core basis for ability grouping. The general belief exhumed during the interviews indicated that sixteen (16) administrators interviewed out of twenty believed that a pupil good in mathematics and science is an intelligent pupil who can easily excel in other subjects at easy. Only four out of twenty administrators did not tally with the idea of intelligence in maths and science as a determinant of good performance in other subjects. Though most agreed or supported their streaming approach only seven (7) administrators supported the idea on the basis of inheritance rather than of their own formulation. For instance, one peri-urban administrator exposed that since the method was enforced a long time ago at the school, there was serious resistance from changing it. He further reiterated that most school teachers and administrators could not try new ideas due to fear of blame if the pass rate dips.

Maths teachers tallied with their administrators on the criteria being used to group pupils into ability grouping. They reinforced that performance in maths and science was the core of streaming pupils. 18 out of 20 teachers interviewed accepted the method being used to group pupils into ability classes. They generally argued that, pupils who perform well in maths and science are in upper classes. Only two did not agree with the maths and science effect. They purported that such streaming approach isolate and reject those pupils who are excellent in other subjects but not good in maths. They actually tallied on the need to do away with the process of streaming.

Students also exposed their thoughts on streaming as they are also affected in the classes they are in as a result of streaming. Of the total of fifty pupils, thirty six (36) had knowledge that maths

and science was a predetermining factor of streaming. Ten (10) pupils exercised ignorance or had no idea on what the school was using as the basis for streaming. About four (4) of the students considered favouritism and being popular to teachers and administrators as the basis of being in the top class. Most Students however, agreed that the method of streaming being used in their school was fair. About 34/50 pupils believe that the method is fair since it accommodate those who are hardworking and gives less pressure to those who are less intelligent. However 16/50 pupils believe that the criteria of streaming was rather a choice by teachers to put pupils they like most in classes where they will be chosen as prefects and soccer players. About 7 / 50 further mentioned that most prefects and sportsman who participate in school activities emerge from a centralised class within less from other classes.

4.4 Effects of ability grouping on teacher's performance in Mathematics

This part was a difficult of the effects of ability grouping. Fifteen out of twenty administrators agreed that streaming was seriously weakened other pupils. Some of the group agreed that the process was isolating pupils and promoting serious deviance behaviour. The classification promoted a self- fulfilling theory according to some administrators. For instance According to the administrators of the two boarding schools who answered this question with a better analysis said that through checking attendance registers that are marked everyday by the class monitors on whether the teacher is attending lessons or not they discovered that most Maths teachers shun the worst classes in favour of the best classes. Teachers give excuses of being occupied either in sports or doing other work issues on lesson periods that demand attendance of the weak class. One rural school administrator admitted that an analysis of the daily written work indicates that the best classes tend to have more details and engaging work and extra work load exercises than

the low performing classes affected by streaming. Such a layered approach has a serious impact on final ZIMSEC examination as expressed by one of the urban school administrator.

Nine out of twenty teachers had no problem of performance when executing their duties in streamed classes. Most of them reiterated a common repetition of the word ‘professional’. They argued that, it is still the same content that is taught across the group and hence there was no need for the use of a different approach between classes. During the interview process, about three out of seven teachers who had no problem of teaching streamed classes exposed that it is however easy to teach the best class because of the speed of understanding and the ability to work on their own without a push. Eleven out of twenty had a problem of lesson delivery in streamed classes. For instance, they argued that one cannot give effective group work in a class where only the weak are leading the weak. In a mixed class the best performers are made group leaders so that they can pull forward those who are weak. About 19/20 teachers supported mixed ability classes than streaming for the welfare of children.

Sixteen (16) of the fifty students did not want to answer this question for the fear of victimization by their respective subject teachers. Of the thirty two (32) pupils who responded to this question, about nineteen (19) of them openly exposed that being in the poor class was a ticket of coping notes and questions from the best classes. Sometimes they argue that, they would see books of their fellow pupils at the same level with new work of different topics they would have covered which the poor class will not even know about. Thirty one of the thirty two (31/32) pupils who responded tally that teachers absent themselves more frequently than they do to other best performance classes. One student mentioned that on their timetable there is a free period after the Maths lesson but the teacher choose to extend to engulf their free period abandoning a Maths

lesson which the teacher is supposed to take during that period in the poor class. Such scenario results in excessively poor performance in worst classes than should be the norm.

4.5 Effects of streaming in Mathematics on public examinations

This part present data that was directly eye witnessed from ZIMSEC public examinations results. The results were easy to attain from the schools. Figure 4.5 shows the ZIMSEC results of Maths at ordinary level for the past four years upon the five schools.

The conclusions I drew from the Zimsec results analysis shows that, in streamed classes or schools the performance in mathematics tend to improve significantly. The quality of results is rather better than before despite the fact that the learners and the teachers themselves tend to be against the aspect of streaming. For instance at school c (rural), the average number of grade Ds in Maths was general more and grade 'U' were limited in totality. This aspect is attributed to streaming since learners are given subjects which make their learning to be less burdensome.

Despite the noticeable improvement in quality of results rather than quantity of symbols, it can also be attributed to other situations like a general motivation in the uptake of science subjects inclusive of mathematics with the issue of aggressive stem marketing that was and is the current theme. Also, it can be just an improvement in the quality of teaching and learning since the past four years has witnessed an exponential growth in information and communication technology use in the area of mathematics. Therefore, to summarize the results as a consequence of streaming can be a vague conclusion judging by the level of rejection it was being done by both teachers and learners. Hence, Figure 4.5 depicts the state of affairs in the past four years, holding other things constant, which we allude to as a result of streaming.

The fact that the research did not take into consideration the mathematical trends of the previous four years into presentational perspective of this research, it has however, left out a gap on the key aspect of what the previous situation was like before streaming was put into effect for each and every school that was part of this investigation. This left out aspect creates a result analysis vacuum that makes the final answer to this research to be partially inconclusive on the effectiveness of streaming to the five schools in Chegutu district of Mashonaland west province if only that graph on Figure 4.5 below is to be taken as sole base for streaming strength.

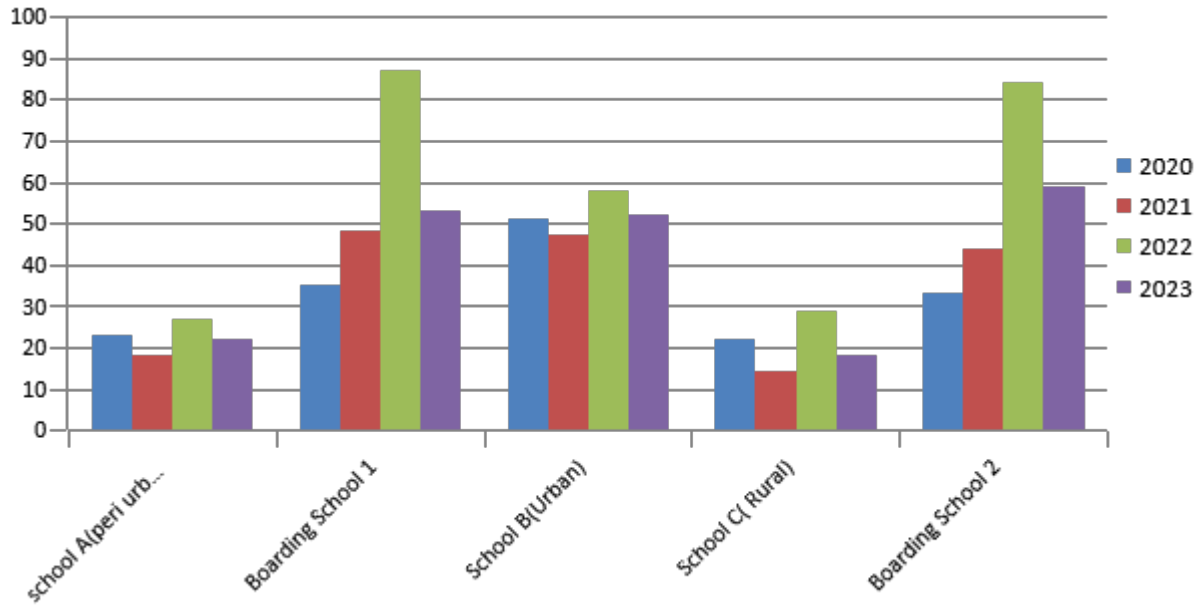

Figure 4.1 Document Analysis of ZIMSEC Maths Results for 4 Years

4.6 DISCUSSION

The research findings align with the work of Smith et al. (2018), who also found that streaming of mathematics has a significant impact on students' confidence and attitudes towards the subject. Both studies indicate that students in lower streams tend to develop negative perceptions of their mathematical abilities, which can hinder their overall academic performance. Furthermore, the research results are consistent with the findings of Johnson and Lee (2019), who observed that streaming can perpetuate inequalities by creating a self-fulfilling prophecy for students in lower streams. This supports our conclusion that streaming may contribute to the exacerbation of achievement gaps among secondary students. The research findings not only align with the work of Smith et al. (2018) and Johnson and Lee (2019) but also complement the findings of Garcia and Martinez (2020), who highlighted the impact of streaming on students' long-term career aspirations. Based on the ZIMSEC results analysis for the past four years, the study further supports the notion that students in lower streams may face barriers when pursuing higher education or careers in STEM fields, perpetuating the cycle of inequality.

Based on the evidence gathered in our study and the insights gleaned from existing literature, the researcher believes that the practice of streaming in mathematics education requires critical re-evaluation. While streaming may have originally been intended to cater to varying learning paces, our findings suggest that it can have detrimental effects on students' self-perception and academic progress, particularly for those in lower streams. The researcher propose that educators and policymakers need to consider alternative approaches to mathematics instruction that provide differentiated support without resorting to the segregation of students into distinct ability groups. By fostering an inclusive learning environment that encourages collaboration and

supports diverse learning styles, the researcher believe that schools can mitigate the negative impact of streaming and promote equitable access to mathematical education for all students.

The research underscores the need for a shift in the approach to mathematics streaming in secondary education. It is imperative to address the implications of streaming on students' academic experiences and to explore alternative methods that prioritize inclusivity and support for all learners.

4.7 SUMMARY

The chapter interpreted the findings from the interviews and data analysis on streaming. Statistical information was analysed through tables and graphs so as to precisely present the findings of the study. The views of the interviewees were analysed per given category so as to come up with a conclusion on the research questions, and these where findings were used in conjunction with the information gained from documentary analysis.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

INTRODUCTION

This chapter serves to consolidate the discussions from chapters one to four, linking the study's objectives, literature review findings, and research outcomes. It also assesses the extent to which the study's objectives were achieved and provides recommendations for policy practice based on the conclusions drawn from the findings.

5.1 SUMMARY

Chapter one introduced the study, providing its background, problem statement, and the primary objective of examining the effects of streaming Mathematics students on final performance in secondary schools in Chegutu District in Mashonaland West Province. The chapter also outlined the research objectives, questions, limitations, and definitions of terms.

Chapter two reviewed literature related to the study, highlighting the gap between existing research and the study's questions. Works by veteran scholars like Gamoran, (2002), Slavin, (2010) and Emily et al (2003) were referred to. In the Zimbabwean context Chisaka (2002)’s work was also analysed.

Chapter three focused on the research design, methodology, data collection, and presentation procedures. It critically examines the research methodology and the process of data collection and the validity and reliability of the chosen methods of data collection employed to gather all

the relevant required information. The researcher used the descriptive research design approach, employing both qualitative and quantitative data gathering techniques.

Chapter four presented the research findings, addressing the research questions. The data presented was categorised and presented according to the main research questions. The use of interviews and their results were revealed. The documents from ZIMSEC results for the past four years were analysed and drawing major conclusions.

5.2 CONCLUSION

The conclusions drawn from the study indicate that the criteria used for grouping students into ability classes, such as Grade Seven results and ability in science subjects and Mathematics, have significant weaknesses that impact student performance in public examinations. The study also revealed the varying effects of ability grouping on teachers and students, with psychological effects being predominant. Additionally, it was noted that ability grouping is not limited to academic considerations but is also used for administrative purposes.

5.3 RECOMMENDATIONS

Based on the finding that ability grouping has no obvious effects on student performance in public examinations, the following recommendations are proposed:

- Schools continuing ability grouping should adopt less discriminatory methods, such as school-based assessments, to avoid disadvantaging certain students.
- Schools should address teacher and student attitudes, providing proper guidance and counselling on ability grouping to lower stream pupils.

- The Ministry of Education should consider grouping by interest, not just ability, and school heads should effectively supervise and monitor teachers to ensure fair treatment of students in both high and low ability streams.
- The negative attitude of teachers towards lower ability classes should change, and teachers should maintain professionalism and positive attitudes when teaching less able students.
- Effective supervision by school heads will help ensure fair delivery of education, minimizing the impact of ability grouping on service delivery.

5.4 IMPLICATIONS

The debate surrounding ability grouping is likely to persist, as the system is perceived to bring positive results in terms of resource allocation and administrative efficiency. The continuation of this debate is attributed to the varied purposes for which the system is employed in schools. These recommendations aim to address the implications of the study's findings and provide actionable steps for policy and practice in the context of ability grouping in secondary schools.

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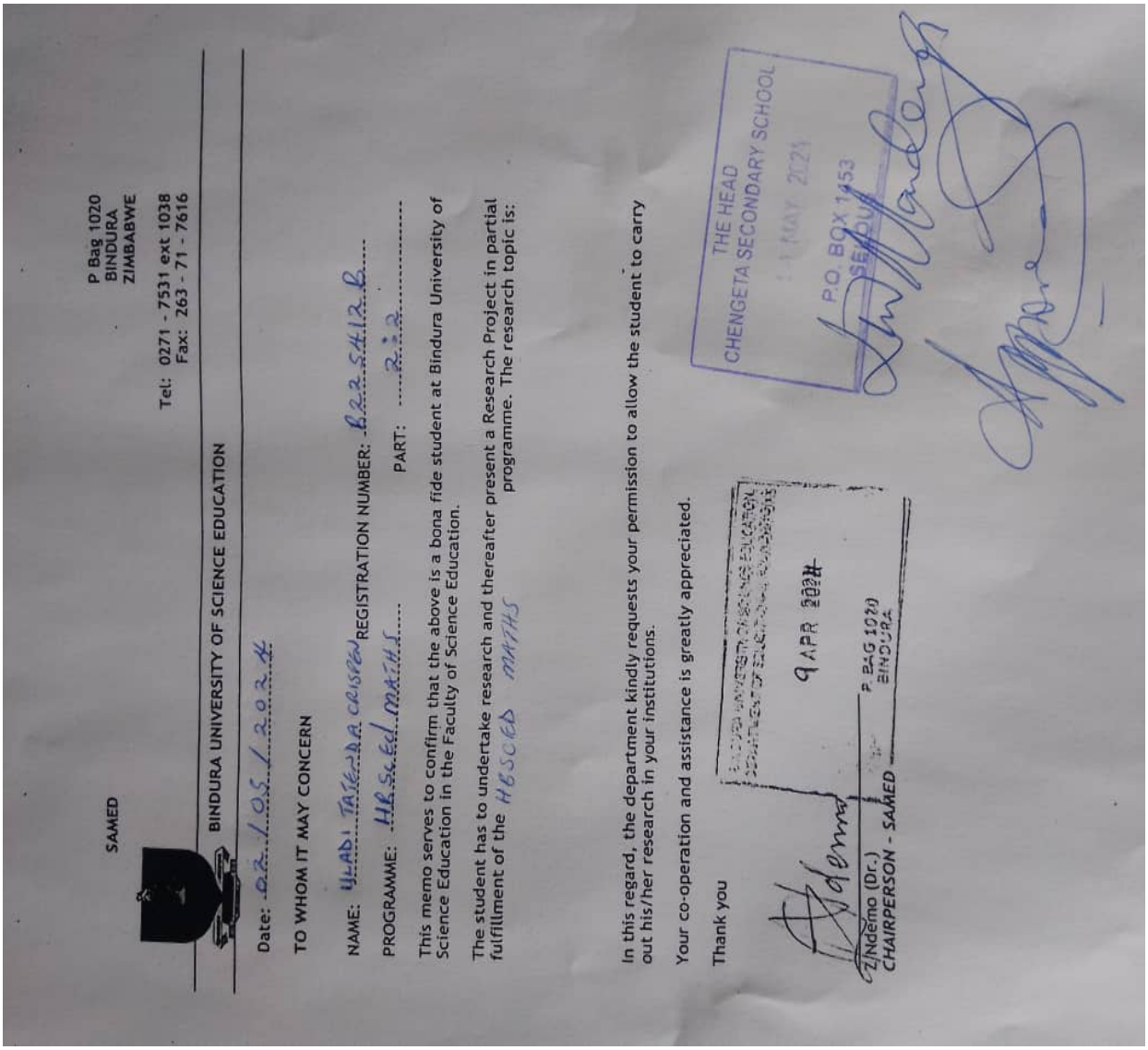
APPENDICES

APPENDIX A: REQUEST FOR PERMISSION TO CARRY OUT A RESEARCH



SAMED

P Bag 1020
BINDURA
ZIMBABWE

Tel: 0271 - 7531 ext 1038
Fax: 263 - 71 - 7616

BINDURA UNIVERSITY OF SCIENCE EDUCATION

Date: 02/05/2024

TO WHOM IT MAY CONCERN

NAME: ULADI TATENDA CASTEN REGISTRATION NUMBER: B225412B

PROGRAMME: HR Sc Ed/ MATHS 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 HBSCED MATHS programme. The research topic is:

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
FACULTY OF SCIENCE EDUCATION

9 APR 2024

P BAG 1020
BINDURA

Z Ndemo (Dr.)
CHAIRPERSON - SAMED

THE HEAD
CHENGETA SECONDARY SCHOOL
1 MAY 2024
P.O. BOX 1453
SEKUYU

APPENDIX B: INTERVIEW QUESTIONS

INTERVIEW QUESTIONS FOR SCHOOL HEADS (ADMINISTRATORS)

My name is Mr Uladi Tatenda Crispen , currently a student with the Bindura University. I am carrying out a survey to gather information on the effects of ability grouping on secondary school students' performance in Public Examinations (ZIMSEC). Your school falls within the area of this study and consequently you have been identified as one of the respondents for the survey. I have questions which I would request you to answer as accurately and honestly as you possibly can. The success of the study depends heavily on the way you answer the questions and how many of the questions you answer. There is no right or wrong answer to each statement and your responses will be treated with ***STRICT CONFIDENTIALITY***. In addition, I would also like to interview some of your teachers and students concerning this matter. I would also like to go through some of your school result analysis for the years 2020 to 2023. It is hoped that the results of the study can be used to come up with improvement plans and enhancing policies for the secondary education sub-sector in Zimbabwe.

I thank you for your time and responses.

- What criteria do you use to use to group/place your students into different classes at Ordinary Level?
- Do you think that ability grouping help in improving teacher execution of duty, in what way?
- Have you received complaints from teachers and students citing ability grouping as a hindrance to high performance in public ZIMSEC examinations? What did they say?

- Have teachers and/ students commended ability grouping as one of the reasons for their good performance in public examinations.
- During class allocation or subject allocation do you consider teacher qualifications and teaching experience to decide on whether the teacher is to be given a low or high ability class to teach?

APPENDIX C: INTERVIEW QUESTIONS FOR TEACHERS

My name is Uladi Tatenda Crispen, currently a student with Bindura University. I would appreciate if you gave me a few minutes of your time to answer the following questions. Your responses will help me to probe into questions that need further clarification.

The information that you give me will be strictly **confidential** and is for academic purposes.

Thank you very much for your cooperation**.**

- Do you feel any difference in teaching the high performing classes and the low performing classes?
- Do you think ability grouping has an impact on your overall performance of duty/pass rate in your subject area in public ZIMSEC examinations?
- Which group of students is most likely to be negatively affected by ability grouping? Why do you say so?
- Which group of students is positively affected by ability grouping? Why do you say so?
- In your opinion and experience do you think it is proper for Zimbabwean schools to continue with the system of ability grouping?

APPENDIX D: INTERVIEW QUESTIONS FOR STUDENTS

I am Mr Uladi Tatenda Crispen, a student with the Bindura University. Currently I am carrying out a study on the effects of ability grouping/streaming on students' performance in ZIMSEC public examinations. Please note that your participation is voluntary, you may decide not to answer some of my questions. I have also to remind you that what we are going to discuss is strictly between you and me, everything will be highly confidential and even your teachers and school head will not be in a position to know what we have discussed. Participation in this survey will not affect your class grade or standing. The idea behind this study is to find out if the practice of streaming has any effects on students' performance in ZIMSEC public examinations. Your responses will help teachers and the Ministry of Primary and Secondary Education to understand ability grouping from students' perspective as well as coming up with better policies for the students in Zimbabwean schools.

Please tell me what you really think (be honest).

- Do you think the criterion used to place you in your class was fair?
- How did you feel when you were placed in this class?
- What was (is) the attitude of your classmates towards school work?
- What was (is) the attitude of your teachers towards your class?
- What was(is) the level of competition in your class and did it help you in achieving good/bad results in public ZIMSEC examinations.