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DIFFEERENTIATED HOMEWORK: EFFECTS ON LOW PERFORMERS

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS OF THE BACHELOR OF SCIENCE HONORS DEGREE IN
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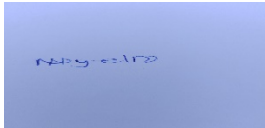
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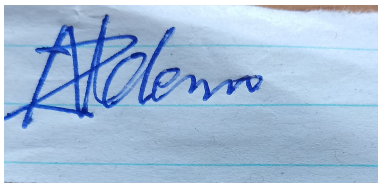
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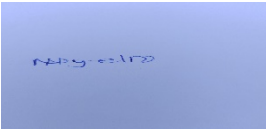
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DEDICATION

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ABBREVIATION AND ACRONYMS:

ABSTRACT

The research main focus was on the use of differentiated homework focusing on low performers. Its main objectives were assessing the impact of differentiated homework: effect on low performers. The research also identified specific areas where low performing need help. It further aimed all soliciting information on how differentiated homework affect low performers. It was a qualitative research that used questionnaires for learners and interview guides for teachers. The research noted that the differentiated homework were a vital teaching technique that helped low performers in a variety of ways. It further recommended the extensive use of the approach in teaching and learning process.

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CHAPTER 1: INTRODUCTION

1.0 Introduction

This study examines the effects of differentiated homework on low-performing students. Differentiated homework refers to assignments that are tailored to meet the individual needs and abilities of students, taking into account their unique learning profiles. The objective of this research is to investigate whether differentiated homework can effectively support and enhance the academic performance of low-performing students

The goal of differentiated homework is to provide meaningful practice and opportunities for learning for all students, including those who may be struggling or have special needs. Differentiated homework can be effective in helping low performers.

1.2 Background of the study

Homework is an educational practice aimed at reinforcing and extending learning beyond classroom. However, the effectiveness of homework can vary among some learners particularly low performers. To address this issue, teachers have increasingly explored the implementation of differentiated homework, an instructional approach that tailors homework to individual students' needs. Currently in Zimbabwe there is an organisation called Education development trust which partners with the Ministry of Primary and Secondary Education, it focuses mainly with peri-urban and satellite schools its mandate is innovations of teachers, how best can they deliver lessons. They are concerned with improvement learning outcomes, they also say that learners should be taught according to their levels of performance.

People had different perspectives regarding homework. Some would view it as a hustle for parents and guardians since pupils would not do it on their own at home. Teaching and learning involves learner participation, hence the inclusion of homework in the curriculum. It has been as a way to compete with foreign nations but also a hindrance to pupil's extra-curricular activities. In the current educational setting of increased rigor pupils learning, homework has once again been accepted as a beneficial pedagogy strategy.

Integrating differentiation into homework has been found to help pupils improve their motivation and academic performance, especially during challenging times such as the pandemic. If differentiated homework is delivered effectively, it can help pupils to progress and achieve their best, especially in mixed-ability classes. Doing homework is always beneficial to pupils, but it is also true that the key for academic success rely on the amount of homework done, but rather on how pupils engage on homework (Nunez et al' 2015) and on how homework engagement is related with pupil's motivation.

Differentiated homework can have positive effects on pupils. Kaur and Saravanakumar (2019) found that differentiated homework helped to improve the academic achievement of student with different learning abilities. They also found that students were more motivated and engaged with their homework when it is differentiated to their specific needs. Another study by Li et al (2017) supports the idea that differentiated homework can benefit low performers. The researchers found that when homework is tailored to individual pupils needs, low performers showed more improvement than given the same homework as their peers.

The study of differentiated homework and its effects on low performers aims to identify instructional practices that can improve the pupil's academic strength and engagement of students who are struggling academically, by giving homework according to individual needs and providing targeted support. Educators can help low performers develop their skills, build confidence and achieve better learning outcomes.

1.3 Statement of the problem

Low performing students often face challenges when it comes to completing homework. They may lack necessary support, struggle with understanding the content. As a result, they may become disengaged from the learning process and experience a widening achievement gap. Differentiated homework aims to provide tailored homework that address the specific needs and abilities of these students, with the goal of improving their academic performance.

1.4 Research Objectives

1. Assessing the impact of differentiated homework on low performers' academic achievement, motivation or self-efficacy.
2. Identify the specific areas where low performing students struggle and provide targeted homework to address these gaps in understanding.
3. Provide additional support and practice outside the classroom.
4. Stimulate low performers interest and encourage active participation in the learning process.

1.5 Research questions

1. What are the effects of differentiated homework assignments on the academic performance of low performing students?
2. How does differentiated homework affect low performers achievement?
3. What specific strategies within differentiated homework are most effective in supporting low performers?

1.6 Assumption of the study

The purpose of the study is to establish the effect of differentiated homework on low performers in mathematics. The researcher assumes that the pupils will give helpful and, precise and substantial data. The researcher assumes that the sample population chosen will give truthful and genuine representation of the entire education sector.

1.7 Significance of the study

Low performing students often face significant challenges in keeping up with their peers, which can lead to disengagement and a widening achievement gap. By examining the impact of differentiated homework on low performers, teachers can identify strategies to provide these

students with meaningful learning opportunities that are better aligned with their abilities, fostering a more inclusive learning environment.

1.8 Limitations of the study

The use of sampling may lead to distortion of data but the researcher will encounter this by using a sample which is fairly large enough to represent the entire population. Lack of cooperation and participation from pupils also hinders or slows down the progress of differentiated homework.

1.9 Definition of terms

Homework refers to the academic assignments given to students by their teachers to be completed outside regular class time. According to Stewart (2013), homework is the reinforcement of skills previously taught. Costa (2016) defines homework as tasks assigned to students by school teachers which are meant to be carried out during non-school hours without direct guidance of the teacher.

Differentiated homework refers to assigning individualized tasks to students based on their specific needs, interests or abilities. According to Windom (2020), differentiated homework is an extension of differentiated instruction outside the classroom.

Low performers these are students who consistently achieve lower grades, who are not meeting specific performance or expectations in a particular aspect of their work.

Summary

This chapter explored the effects of differentiated homework on low performing students. Differentiated homework aims at enhancing academic outcomes for all students, including those who struggle academically. Homework has long been considered an essential component of the learning process. It provides students with an opportunity to reinforce and extend their understanding of the material covered in class.

Chapter 2: LITERATURE REVIEW

2.0 Introduction

This study was intended to differentiated homework effects on low performers. This literature review is concentrated on text applicable to this study in the subsequent groupings:

- a) The connotation of differentiated instruction as well as its precarious application to the instructive realm;
- b) The consequence of teacher perception as well as physiognomies in differentiation instruction;
- c) clarification of student engagement;
- d) Differentiated instruction as well as student academic accomplishment;
- e) Differentiated instruction in addition to student learning behavior;
- f) Differentiated instruction as well as student turnout.

Teachers, as the essential mainstay of differentiated learning, need to take benefit of classroom fundamentals to fit in the learners' wellbeing, students' eagerness to learn as well as the student's side view to engross in the learning process (Hall, 2015). How glowing teachers implement the differentiated learning model as well as how it impacts student engagement of learning are the pivotal points of this literature analysis.

2.1 Differentiation: Meaning, Importance, and Application

The usage of differentiation has appeared as one of the most mutual as well as widespread approaches used and being supported for use in facilitating students of diverse needs as well as educational necessities to achieve their educational objectives (Hall, 2015). One of the subjects that have received substantial attention is the connotation of differentiation. Instructional differentiation is defined in slightly diverse means.

To this end, the classification of differentiation espoused by Rock, Gregg, Ellis, and Gable (2018) has been the most extensively used and the utmost apposite for this study. Rock, et al., (2018) postulate that differentiation is the process of guaranteeing what students learn, how they learn it,

as well as how they establish what was learned is a match for the students' enthusiasm level, wellbeing, as well as desired mode of learning.

Furthermore, differentiated instruction is associated with detailed teaching strategies and learning surroundings. Pozas and Schneider (2019) have projected a taxonomy of differentiated instruction. They advocate that tiered assessments using manifold resources as well as tasks modified to student challenge level are a characteristic of differentiated instruction.

Pozas et al. (2020), harmoniously categorize tiered assessments as a well-known differentiated instruction practice among teachers. In such classes, diversity is lectured by teachers using countless pedagogies (King-Sears, 2017) as well as strategies such as educating students in addition to their parents about modifications (Kronberg & York-Barr, 2018). Familiarizing standardized tests to account for diversity (Tomlinson, 2015) as well as designing curricula on the foundation of explicit concepts, ideologies and identifications (Kronberg & York-Barr, 2018; Tomlinson, 2019) are also collective teaching strategies interconnected with differentiated instruction.

In classrooms based on differentiated instruction, some teachers approve heterogeneous alliances so that students can learn as well as socialize with peers with diverse characteristics as well as learning styles (King-Sears, 2017), accordingly promoting the obligation of diversity. Other teachers may openly respond to student variances by, for instance, recognizing learners' intellectual dimensions and tailoring course content in line with these (Chamberlin & Powers, 2016). Otherwise, teachers may work together with students and, in doing so, place students' experiences and circumstances at the center of such relationships to meet the varied needs of students (Tatum, 2017).

Tomlinson (2015) specify that providing students with learning options is a definitive feature of differentiated instruction classes that teachers use to encourage students to learn based on their

intellectual competencies. Through this approach, teachers consider student modifications in learning styles as well as intelligence. According to Tomlinson (2015), giving students learning options has high efficacy as well as positive outcomes since students learn autonomously.

Additionally, since students are presented with learning decisions in agreement with their learning styles, their learning as well as psychological needs are spoken by teachers. Tomlinson (2015) recommends that teachers in distinguished instruction classrooms usage this instructional strategy to encourage excellence and equity; positive student outcomes are attained for the reason that consideration is given to students' personalized learning needs as well as knowledge levels (Dosch & Zidon, 2014; Santangelo & Tomlinson, 2019).

That provided that students with learning options is a characteristic feature of differentiated instruction has also been long-established by Pozas and Schneider (2019), who recommend that the instructional strategy helps students undertake responsibility for their learning, authorizing them to select what and how they want to learn. Scholars such as Smale-Jacobse (2019) recommend that providing students with learning possibilities as part of differentiated instruction endorses the individualization of lessons which successfully addresses alterations in students' learning partialities. Subsequently, teacher instruction is familiar from the onset and not only when the lessons do not address the necessities of some students (Smale-Jacobse, 2019).

An additional collective instructional strategy in differentiated instruction classes is the use of problem-solving activities (Bikic et al., 2016). Instructional strategies in differentiated instruction classes are not homogenous. For example, some teachers may use a blended, whole class approach to balance the recompenses as well as disadvantages of traditional instruction (Fresen, 2020; Wormeli, 2015). Teachers who adopt a whole-class approach argue that some students learn more effectively in this environment; however, some teachers prefer to organize classes in small groups (Wormeli, 2015). For instance, a study by Lemberger et al. (2015) displayed that students exhibit greater academic accomplishments when organized into small learning groups. In this study, small learning groups created higher academic attainment than whole-class instruction.

By the same token, in a study by McNaughton et al (2018), trivial groups were hypothesized as more operative for augmenting academic attainment for the reason that they are malleable and take into account students' wellbeing as well as learning profiles. Subsequently, the usage of trivial groups is endorsed by countless teachers that use differentiated instruction in their classrooms. Nevertheless, as a warning, teachers are not determined by only on one pedagogy in many differentiated instruction classrooms. The predominant aim of differentiated instruction is to spread on instructional strategies associated with students' needs as well as skill profiles (Connor et al., 2015).

Differentiated instruction is also affiliated with detailed learning environments. Learning environments comprise scheming development classrooms to minimize apprehension among students (Tomlinson et al., 2017). Powell (2017) also instituted that a encouragement environment is effective for engaging the extensive learning involvements of students, augmenting the learning familiarity in terms of quality, depth in addition to substance. Tomlinson & Allan (2015) have acknowledged environments within which students can prompt their comicality, admission guided help, as well as benefit from active teacher responses as a representative of a differentiated learning atmosphere.

Another distinction of differentiated instruction classrooms is the usage of working spaces where students accomplish individualized work grounded on their learning needs as well as experiences (Tomlinson & Imbeau, 2023). Working stations characteristically go hand in hand with the usage of individualized learning materials as well as tiered activities whereby teachers sustain the identical skills as well as concepts for all students but provide them with diverse resources according to their capabilities (Chapman & King, 2015). Purposively composed student groups, using learning centers, compressing, conferencing, as well as multifaceted tutoring (Hillier, 2018) also establish common features of the learning atmosphere in differentiated instruction classrooms.

The significance of differentiation has been accentuated by scholars such as Willis (2017) who elucidates the connection between differentiated instruction as well as the various brain functions

of the learner. It is his interpretation that differentiated learning is not just ingrained in but also reinforced by brain based research. For him, instruction of students in a number of learning alleyways as opposed to just a solitary pathway safeguards that there is conception of more pathways of admittance. This accomplishment is through a number of sensory organs comprising the nose (smell), eye (sight), as well as ear (sound) as well as through conception of connections that are cross-cultural. Willis (2017) also accept as true that each time the multiple regions of the brain are permitted to store data on a given subject, more cross-referencing as well as interconnection of data consequential from diverse sources can be done. These data, he determines, are frequently saved in numerous areas of storage and the cross-referencing is consequently a response to just one cue. The inference of this is that rather than a student just remembering lessons or instruction, he/she actually learns it (Willis, 2017). The arguments by Willis (2017) present no experimental studies that justify his point of view. It might not be as efficacious as he claimed after all. Besides, learning rather than memorizing instruction should be the objective of any form of teaching (Huijser et al, 2018). Nevertheless, it has also been shown in other studies that memorization is one of the most operative ways through which learning take place (Rock, Gregg, Ellis, & Gable, 2018).

The opinions of Willis (2017) on learning are supported by Wolfe (2016) who argues that acquisition of all forms of data or information is via the five senses of a person namely the sight, smell, touch, sound, and taste. Willis (2017) adds that when information has been acquired through these five senses or any one of them, it is temporarily stored for future use. It is up to the brain to make decisions regarding how – if at all – to use the stored information (Wolfe, 2016).

He argues further that the stored data have more impact on the brain when the stimuli are motivated more frequently. The information known is of great importance to differentiation of instruction as an approach to teaching. This is for the reason that differentiation is able to activate not just one but multiple senses at the same time (instantaneously). This guarantees that the brain is obstructed more commonly to enhance learning (Wolfe, 2016).

The influences by Wolfe (2016) diverge from that of Willis (2017) in that they endeavor to make some vibrant and more unequivocal links or associations between differentiation and brain functions. If indeed differentiation can be proven to galvanize multiple senses, then it can be true that it has the impending of causing data to have more impact on the brain (Wolfe, 2016).

Nevertheless, the problem still remains that there has been no adequate empirical data or evidence to prove this assertion. Additionally, more data that the brain processes may not always translate into better learning as has been reasoned beyond (McTighe & Brown, 2015).

The disagreement by Wolfe (2016) is also reinforced by Gardner's theory of numerous intelligence (2016). This theory postulates that there are eight diverse types of intelligences, which together serve a very imperative role in helping to appreciate how students are able to learn using diverse varieties of minds (Gardner, 2016). These multiple intelligences also help increase the considerate of how students are able to perform, remember, understand, and learn in different ways (Gardner, 2016). The intelligences are naturalist, intrapersonal, interactive, spatial, bodily-kinesthetic, musical, mathematical, logical, as well as philological. It is the resilient view of Gardner (2016) that if teachers are able to teach in diverse behaviors and if learning could be commenced and assessed using diverse means, then students would be assisted better.

Gardner (2016) proclaims that as long as there is only one technique or methodology to instruction used in schools, the students relinquish essential learning and retention and such an approach does not make them to successfully maximize their proficiencies. By quarrelling that assessment should be done through numerous means, he contests the view that all students must be assessed using a uniform and typical formulary (Gardner, 2016). Gardner have faith in that when such a standardized or single-method method to teaching and assessment of students is applied, the inevitable result – though not always expected – is that the capability of students to retain the content they are taught is suggestively lowered (Gardner, 2015). The conflicting is true; students can expressively experience improved content retention when a differentiated approach to instruction and valuation is used (Gardner, 2015).

Gardner's (2015) influences are mostly binding in light of available exploration. The numerous intelligences theory – as long as it is applied as well as explained undoubtedly – can indeed be satisfactory explanation for the use of differentiation. A foremost matter with differentiation has persisted that there is a lack of empirical evidence to establish that its use enhances learning (Hall, 2015). Through the theory of numerous intelligences, at least some efforts are made to demonstrate how numerous customs of teaching and multiple devices of assessment could enhance learning conclusions by increasing content preservation.

2.2 Teacher Factors and Characteristics in Differentiation Instruction

Agreeing with VanTassel and Stambaugh (2015), the teacher is the foremost motive that the differentiation strategy has principally been unsuccessful in schools. Some of the teacher characteristics that hinder differentiation include a) teachers lacking the knowledge that is necessary to modify and differentiate the regular curriculum content areas in order to cater for the gifted students; b) teachers lacking classroom management skills required to support differentiation instruction; c) teachers lacking the beliefs required in implementing differentiated instruction, for instance, understanding that students differ in the way they learn and that students are capable of obtaining knowledge that may not be within the teacher's sphere of information; d) teachers lacking the know how to accommodate approaches to learning by talented students coming from different cultural groups (both social and ethnic) or even those who are underachievers teachers finding it problematic to locate and effectively utilize various resources that would help in teaching the gifted students; f) teachers lacking the planning time needed to adjust the curriculum for talented in addition to gifted students; g) teachers lacking the sustenance of school leadership to guide and value the implementation of differentiated instruction for gifted students; h) teachers lacking the relevant pedagogical teaching skills and information for gifted learners (VanTassel & Stambaugh, 2015).

Apart from the above, other factors include lack of the applicable professional knowledge in schools as per Winberg et al (2020). This professional knowledge consist of teachers' knowledge

of either gifted learning or associated pedagogy and the necessary curriculum; and leadership knowledge in regard to ways of providing leadership towards the effective provision of education to the gifted learners. The impact of insufficient professional knowledge in the provision of gifted education may be minimized to a certain extent if teachers employ familiar curriculum pathways and tools designed to identify students' content knowledge at any given point and then planning for their teaching (Winberg et al, 2020). Consequently, it is more effective for teachers to: a) identify more cognitively the multifaceted knowledge and understanding within the broad topic areas which the teacher is more accustomed with and to create challenges and enquiry that will stimulate student's knowledge; here the teacher will require focusing on only a single topic at a time; b) inspect gifted learning and thinking by categorizing students who are able to learn topics at higher, cultured and more composite level on the knowledge plane. c) produce challenges as well as enquiries that will inspire and students' knowledge; teachers only need to take account of a solitary topic at any given time; d) identify talented learning and thinking; it is understandable that some students are able to learn and appreciate topics at a relatively higher, sophisticated and more complex level on the information scale (Winberg et al, 2020).

2.3 Student Assignment and Differentiated Instruction

Assignment has been a complicated part of the learning process throughout the centuries (Marks, 2017). It has been connected with academic success. Although student assignment is a method that is talked about quite often among educators, there are several broad terms in research that try to explain what it is and how it is effective in the classroom. Marks (2017) designates engagement as being aggressively engaged in the learning process. To illustrate more, she also notes that environment, community, instruction in addition to other key elements play a very imperative role. It is also stated that assignment is three-dimensional: behavioral, emotional, in addition to cognitive (Marks, 2017).

Assignment may also vary from semester to semester depending on what is happening in a student's home life or whether a safe learning environment is delivered.

As well-defined by Marzano et al., (2018), student participation incorporates being academically vigorous on a short- and long-term basis. Assignment is more than a relaxation activity that takes place infrequent. It is a repetitive that should be second nature to students. When the following questions are being responded, then assignment is occurring: “How do I feel?” “Am I interested?” “Is this important?” “Can I do this?” (Marzano et al., 2018).

In education, student assignment refers to the gradation of attention, inquisitiveness, interest, optimism, as well as craving that students show when they are learning or being taught, which extends to the level of inspiration they have to learn as well as progress in their education (Marzano, et al., 2018). Commonly speaking, the concept of “student assignment” is established on the credence that learning improves when students are affianced, and that learning tends to suffer when students are disconnected (Marzano, et al., 2015). Robust student engagement or improved student engagement are mutual instructional objectives articulated by educator (Marzano, et al., 2015).

The Glossary of Education Reform (2016) expresses education as a development of gaining systematic academic instruction in a school or university. During this assignment process, the motivation level of the students intensifies their inquisitiveness which makes the students more concerned in learning (The Glossary of Education Reform, 2016). As specified, students are permitted to define engagement as well as how lessons could be designed to keep them involved and help the students learn. This is the ultimate situation for safeguarding the academic needs of the students as well as keeping them affianced (The Glossary of Education Reform, 2016).

2.4 Student Interactive Engagement

Student contribution and behavior in an academic setting is the supporting of student engagement (Harris, 2018). Student engagement, unquestionably on a secondary level, is concerning associations with both instructors as well as peers that foster academic accomplishment as well as amicability (Harris, 2018). Academic involvement, as well as productive, useful conduct best define behavioral appointment (Luthans et al, 2021). Behavioral engagement best defines how

much a student will learn. The more intricate they become, the more they will acquire (Luthans, 2021). One of the toughest predictors of school achievement is student deportment (Miller, 2017). Behavior distinctly disturbs attainment because it can be restrained daily: presence, homework accomplishment, behavior endorsements (Miller, 2017). The more productive the behavior, the improved significances you will see; not only in academics, but extra-curricular happenings as well (Miller, 2017).

Industrious performance, accomplishment, appointment in the academic development, as well as attendance are all incorporated in the behavioral engagement advancement. These behaviors can regulate the level of accomplishment within a school year (Finn & Voelkl, 2015). Supportive to research, the more students are affianced as well as concentrating, the higher the academic consequence as well as a less than pleasing, damaging relationship between the instructor, students as well as peers raise less than satisfactory academic assumptions (Christenson, Hurley, Lehr, & Sinclair, 2015). As well, there is a direct suggestion between student attainment as well as behavior (Finn & Voelkl, 2017). Some of the characteristics of behavior appointment encompass observed behaviors such as student learning behavior, theoretical growth, as well as turnout (Miller, 2017).

2.5 Differentiated Instruction and Student Academic Achievement

Classrooms must be envisioned to serve as incubators for student learning source. In order to flourish this, educators have strong-minded that differentiated learning is essential in order to meet the learning requirements of each learner (Tomlinson, 2015). As such, teachers need to develop differentiated in their instructional methods as well as ensure they are talented in meeting the needs of their students (Tomlinson, 2015). Since students often become disengaged during the learning process, it is commanding for teachers to utilize differentiated instruction to submission to their incomparable learning style to re-engage them (Mystkowska-Wiertelak, 2022). Modifying educational instructions to meet the necessities of every learner plays a unwarranted role in shaping the educational development of the learners (Ferrier, 2017). Differentiation in the issuance of learning instructions enable the learners to communicate with the learning activities as the teachers

use illustrations as well as forms of instructional materials that are dependable with the necessities of the learners (Ferrier, 2017). The formation of comparable teaching materials that consider the uniqueness and the effects of every learner helps all learners acquire the identical learning objective (Washington, 2018).

Accordingly, the learners will be able to use their strengths in addressing as well as responding to diverse academic needs, and this empowers them to record superior academic performance. Differentiated instruction has been demonstrated as an operative tool for teachers as well as students within the classroom (Said, 2019). Conversely, Reis, Said (2019) resolved in their quantitative study concerning reading upgrading that differentiated instruction has proved to be just as effective as traditional attitudes.

Goddard, Goddard, and Kim (2015) also determined differentiated learning was operative in their study on the subject of math and reading. Lemberger et al. (2015) resolved during their study, that out of the control as well as non-control group, the control group outstripped the non-controlled group with reading expertise. Teachers play a contributory role in confirming the academic success of learners in differentiated learning (Charles & Laurd, 2018). As teachers are formulating their academic lessons to engross the students, they must be aware that the capability of learners in the classroom are wide-ranging (Charles & Laurd, 2018). The differentiation of the instructions to costume the discrete needs of every learner permits the students with different concentration spans to focus on learning options that work for them if such potentials are ethical as well as lead them towards the comprehension of a communal learning objective (Said, 2019). Through this, every learner will be able to complete every assignment or sit on investigations and use their strong point to achieve such tasks, and this will improve their educational performance.

Furthermore, differentiation of teaching instruction such as the use of diverse teaching mediums permits learners with different weaknesses as well as strengths to involve in and perform comparable learning activities via numerous mediums (Simmons, 2015). For occurrence, the use of summaries, description, storytelling, and artworks, and numerical presentations along with other

mediums, empower students to enthusiastically answer the enquiries and respond to innumerable lessons obtainable in the classrooms (Bal, 2016). The collected works advocates that the differentiation of teaching instructions enhanced the academic performance of learners. The same is accurate when it comes to differentiated instruction as well as multiplicity. Woolfolk, (2016) resolved in their study that differentiated instruction is also operative in teaching students who are culturally differentiated.

In Simmons (2015) qualitative reading with seven contributors, the usefulness of differentiated instruction was scrutinized in reading with one teacher consuming differentiated instruction as well as another teacher partaking blindly. Through a succession of reading strategies with learners, Simmons (2015) resolved that differentiated instruction is operative in teaching reading strategies with uncomplicated students. This study also emphasized that the students who take part in the study grew intellectually and exhibited interest in the subject substance. In the same way, research by Cusumano and Mueller (2017), which concentrated on differentiated instruction in an elementary school, established surges in the school's API scores as a consequence of differentiated instruction.

Boges' (2015) diverse method quasi experimental study discovered the effects of differentiated instruction on accomplishment scores. Boges' pre and posttest design was tested with a small group and a whole group. Boges' study resolved that there was no difference in using differentiated instruction between the two groups. There was an intensification in the mean score from the pretest to the posttest, which was underwritten to individual variances and not instructional transformations.

In another education by Tomlinson & Imbeau, (2023), differentiated instruction was accompanying to augmented students' motivation, self-worth, study habits as well as appointment, which led to increased realization. Comparable findings have been traditional by Valiandes (2015). Valiandes (2015) exhibited that students that promoted from differentiated classrooms achieved better than their cohorts in outmoded classrooms.

In dissimilarity to the research which recommends that differentiated instruction increases students' academic accomplishment, some fragments of the literature show adversative conclusions. Boges (2015) did not find that differentiated teaching methods predisposed students' academic attainment. Another study by Smale-Jacobse et al. (2019) associated the impact of differentiated instruction as well as traditional methodology on reading comprehension with differentiated instruction concentrating on flexible grouping as well as tiered projects. The scholars did not find a statistically momentous modification between the two groups at the advanced level, even though differentiated instruction positively improved students' reading understanding at the elementary as well as intermediate levels.

2.6 Differentiated Instruction and Student Learning Behavior

The usage of differentiated instruction in classrooms shapes the behavior patterns of learners although in class and inspirations their academic expansion (Gentry, Sallie, & Sanders, 2015). Differentiation of instruction permits teachers to use numerous teaching materials as well as methods that embolden active participation of every learner notwithstanding of their abilities as well as faintness (Ramos, 2018). For instance, the teacher can use reading exercises to inspire participation among the learners who have resilient reading proficiencies despite the fact teaching those who are good with information and numbers by using altered tools (Gentry et al., 2015). As a result, every learner should be self-reliant in their capacities. It is a perception that will authorization them to express themselves contentedly throughout the class session.

Mims' (2017) pragmatic study outlined a controlled qualitative study where differentiated instruction in reading was exploited between two elementary school classes. Mims exploited differentiated instruction on one class as well as not in the other. Mims (2017) determined that both teachers and students promoted from differentiated instruction. In addition to students seeing their grades enhanced, teachers were compensated with students who conduct yourself and captivated in the reading lessons taught in class. Mims went on to state that the more learners enjoy reading in class the more they are disposed to read. This was owing to the differentiated instruction

used with learners to get them promised in the reading, which supported in the academic development. The study of Muller, Hofmann, Begert and Cillessen (2018) scrutinized students in grades 7-9 and determined that when teachers betrothed students in learning, student behaviors in classroom were less disrupting.

On the other hand, Wesley (2017) specified in his study of high school and middle school learners that differentiated instruction had no behavior on student behavior in the classroom. Wesley specified that other variables were connected to student behavior, which incorporated age, classroom size, gender, education, as well as their disclosure to differentiated instruction approaches. Differentiation inspires teamwork among learners (Robb & Bucci, 2015). This component is energetic in improving their societal development (Robb & Bucci, 2015). In numerous cases, the teachers can place the learners with related capabilities and skillsets in groups and allocate them to work or instruct those using perceptions that inspire their learning familiarity (Tamlinson & Imbeau, 2023). The coming together of learners with comparable strengths empower them to work together on numerous academic projects as well as tasks, which instill the cooperation skills among them.

Using individualized teaching approaches and materials in classrooms gives every student an identical occasion of expressing themselves (Subban & Round, 2015). From time to time, learners who are alleged as frail in certain subjects often tend to wary away from participating in goings-on during lessons for fear of being wrong or chuckled at by their contemporaries (Van Geel, et al., 2019). Nevertheless, with a teaching methodology that uses models and techniques that augment the strengths of each learner, every learner will be stimulated to take part in numerous learning activities within the class atmosphere (Rachmawati et al, 2016).

Through continuous participation in the classroom accomplishments, each learner will become confident in their capabilities, and this will help in increasing their self-esteem. Stollman, (2019) and Malacapay (2019) recommend that using individualized teaching methods as well as materials supports students to become more metacognitive and self-directed since they gain a more nuanced considerate of their learning needs. Since differentiated instruction comprises teachers continuously watching students' instructional needs, readiness as well as interests, students become promised in the learning process, which means that they play a role in emergent their personal objectives. Fisher (2023) contends that students become sanctioned as learners.

A study by Aranda and Zamora (2016) indicated that differentiated instruction inspires students to implement self-discipline for the reason that of the safe nature of the classroom atmosphere, which inspires such behaviors. This conclusion has been established by Fisher (2023), who, in the background of a literacy class, recognized that differentiated instruction occasioned in the use of self-discipline among students in addition to student contribution. Correspondingly, Tieso's (2015) research sanctions that differentiated instruction enables students to become confident, competent as well as self-sufficient for the reason that they must work in small groups. Small groups in such lessons mean that teachers can recognize students' preferred learning styles, which support students to work more professionally. These findings have been documented by Boushey & Moser (2023), who finds that students work more successfully in small groups because of the opportunities for partaking, increased engagement as well as getting constructive feedback, which shape their learning behaviors.

2.7 Differentiated Instruction and Student Attendance

Absenteeism in classrooms is attributable to numerous factors such as the inflexible teaching approach used by the teachers as well as lack of interest in the instructions (Kearney & Graczyk, 2014). The usage of differentiated instruction makes it tranquil for the teachers to employ bendable teaching models, which accommodate the needs of every learner, and this can help in fluctuating diverse elements, which contribute to reducing the rate of nonappearance in school (Nagro, Hooks, Fraser, & Cornelius, 2018).

By means of differentiated learning instruction that concentration on the individual strong point of every learner gives them a sense of belonging, and they will find the learning process pleasurable (Tomlinson, 2017). As a result, they will permanently want to be fragment of every lesson, as well as this advances their attendance rate (Tomlinson, 2017). In addition, differentiated instructions augment the connection between the teachers as well as the learners as the teachers will continuously have an opportunity of appreciating the apprehensions of every learner (Heacox, 2019). Accepting the concerns of each student will aid them distinguish any sign of malingering

on time, as well as put approaches in place, which will restriction such behaviors. The teachers can employ diverse creative as well as customized teaching strategies that capture the interest of every learner as well as diminishes tediousness in the classroom (Turner, Solis, & Kincade, 2017). Accordingly, the students get fascinated to the instructions (Turner et al., 2017).

As well, conveying the student's tasks, which bring into line with their fortes, will hasty them to want to recognize more about the substance, and they will guarantee that they be present every lesson, and this aids in reduction the rate of nonattendance. Comparable conclusions have been reputable by Manship et al. (2016) in their study of a Chicago school which reputable condensed rates of nonattendance subsequent the execution of a differentiated program.

Correspondingly, studies by Santangelo and Tomlinson (2019) and McQuarrie and McRae (2018) specify that differentiated instruction is definitely correlated with condensed absenteeism rates. Santangelo and Tomlinson's (2019) study displays that differentiated instruction endorses high student engagement, which causes students to be concerned to lessons as well as consequently advances attendance. Tomlinson (2017) correspondingly create that differentiated instruction invigorated students to advocate for their learning.

In doing so, they improved assumed curricular expectations and how to improve their learning. A consequence is that students develop improved interpersonal associations with their teachers. Schools are then made better-looking leading to augmented attendance rates.

Summary

The varied research and descriptions of differentiated instruction as well as engagement in this review display that there is a constructive connection between encouraging students to become vigorous in the learning process as well as guaranteeing that teachers are reaching each student in order for them to be effective. Differentiated instruction is an erudite approach that could augment student assignation in learning. Instructors need a wide-ranging as well as precarious analysis of the consequence of differentiated instruction as well as its belongings on students of diverse credentials. Consequently, differentiated instructions as a developing modern concept for teachers, learners, schools as well as parents act as a revolving point in appreciating learner engagement in education.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter outlines the methodological approach embraced in this study. It highlights the different steps taken to ensure a clear grounded analysis of the effects of differentiated homework. The research methodology is essential in that it validates the data collected and provides a clear sense of how it will be collected.

3.1 Research design

According to Bennet (2018) a research design is a work plan that permits the researcher to come up with resolutions to the problems as well as guide in innumerable stages of the research. Manion (2017) define research design as a description on an overall plan on how the research implements the formulated research questions. Consequently, in this particular research a research design is a assortment, or a pattern of approaches used to gather and interpret data in a systematic way. This study will adopt a qualitative approach to investigate of the effects of corporal punishment as well as challenges as well as coping mechanisms teachers employ to manage learners who exhibit disruptive behavior in schools, the following research questions guided the study. Qualitative evidence syntheses, also recognized as systematic reviews of qualitative research, aim to explore people's perceptions and experiences of the world around them by synthesizing data from studies across a range of settings. When well-conducted, a qualitative evidence synthesis provides an in-depth appreciation of complex phenomena while concentrating on the experiences as well as perceptions of research participants and taking into contemplation other contextual factors (Heather Ames, 2019).

A qualitative research approach is a custom of learning about human and social sciences and discovering how people think and feel (Sharique, et al., 2019). Qualitative research is predominantly a research methodology that empowers one to study or investigate the level of quality of relationships, happenings, events, or materials (Aldaihani, 2022). It is examining in

nature, all-inclusive in character, and uses a subjective approach. Additionally, a qualitative method is process-oriented, comprises purposive sampling, and is used to develop hypotheses. Words, pictures, and physical things are used to analyze data while using a qualitative approach. The objective of a qualitative method is to consider and identify concepts employed in a continuous process employing techniques like in-depth interviews and group discussions, which are non-structured. Moreover, the qualitative approach look after first conception of the conclusions (Sharique, et al., 2019).

In this investigation, the researcher's interest is in the elucidations that the participants will give regarding the empowerment in educational leadership in education. The researcher intends to ascertain new perceptions, connotations and understandings of the topic under investigation. Alase (2017) notes that qualitative data can brighten human feelings and afford rich perceptions into the phenomenon under investigation. It is therefore essential to note that qualitative data are not mediocre in status and what is imperative, is to judiciously select data that serves the objective of the study.

In this study, the researcher used the qualitative approach as it focuses on a collective case study as it is key in bringing the researcher to an appreciation of a composite subject and can extend familiarity as well as add detail to what is previously known through earlier research. McMillan and Schumacher (2019) are of the opinion that a design mainly place emphasis on one phenomenon that the researcher selects to appreciate in great detail irrespective of the number participants for the study. Case studies stresses comprehensive contextual analysis of a restricted number of circumstances and their relations. Social scientists, in precise, have made extensive use of this qualitative research method to scrutinize current real-life circumstances and provide the basis for the presentation of concepts and addition of methods. The qualitative approach is selected as it would allow the researcher to recognize several issues related to the research topic in question.

3.2 Research tools

The researcher employed methods of the questionnaire method and interviews

3.2.1 Interviews

Interviews characteristically are much more like conversations than formal events with predetermined response categories. They are recurring face-to-face encounters between the researcher in addition to the informants directed towards appreciating informants' standpoints on their lives, experiences or situations as expressed in their own words. Interviews can either be structured or unstructured. Structured interviews comprises of specific questions as well as the interviewer may not swerve from the list of questions, this will be used in this case. According to Flick, (2018) interviews permit researchers to explore the context in which participants' experiences as well as perspectives are placed understanding the social, cultural as well as environmental factors that impact participants' viewpoints can provide appreciated insights into the research topic.

3.2.2 Questionnaire

Questionnaires were used to gather sentiments from a particular group in a systematic manner. The merits of employing the questionnaires are that they are quite hands-on and are in a standardised uniformity technique (Ljungberg, 2021). This make them more independent and tranquil for data analysis as well as presentation. Questionnaires were used on the grounds that they are collective and springy method for collecting data. According to Hair, et al (2019) questionnaires often create numerical data, tolerating for quantitative analysis. This empowers researchers to apply statistical techniques to identify patterns, relationships as well as tendencies with the data.

Moreover, questionnaires also tolerate for a larger reach of pupils and permit a quicker technique of collecting information predominantly when compared to interviews. Questionnaires will be exploited on the grounds that they are simple when contrasting and investigating findings and because they are also easy to allocate to the respondents.

3.3 Population

According to Casteel, et al, (2021) population is the total gathering of elements about which we wish to make implications. Population is very imperative in any research as it determines how sampling is going to be done as well as drives the whole research methodology (Popper, 2019). The population comprises Ordinary level pupils which involve 3s and 4s which equalled to three hundred and twenty learners as well as 5 Mathematics teachers. The research was carried out without any stipulations on sex, age and background of pupils and teachers. In this research the teachers and learners were the target population because they are thought to be dependable informants with correct information which could answer best enquiries of the researcher.

3.4 The sample size and sampling techniques

Sample size determination is the act of selecting the number of observations or imitates to comprise in a statistical sample. According to Gay et al (2017) defines sampling procedures as a procedure of picking a number of individuals in a study in such a system that the individuals characterise the larger group from which they are designated. In this research sampling design covers all facets of how the samples in the study will be itemised and carefully chosen. According to Kenton (2020), a sample is an analytic subset encompassing the characteristics of a larger population. In this research sample size determination is the act of decide on a number of pupils as well as teachers to be encompassed in a statistical sample.

The researcher conduct a random sampling. In this procedure, each individual in the population has an identical chance of being selected. The researcher randomly select 80 pupils from Ordinary level Mathematics learners that is 10 pupils from each class. Learners were asked to pick yes or no cards from a box as to avoid bias when selecting the respondents. According to The National Institutes of Health (2021) random sampling is a process of choosing a sample from a population in which each person or thing in the total population has an equal chance of being nominated.

3.5 Procedures of collecting data

Research instruments are tools that are used by the researcher to collect data from the sources that had been recognized for the research. Cheng (2016), says a research instrument is a device that is used to do a specific assignment that is used as well as comprises studying something and trying to discover evidences about it. In this research, interviews as well as questionnaire will be used as data collection instruments.

3.6 Data presentation

In this research, the researcher presented data in the form of tables, pie charts and bar charts.

3.7 Data analysis

Hair, et al (2019) outlines data analysis as the organised process of scrutinising, cleaning, transforming as well as interpreting raw data to extract expressive insights and draw valid deductions. Making sense of the data required methodical effort that ensured the emerging issues from the field were fully captured. The use of mixed method approach necessitated the use of two diverse but related methods of data analysis. What is imperative is that the two methods apprise and enhance each other rather than contending. The researcher used descriptive data.

Summary

The above chapter outlined the research design and methodology. It defined methods which were used to collect data, which include research instruments, sampling. The sample size was also outlined. Finally, the methods of data presentation and analysis procedures were also pronounced.

Chapter 4: DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter present, analyze and discuss the findings of the research on a research on differentiated homework: effects on low performers. The information derived from the questionnaires and interview guides. The response rate for all the teachers and students is indicated below.

Response rate

Teachers	Number	Percentage
Males	2	40 %
Female	3	60 %
Learners	Number	Percentage
Males	35	44%
Females	45	56%

4.1 Learner's responses

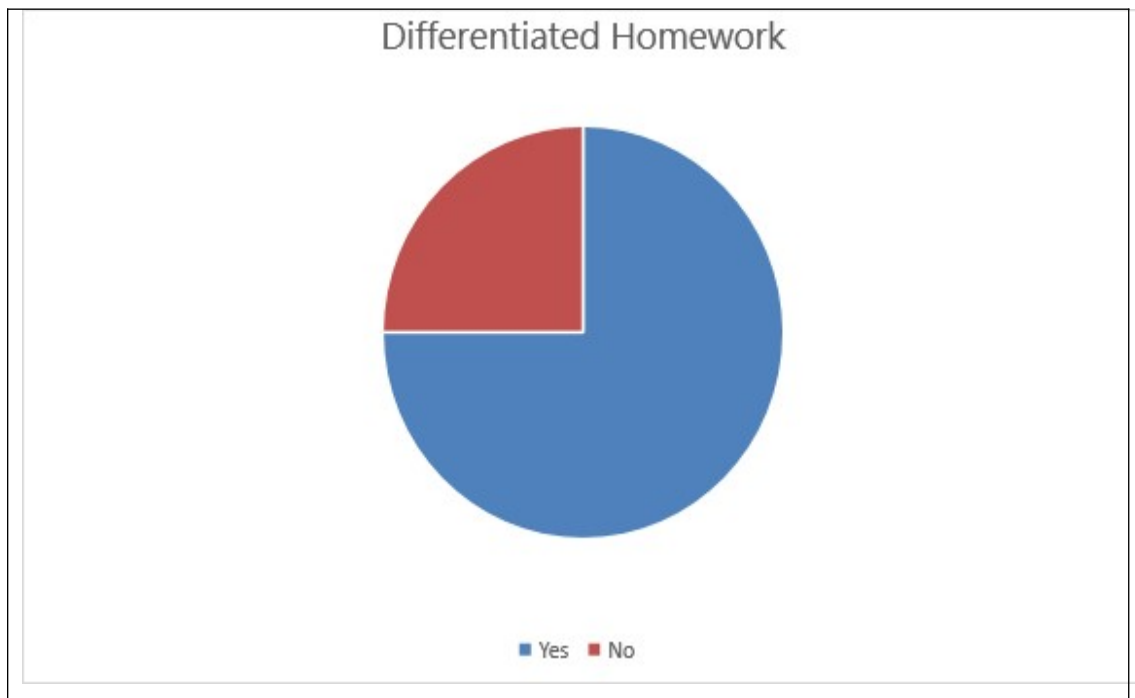


Fig 4.1 Whether the learners receive differentiated homework

80 % of the respondents highlighted that they received differentiated homework and the other 20% does not receive it. This is in line with Millikan (2017) who found out that learners' achievement and meaningful learning had improved as a result.

4.2 Differentiated assignments

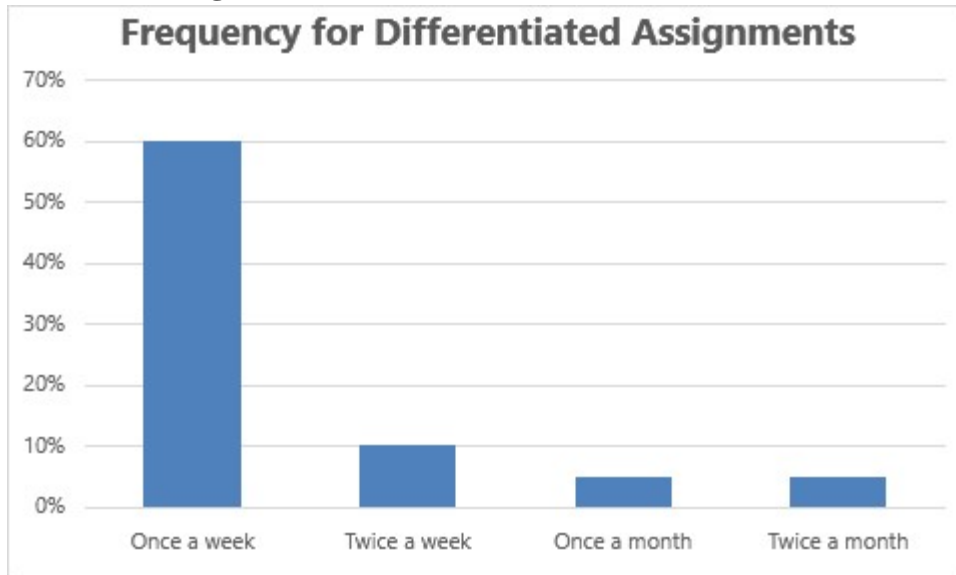


Fig 4.2 How often learners receive differentiated assignments

60 % of the learners indicated that they received differentiated assignments and this is a notable achievement. This is in line with Prast et al., (2018) who pointed out that differentiated assignments aid learners' perceptions, interests, abilities and strengths come to the fore during the learning and teaching process.

4.3 Whether differentiated homework assignments has improved understanding of mathematics

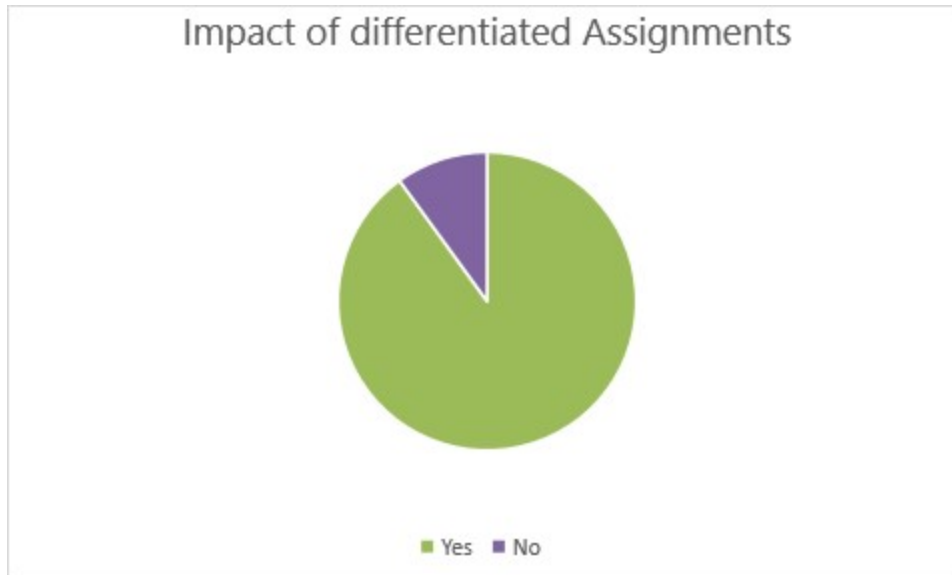


Fig 4.3 How differentiated homework assignments has improved understanding of mathematics

As highlighted

above 90 % percent of the respondents highlighted that differentiated instructions helped in improved understanding. This view is supported by Doubet & Hocket (2018) who argue that differentiated homework enable learners to complete their learning processes with appropriate accomplishments according to their own learning promptness. In this manner, teachers can observe learners' development as well as learning levels and make endorsements.

4.4 Whether differentiated learning is beneficial

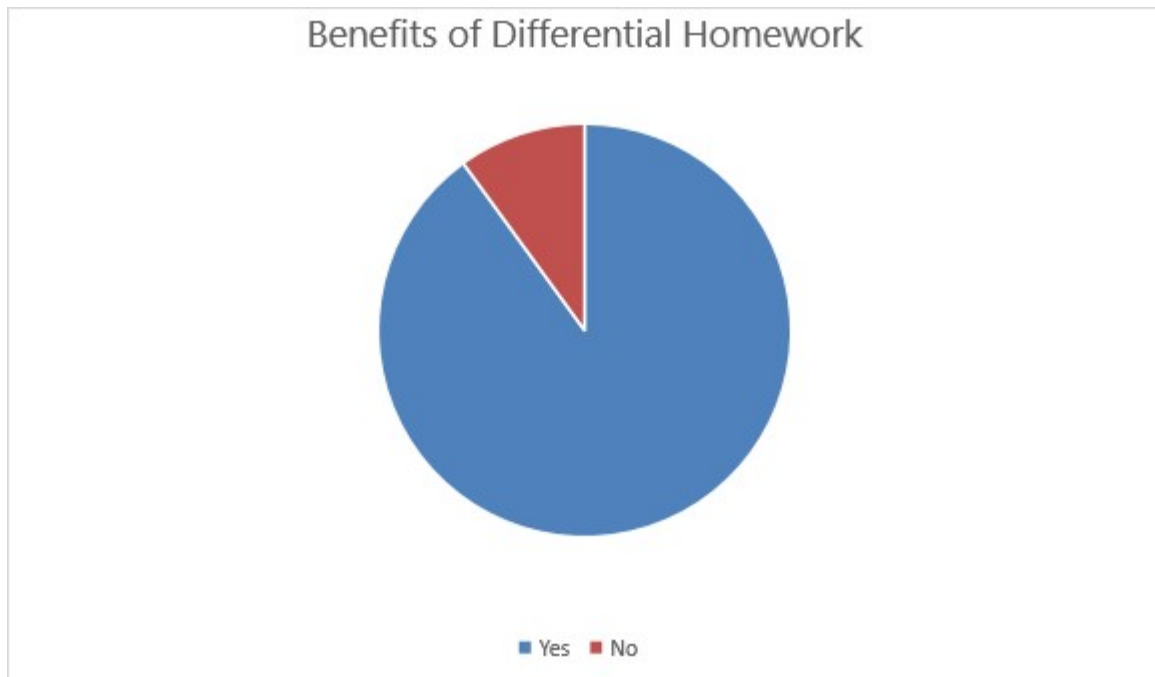


Fig 4.4 Whether differentiated learning is beneficial

90% of the learners believe that differentiated homework assignments are more beneficial than traditional homework assignments and only 10% opted for traditional homework. This coincides with Bulley-Simpson (2018) conclude that learners' meaningful learning and achievement were increased.

4.5 Communication with teachers regarding your differentiated homework assignments

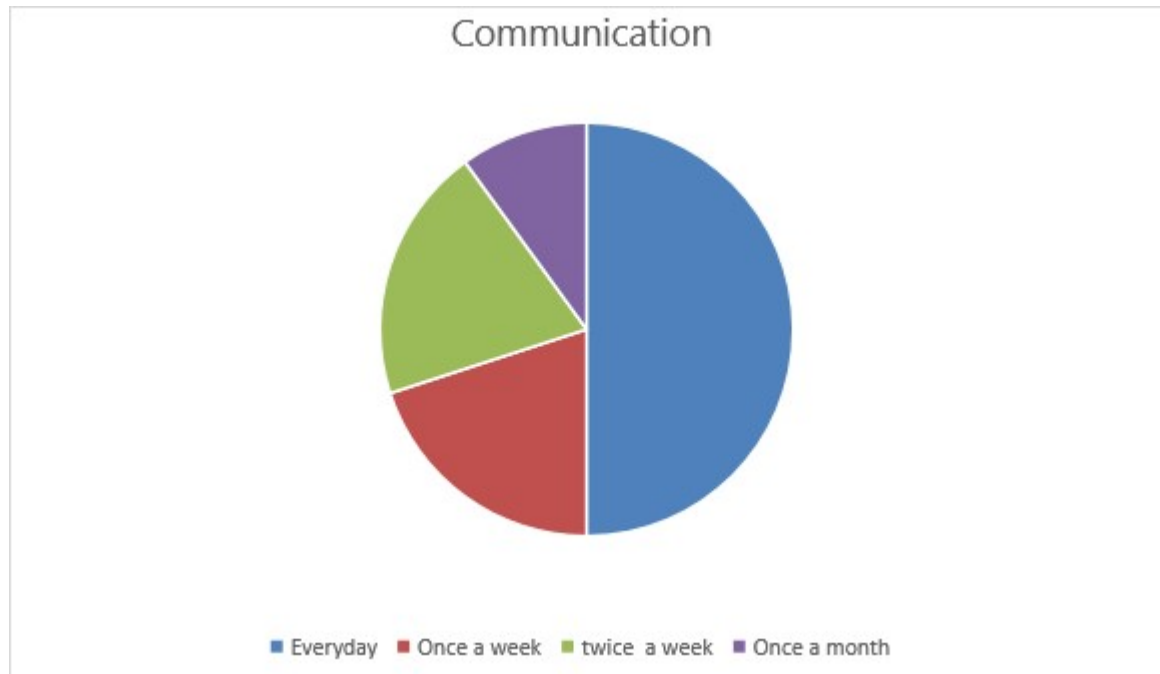


Fig 4.5 Communication with teachers regarding your differentiated homework assignments

50% indicated that they communicate daily, 20% they communicate once a week, 10% specified that they communicate twice a week and the other 10% noted that they communicate once a month. Tomlinson (2016) endorses this when he notes that communication improve learners' productivity and to give them the ability to produce original works and manage the whole process on their own.

4.6 Results from the teachers

Results from the teacher survey demonstrated teachers feel either confident or very confident in using differentiated homework assignments, ability grouping and/or tracking in the classroom. The teachers observed were assured in the effectiveness of the aforementioned teaching strategies and

recalled many benefits these methods. 80% of the surveyed teachers concluded differentiated homework tailor instruction to students' individual needs, allow students to learn at their own level, allow students to work alongside same-ability peers while also working with different-ability peers, allow for peer tutoring, and close learning gaps. The overall consensus from the teacher survey demonstrated that differentiated homework benefit more than higher tiered students since the aforementioned teaching strategies focus on bringing lower performing students up and filling in those learning gaps.

Furthermore, when asked about effects of differentiated homework assignments their perceptions of low performing student's academic performance in mathematics, all five teachers (100%) stated they believed their students were below expectations during the beginning of the year, meeting expectations in the middle of the year, and will exceed expectations during the end of the year. These teachers were also asked, "What is your perception of student progress for each group from the beginning of the year until now in performance?"

In regards to how does differentiated homework affect low performers achievement, one teacher (20%) stated she believed little growth was shown, three teachers (60%) stated they believed adequate growth was shown, and one teacher stated they believed substantial growth was shown. In regards to average-tiered students, four teachers stated they believed adequate growth was shown, and one teacher stated she believed substantial growth was shown. In regards to low performing students, four teachers (80%) stated they believed inadequate growth was shown, and one teacher stated she believed was shown. When asked about their perceptions of student academic performance in reading, all five teachers stated they believed their students were below expectations during the beginning of the year, meeting expectations in the middle of the year, and will exceed expectations during the end of the year.

4.7 Teaching Strategies

The teachers were also asked, what specific strategies within differentiated homework are most effective in supporting low performers. In regards to lower-performers, two teachers (40%) stated they believed mediocre performance was revealed, two teachers (40%) stated they believed inadequate performance was shown, and one teacher stated she believed insignificant performance

was shown. What strategy they use they cited differentiation, tiered instruction, homogeneous tracking and heterogeneous tracking.

The findings of this study that teachers employed a range of differentiated instruction principles were also confirmed in other studies by Pozas and Schneider's (2019). For example, consistent with previous research, this study found that tiered assessment was a unique feature of the differentiated instruction class when compared to the traditional class. This is in line with Pozas and Schneider's (2019) taxonomy of differentiated instruction which identifies tiered assessments involving the variation of resources and tasks based on student challenge level and other factors, as a characteristic. Scholars such as Pozas et al. (2020), in their research, found that tiered heterogeneous tracking is implemented “sometimes” by one teacher and “often” by four

Teachers also highlighted that they applied strategies to address diverse student needs. Other teachers used strategies such as educating students and their parents about differences or changing standardized tests to reflect the emphasis on diversity.

The teachers also noted that they used differentiation, tiered instruction, homogeneous tracking, and heterogeneous tracking. One teacher responded, “Differentiating instruction and offering differentiated instruction allows students to be more successful by tailoring instruction, work process, and work product to the students' individualized needs in the moment. They get the instruction and the tools needed to be successful at each skill at their level. This prevents knowledge gaps and allows students to proceed along the learning continuum at the speed they need. Homogeneous tracking can help students by allowing them to work alongside ability level peers, but students also benefit from working with students at differing ability levels, both above and below. Peer tutoring is especially helpful for student’s lower ability levels.” Another teacher stated, “Differentiated instruction - getting on their level and teaching them. Differentiated instruction- giving the students exactly what they need. Another teacher responded that these strategies, “Give students instructions based on their learning abilities. Helps fill in the openings in their learning.” Another teacher responded, “You drive their academic success.” A different teacher also responded,

“The benefits are that you can focus on a particular skill with a group of students that needs to gain mastery on that particular area, and it’s easier to track student mastery when instruction is differentiated by ability.” In terms of which students benefit more academically from

differentiation instruction, one teacher responded with “higher level” while four responded that low performing students benefit. This is in line with Cooper & Valentine (2017) who concluded that differentiated instruction has an immediate effect on the retention and understanding of the material it covers.

4.8 Discussion

Every teacher surveyed noted a level of confidence in the effectiveness of differentiated homework assignments. Most respondents believed these types of instruction benefits low performing students particularly since these strategies permit the teacher to focus on each individual students’ academic ability. Teachers use these strategies to assess each of their students and meet them at their current academic performance. This permits learning gaps to be closed while instantaneously working alongside peers of both same-ability as well as different-ability groups. The main benefit teachers stated in the survey consisted of each group of students receive an individualized homework as well as accommodations to set them up for success. These findings align with the study by Stollman, Merink, and Westenberg (2019) which also found teachers could concentrate more on students’ individual needs, strengths, characteristics, and interests.

Most students conveyed constructive feelings about their own learning through differentiated homework assignments. These students felt that they grew quite a bit academically in both reading and mathematics since the beginning of the school year. The students felt confident in their progress and could see advances being taken in the right direction. These findings somewhat contrast the study by Blonde, Dahnke, and Zusho’s findings (2019) that concluded teaching students through the aforementioned strategies had no positive or negative effects. In their study, students felt neutral and fairly unaware of the types of instruction they received (Blonde, Dahnke, and Zusho, 2019). My findings resolved that most students had constructive emotional state about their own learning irrespective of being aware of ability grouping or not.

Some results revealed that their learners receive diverse or accommodated assignments. However, they noted that most of these students’ mindfulness did not take account of knowledge of a association between ability groupings as well as different or accommodated assignments.

The effects of differentiated homework also show a discrepancy from different subject areas. Brookhart (2017) found that homework assignment and completion had a direct effect on student achievement in mathematics. "The importance of homework variables to mathematics achievement is probably best explained by learning theory and the importance of practice to mastery" (Brookhart, 2017, p. 328). For mathematics specifically, time spent on homework provides students with the additional opportunities needed to practice and reinforce skills.

Teachers also noted that differentiated homework can also improve students' study habits and time management skills. It can nurture positive character traits such as accountability and individuality for those implementation the work positively and on time. Nevertheless, there also exists the likelihood of homework leading to objectionable character traits by encouraging cheating, either through unswervingly copying someone else's homework or from getting help which moves beyond educating to someone finishing the students homework for them (Van Voorhis, 2014; Cooper & Valentine, 2018; Cooper, 2018). Various parents and educators maintain that homework may cause students to be overawed with a topic and thereby lose interest. It is also argued that homework interferes with students' ability to participate in extracurricular activities which diminishes the social learning that transpires there (Cooper, 2019).

Respondents also highlighted that differentiated homework has an instantaneous effect on the retention and understanding of the material it covers (Cooper & Valentine, 2015). Homework can permit all students to work individually and establish their understanding of a topic. Some students prefer to be more voiced in class which shows their level of appreciation, but other students prefer to remain quiet in class, and may appear to have incomplete comprehension of the subject. Consequently, through the completion of homework, teachers are able to assess the appreciation of all of their students (Van Voorhis, 2014).

Some teachers also noted that differentiated homework can be differentiated based on its "amount, skill area, determination, degree of choice for the student, accomplishment deadline, and amount of individualization as well as social context" (Harris, Robinson, & Patall, 2016, p. 1). Numerous learners learn inversely and have fluctuating academic needs; adjusting homework can assist a

child in being successful. For instance, some students may need their work broken down into different pieces for homework each night.

Summary

Other respondents noted that there are more than a few purposes that teachers wish to accomplish through differentiated homework. Principal, it can be used as practice to evaluate and reinforce concepts covered in class. It can also be used as groundwork for a forthcoming lesson. Additionally, homework can be used to provide a leeway to regulate if students can apply the skills as well as strategies they have learned to new circumstances.

CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.0 Introduction

This study was designed to determine if the effects of differentiated homework on low-performing students. The intent of this study was to investigate the best practices of teaching and learning and to get into the classroom to see what was really happening that promoted student learning. The teacher participants allowed the researcher entrance into their classrooms to look for differentiated instructional practices and to see if any of these practices had a greater impact on student achievement than others. This study addressed three specific research questions:

The overall purpose of this study was to provide answers to the following questions:

1. What are the effects of differentiated homework assignments on the academic performance of low performing students?
2. How does differentiated homework affect low performers achievement?
3. What specific strategies within differentiated homework are most effective in supporting low performers?

To answer this question, this study attempted to add to the literature base by evaluating whether any of the selected independent variables had a relationship with teachers' use of differentiated instruction. The intent was to discover those variables that most highly correlated with utilization of differentiated instruction. With this information, administration and trainers could be more successful in assisting teachers to incorporate this effective practice. In this study, three high schools and two alternative high schools were examined across academic teachers to see if any of the independent variables in question were related to implementation.

5.1 Summary of Findings

This research investigated if the effects of differentiated homework on low-performing students. To get thorough information from a rounded perspective, a mixed methods study was conducted. Through survey, the individual factors were spelled out in the item-by-item questions that make up components of differentiated instruction.

For the researcher, this study clarified the components of differentiation that enhanced both student learning and satisfaction in the classroom. The findings from this study are important as teachers plan lessons for the purpose of increasing achievement for all their students. Until it is an expectation that all students achieve, not all students will. We have to change the mind-set that there are some students for whom it is all right if they do not get it; we do not expect them to. The craft of effective teaching must be made explicit and expected. In order to increase student achievement, the focus must be on the instructional strategies occurring in the classrooms.

Instructional strategies that have been researched and proven to be effective must be expected in all of our classrooms, and accountability measures must be in place to ensure that all students do indeed show growth each year in school.

Findings from this study indicated that there were many different interpretations of differentiation, even for the teachers who attended professional development in this area. This finding solidified the idea that using a mixed method approach to data collection and interpreting the qualitative data through the philosophical and interpretive orientation of symbolic interactionism was the appropriate methodology for this study.

5.2 Conclusion

This study concluded that teachers who differentiated by the use of choice charts increased achievement in reading. Most of the students in the participating classrooms had never taken a learning styles inventory, as reported on their surveys. If they did not know what learning styles were and simply picked choices that were most interesting to them, then one would conclude that both choice and interest also affected the reading scores of these students. This fact would indicate that differentiated instruction does lead to increased student achievement in this circumstance. The concept of learning styles was also identified as a theme in the qualitative analysis of this study. Classroom observations and discussions with teachers revealed that the idea of learning styles included the components of choice and interest. According to Tomlinson and Allen (2015), differentiation is a response to a learner's needs.

Teachers can differentiate by content, process, and product, according to a student's readiness, interests, and learning profile. In the classrooms observed, the teachers and students saw learning

styles as the umbrella to differentiation. Learning styles were accommodated by offering the students choices that were interesting to them. Interviews and observations concluded that the concept of learning styles was used as a choice in product and processes within these classrooms on a frequent basis.

Accommodating instruction to match a student's learning style has been a researched method in increasing student achievement. The findings of are consistent with the findings in Chapter IV. Students who reported differentiation for learning styles had increased achievement in reading. Also discovered through the qualitative analysis was that choice, interest, and learning styles all had an impact on the students' interests and motivation in class.

Question 2: How does differentiated homework affect low performers achievement?

Results from this study indicated that there were components of differentiation that led to lower student achievement than others. However, it became increasingly evident through the qualitative analysis that these components were not so easily distinguishable. The teachers interchanged the terms learning styles, choice, and interest during their interviews.

The variables that were found to have the greatest impact on student achievement were choice, interest, learning styles, and pre-assessment, both formal and informal. Student survey results indicated moderate forms of pre-assessments occurring. Through classroom observations and teacher interviews, it became clear that the ongoing informal assessments truly directed the instruction in these classrooms. Informal types of pre-assessments were more than likely not recognized by the students.

5.3 Implications for Practice

Practitioners need to understand the components of differentiation in order to design lessons around students' needs. Although some educational consultants are trying to coin differentiation as strategy in itself, it is not. Differentiation is a framework used to implement the best practices in teaching and learning that already exist and have been researched to be effective. Teachers

should not receive training in differentiation that does not make it clear that differentiation is based on the current, best practices in education. It is no wonder that educators feel overwhelmed with professional development. It is difficult to understand how these strategies all tie together.

Far too often professional development teaches the differentiation variables in isolation of one another, such as learning styles, brain-compatible classrooms, and multiple intelligences. Differentiation training allows the teachers to see how these all fit together and complement each other into one package. Therefore, differentiated instruction is a process, not an instructional strategy itself.

Perhaps the most important component of differentiation is the one that has received the least amount of attention. Results from this study confirmed the importance of using pre-assessments, both formal and informal, to plan for instruction. Pre-assessment may seem too simple a concept in which to provide training, but when connected to differentiation, it becomes the foundation of an effective classroom, and its importance cannot be overlooked. Effective classroom planning occurs through pre-assessment data- gathering techniques.

Results from this study indicated that choice was the easiest and most effective way for teachers to begin differentiation. For teachers new to differentiation, choice would be a great starting point, because it is manageable and easy to implement. However, pre-assessment data are needed to properly create the choices unique to the students in a particular classroom.

This study found that teachers used pre-assessment techniques frequently, but only few teachers created tiered lessons to accommodate low, middle, and high achievers. Tiered lessons are a higher level of differentiation that require more time and training. To develop differentiated lessons that truly accommodate the differences in readiness levels, ongoing training in flexible grouping and tiered lesson design are needed. Differentiation takes time and support to implement. Teachers

must be given both administrative support and time to implement all of these strategies effectively in their classrooms.

Teachers must become savvy to the differences in students' academic levels, cultures, and interests to become responsive to students' needs. Pre-assessment techniques can advise the teacher of the differences with which the students enter the classroom, but in order to differentiate instruction, the teacher must understand and apply best practices in the classroom. One may ask why best practices have been researched but not implemented. Part of the problem is creating a manageable way to structure a classroom.

The complexity of what actually goes into preparing a lesson and what happens in the classroom as the lesson is delivered is difficult to understand, especially for someone outside of education. There is no prescribed way to teach, and it is customary for the teachers to decide how to do things within their own classroom, as well as they can, without consulting with fellow teachers and administrators. This is in drastic contrast with other professions, where best practices are discussed and practiced routinely as a team. Physicians, for example, stay current by attending seminars and work in teams to update best procedures. Not many patients would choose to see a physician who just wanted to do things the old way, knowing that a better procedure exists. Should classrooms be any different? Yet in classrooms right next door to each other, drastically different approaches to instruction are occurring, even though research tells us there is a

In conclusion, differentiation is a framework that can be used to intentionally build a lesson using best practice. Since differentiation involves student pre-assessment data, no two classrooms would be exactly the same, although the framework could be. The conceptual framework is a generic overview of differentiation, but for teachers who want to differentiate, it is not easy to follow. A simplified version, using results from this study, has been created as a means for teachers to follow when beginning differentiation.

Summary

The chapter concluded that the motivation and achievement of student should be given more attention by the teachers at school. Lack of student's motivation can affect the attention of students and finally reduce their performance and achievement. The right teaching approach should be implemented in order to encourage students exploring the knowledge and built self-confidence in solving the problems. In overall, Differentiated Instruction approach has positive impact on students. The results showed that the gifted student's motivation improved with differentiated instruction. Students have the rights to explore the knowledge and sharing the idea with the facts. As a result, the motivation and achievement of student has increased. In addition, the activity is one of the elements in differentiated instruction approach.

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APPENDICES APPENDIX 1: REQUEST LETTER TO CARRY OUT A RESEARCH

P Bag 1020
BINDURA
ZIMBABWE

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

SAMED


BINDURA UNIVERSITY OF SCIENCE EDUCATION

Date: _____

TO WHOM IT MAY CONCERN

NAME: NYANDORO N. Y REGISTRATION NUMBER: B 1440366

PROGRAMME: HBScEd MT 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 Bachelor of Science Education programme. The research topic is: differentiated homeworks : effects on low performers

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.

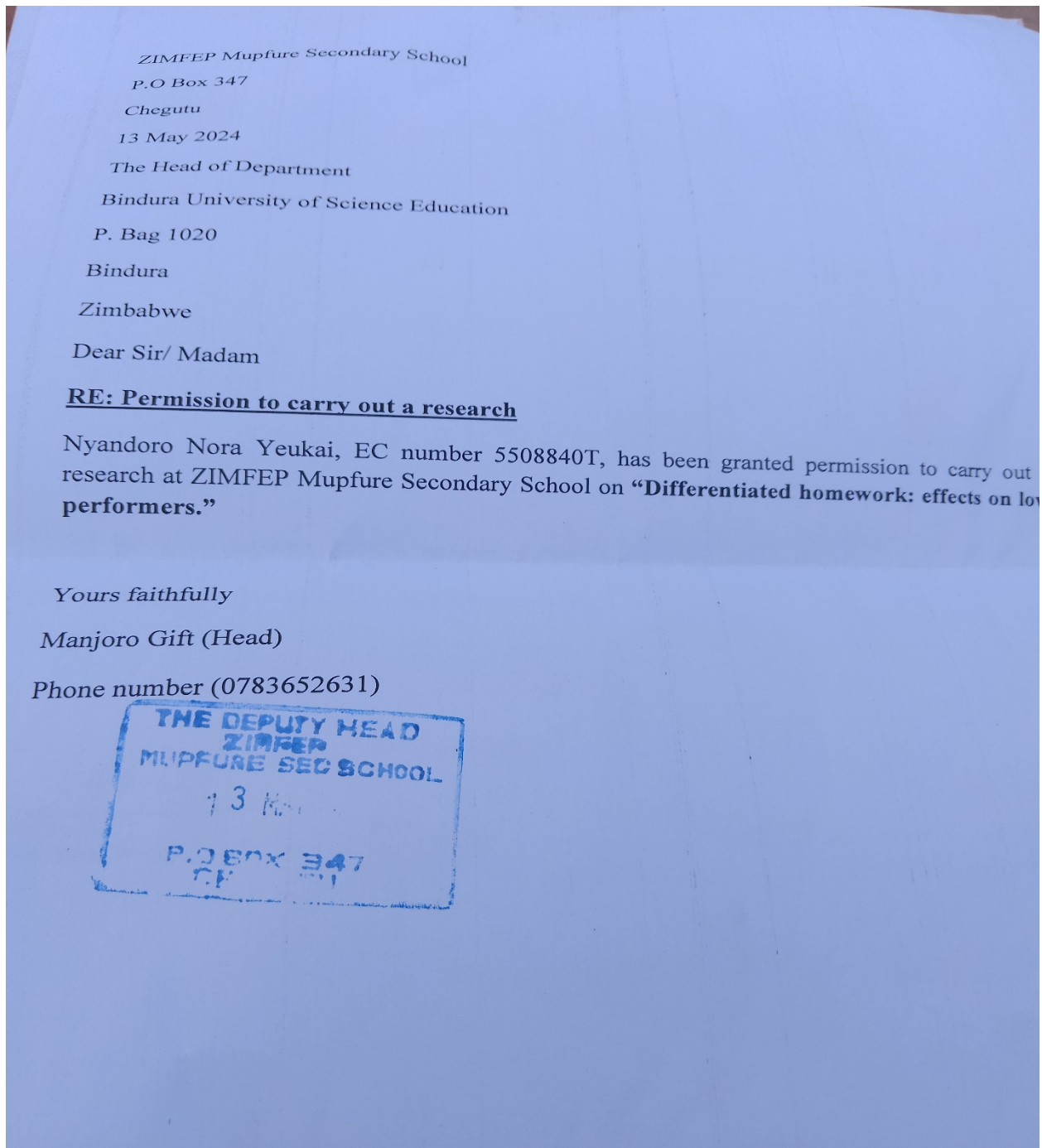
Thank you


Z. Ndemo (Dr.)
CHAIRPERSON - SAMED


9 APR 2024
P. BAG 1020
BINDURA


10 MAY 2024
CHEGUTU DISTRICT
P.O. BOX 373, CHEGUTU
TEL: 068 215 2328/068 215 2871-2

APPENDIX 2: PERMISSION FROM THE SCHOOL HEAD TO CARRY OUT A RESEARCH



APPENDIX 3: QUESTIONNAIRE FOR LEARNERS

The researcher Nora Yeukai Nyandoro is a student at Bindura University of Science Education and is conducting a research on differentiated homework: effects on low performers. Note that the information will be confidential and will remain anonymous.

Instructions for completing questionnaire

- Do not write your name on the questionnaire

Section A

Gender: Female ☐ Male ☐

AGE: 14-16 ☐ 17-19 ☐ 20 and above ☐

Section B

1. Do you receive differentiated homework assignments?
2. How often do you receive differentiated assignments?.....
3. How do you feel about receiving differentiated homework?.....
4. Do you think differentiated homework assignments have improved your understanding of the material?
5. Do you believe differentiated homework assignments have positively affected your academic performance?
6. What percentage of your homework assignment do you complete?
7. How often do you seek additional help when completing differentiated homework assignment?

8. Have you noticed any improvement in your grades?
9. Do you prefer having homework assignments tailored to your needs?
10. Do you believe that differentiated homework assignments are more beneficial than traditional homework assignments?
11. How often do you communicate with your teacher regarding your differentiated homework assignments?
12. Do you feel adequately supported by your teacher in completing differentiated homework assignments?
13. Is there anything you would suggest to enhance the effectiveness of differentiated homework assignments for low-performing students?
.....
.....

APPENDIX 4: INTERVIEW GUIDE FOR TEACHERS

The researcher Nora Yeukai Nyandoro is a student at Bindura University of Science Education and is conducting a research on differentiated homework: effects on low performers. Note that the information will be confidential and will remain anonymous

1. How would you define differentiated homework and what is its purpose in the context of supporting low-performing students?
2. In what ways do you think differentiated homework assignments can benefit low performing students compared to traditional homework?
3. How do you adapt differentiated homework assignments to meet the specific needs of low-performing students?
4. What strategies do you employ to identify the specific needs and learning styles of low-performing students in order to tailor homework assignments to their individual requirements?
5. How do you ensure that the differentiated assignments are challenging enough to promote growth but not overwhelming for low-performing students?
6. How do differentiated homework assignments contribute to increasing the motivation and participation of low-performing students?
7. Can you share any specific instances where differentiated homework assignments have positively influenced the academic performance of low-performing students?

