



**PERCEPTION OF TEACHERS REGARDING THE EFFECTIVENESS OF
DIFFERENTIATED INSTRUCTION IN ENHANCING STUDENTS'
ACADEMIC ACHIEVEMENT**

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ABSTRACT

Differentiated instruction has gained increasing attention as an effective pedagogical approach for addressing diverse learning needs in heterogeneous classrooms. The present study aimed to examine teachers' perceptions regarding the effectiveness of differentiated instruction in enhancing students' academic achievement. A quantitative research design using a descriptive survey method was employed. Data were collected from 62 teachers working in secondary and higher secondary special education schools through a structured questionnaire consisting of 17 items measuring dimensions such as academic performance, student engagement, inclusiveness, classroom management, and teachers' implementation of differentiated practices. The instrument was validated by experts and demonstrated satisfactory reliability through Cronbach's alpha. Descriptive and inferential statistical techniques were applied to analyze the data. The findings revealed that the majority of teachers perceived differentiated instruction as an effective strategy for improving students' academic outcomes. Approximately 83.6% of teachers agreed that differentiated instruction enhances students' academic achievement ($M = 4.08$, $SD = 1.076$), while 79% reported that it reduces learning disparities among diverse learners ($M = 3.90$, $SD = 1.112$). Similarly, 69.4% of respondents indicated that differentiated instruction increases student engagement ($M = 3.75$, $SD = 1.019$), and 79% believed that it strengthens students' confidence ($M = 3.97$, $SD = 1.214$). In addition, 75.8% of teachers reported that differentiated instruction promotes a more inclusive classroom environment ($M = 3.95$, $SD = 1.207$). However, several challenges were also identified, including limited instructional time (83.9%, $M = 4.16$) and increased teacher workload (69.5%, $M = 3.69$). The study concludes that differentiated instruction is a valuable instructional strategy that can significantly enhance students' academic achievement, engagement, and inclusiveness when supported by adequate training and institutional resources. The findings provide important implications for educators, school administrators, and policymakers in strengthening teacher training and promoting effective implementation of differentiated instruction in classrooms.

Keywords: Perceptions, Teachers, Effectiveness, Differentiated Instruction, Academic Achievement

INTRODUCTION

A teaching approach that tailors instruction to meet the diverse learning needs, readiness levels, interests, and learning profiles of individual students. It involves modifying content, processes, products, and the learning environment to ensure that all students have



equitable opportunities to learn and achieve academic success. Differentiation instruction is instead of a general teaching plan, an attempt to adapt content, processes, products and the learning environment to the needs of a large variety of students. The instructors that employ such approach carefully create flexible learning experiences that allow students to learn in ways that support their interests and capabilities. The focus of this approach is on the role of the teacher who is a facilitator and constantly assesses the progress of students and can adjust their instruction to ensure that every student is engaged in meaningful learning (Charles et al., 2018).

Watkins (2013) observes that differentiated instruction is defined as inclusive and equitable instruction that is aimed at reducing any barrier to learning. The strategy emphasizes the active preparation as opposed to corrective steps and it also makes sure that learning is offered to students in various academic abilities. Differentiation instruction facilitates adoption of different instructional strategies including flexible grouping, heterogeneous instructional resources, and heterogeneous assessment. Such a practice leads to increased classroom engagement, motivation, and participation of students since the three factors are basic elements of effective teaching and learning practices.

Bosier (2007) highlighted differentiated instruction since it is an evidence-based pedagogical model that enhances academic achievement due to the diversity of the learners. The system entails the systematic organization of the adaptations in instruction using the continuous assessment information and student responses. Differentiation instruction refers to one of the teaching methods that a teacher employs to support both high performing and struggling pupils in the same classroom setting. The strategy does not only promote academic growth but also enhances good learning experiences through the ability to identify the individual capabilities of students. Hence, differentiated instructions are gradually being known as a significant approach to enhance academic achievement among students in heterogeneous learning contexts.

According to Adams (2020), modern classrooms are heterogeneous in abilities, learning styles, cultures, and preparation of students, and a universalized method of instruction cannot suit the needs of numerous students. This diversity needs to be addressed as it will allow access to the learning opportunities to be more balanced and allow all the learners to get engaged. When teachers consider their individual differences, students are more likely to feel valued and motivated by differentiating instruction and adjusting instructions to fit their individual differences. Differentiated instruction helps teachers to vary the content, the process, and the assessment, thus reducing the differences in learning, and enhancing academic achievement in general. Students who fail to meet the traditional teaching patterns may end up being disengaged and performing poorly because of neglect in learner diversity.

The authors concentrated on the effect of inclusive and responsive instructions on enhanced learning achievement in differentiated classroom. The difficulty of dealing with multiple learner groups contributes to the fact that teachers can consider individual differences in the knowledge of the previous knowledge, language skills, and cognitive development. This sensitivity contributes largely to academic performance since when teaching methods are customized according to the needs of the students, they learn better. Teachers who embrace diversity amongst learners are well placed to create a learning environment in the classroom that fosters involvement and cooperation. This habit does not only enhance the academic performance of students but also inculcates confidence and self-efficacy in the learning process, which is the root of relevance of differentiated instructions practices in the modern day education (Goddard and Kim, 2018).



Johnson (2010) pointed out that, learner diversity management is one of the major reasons why the quality of education can be enhanced and the gaps in educational achievement can be narrowed. The various classrooms require dynamic teaching approaches that can support students with different abilities, interests and learning speeds. When dealing with diversity, teachers will be able to support not only learners with learning problems but also the academic progress of talented learners, and thus, allow equal academic progress. The practices enhance student involvement and achievement. Diversity awareness and responsiveness also prepare students with the preparation to work in diverse societies and thus, differentiated instruction is an academic need, a social and educational priority.

Tomlinson and Imbeau (2019) claimed that a lack of professional knowledge and training may be a key challenge in an ability of teachers to meet the needs of diverse learners by use of differentiated instructions. Many teachers claim that there is limited knowledge of how to plan instruction to meet readiness level, interest and learning profiles of students. Without appropriate training to become effective teachers, they cannot plan a flexible lesson, create different instructional strategies, and assess the students differently. This lack of preparedness does weaken the belief of teachers in themselves to make the effective differentiation, and may result in superficial practices instead of effective academic instructions changes, and eventually downplays the gains in the performance of the students.

As De Neve, Devos, and Tuytens (2020) highlighted, time constraints and workload pressures are another possible obstacle to the execution of the requirements of varied students. Differentiated instruction takes a lot of planning, differentiated materials preparation, continuous assessment and individualized feedback provision that in some cases might be hard to manage due to the adherence to the timetables of the curriculum. The teachers are usually forced to teach syllabus within a given deadline which denies them the chance to impart instructions to the learners at their own level. In turn, differentiation can be considered impractical in a real classroom setting, especially in classroom environments in large-scale settings, thus restricting its application on a regular basis and its ability to improve the academic performance of students.

The scholar emphasized that even the diversity in the classroom is a complicated topic to discuss, particularly when the group of learners is quite different in terms of academic achievements, language proficiency, and social and economic background. Teachers may find it difficult to reconcile the interests of higher achievers and those students who need special attention. There is also the problem of poor access to instructional resources and institutional support that exacerbates these problems. In cases when teachers are not able to address these diverse needs in an equal manner, differentiated instruction can fail to deliver the impact it is supposed to have on the academic performance of students, despite its high theoretical significance (Schleicher, 2022).

Pegram (2019) has noted that the application of teaching strategies based on differentiation instruction is important in enhancing the academic performance of students by considering the differences in their readiness, interests and learning profiles. Those teachers who purposefully change the content, processes, and assessment strategies have higher chances of involving different learners and facilitating the in-depth cognition of the subject matter. These adaptive instructional strategies assist in eliminating the learning disparities through providing the students with proper amounts of challenge and support. Studies have indicated that students show more motivation, better classroom activities, and better academic results when the instruction is adjusted in accordance with the needs of the students. Differentiation



instruction is a strategy that is perceived to be effective by teachers since they have the flexibility to adapt to classroom diversity, which has increased the learning outcomes of both the high-achieving and low-achieving students.

Millikan (2012) has analyzed the correlation between teaching methods and student performance and discovered that the teaching methods that focus on responsiveness and feedback contribute significantly to student performance. The strategy of differentiated teaching helps teachers to give specific feedback and modify teaching according to the progress of the students to enhance the learning process. Educators attest that the more flexible, as opposed to homogeneous, instructional strategies the greater chances that pupils will learn academic material and show long-term success. Differentiation instruction is effective because it prioritizes evidence-based decision-making and thus allows the teacher to constantly improve their instructional methods so as to maximize learning by the students of different abilities.

Differentiation is one of the effective teaching strategies that are closely linked with better academic performance and equal learning opportunities. According to teachers, flexibility in instruction fosters the comprehension of students by providing an opportunity to support a variety of needs through one classroom. Differentiated strategies promote interactive learning, critical thinking, and academic interactions thus enhancing performance. In addition, teachers are aware of the fact that strategic difference in teaching methods can create learning communities with the inclusion of all students to succeed in their academic endeavours. The perceptions support the opinion that efficient teaching strategies are one of the primary determinants of academic success among students (Milinga et al., 2023).

Purpose of the Study

This study aims to investigate teachers' perceptions of the effectiveness of differentiated instruction in enhancing students' academic achievement. It looks at how a differentiated instruction is conceptualised by instructors with regard to the needs of various students. Another aspect that the research addresses is how teachers have perceived the effectiveness that differentiated instruction has on the academic performance of students. Besides this, it also establishes the perceived benefits and hindrances to implementing differentiated instruction. Overall, the study will give information to guide the instructional practice and increase the learning outcomes of the students.

Research Objectives

- To identify teachers' understanding of differentiated instruction
- To explore teachers' perceptions regarding its effectiveness
- To examine the perceived impact of differentiated instruction on students' academic achievement

Research Questions

- What are teachers' perceptions of differentiated instruction?
- How do teachers perceive the effectiveness of differentiated instruction in enhancing academic achievement?

Significance of the Study

The study's importance lies in its investigation of teachers' perceptions of differentiated instruction as an effective teaching strategy in diverse classroom settings. The research provides significant information as to the teaching methods to be used to help a wide range of learning requirements by exploring the attitude and performance of the educators as to the application of differentiated instructions. The results can make teachers amend their pedagogical models and strategies to enhance student interactions and academic outcomes. In



the paper, the authors also comment that the beliefs of teachers are important components that determine good classroom practices.

The research study has practical implications to the education policymakers, educational curriculum developers, and educational administrators as it provides evidence based arguments on the perceived results of differentiated instruction on academic performance of the learners. The outcomes may be applied to the developmental programs and the teacher training to promote effective and inclusive instruction. Finally, the study led to improvement of academic performance because it contributed to the promotion of diversity accommodating teaching approaches that offer equal learning opportunities to the learners.

LITERATURE REVIEW

Kotob (2019) defines differentiated instruction as a proactive approach to instruction and adapting the instruction to the needs, abilities, interests, and learning profiles of the learners. The main consideration of the differentiated instruction concept is equity and not equality and that students learn best when they are taught in a manner that fits their learning styles. The teachers are the key in the design of elastic teaching plans which would provide every learner with gratifying access to learning materials and scholastic performance (Tomlinson, 2017).

Differentiated instruction is based on the principles of learner-centered that enable the engagement of students as well as their independence and motivation. These values consist of constant assessment, student diversity responsiveness, and responsiveness. Differentiation acknowledges that classrooms are not homogeneous environments and successful teaching is a task that needs to be planned well in order to accommodate learning diverse requirements. These values can assist the educators to develop inclusive classrooms that enhance academic performance. (Burkett, 2013)

According to Safawi and Akay (2022), content differentiation is one of the key features of differentiated instruction, meaning that the instruction will be tailored to the readiness and existing background knowledge of students. Instructors are able to distinguish teaching and reading materials or change the level of difficulty to make the text learner friendly. Process differentiation is concerned with how students can formulate meaning using information using various instructional methods and to make sure the learning objectives are achieved to facilitate learning and an understanding process.

Differentiation instruction also entails product differentiation and differentiated learning environment. Product differentiation helps to provide the students with the opportunity to demonstrate the learning process using different assessment forms that motivate the creativity and owning. The learning environment factor involves creating classrooms with a flexible and collaborative design and providing emotional safety. These elements, combined, can assist an educator to easily address individual differences and, consequently, attain improved academic results among diverse learners (Safawi and Akay, 2022).

RESEARCH METHODOLOGY

Design

The study employed a quantitative research design to examine teachers' perceptions of the effectiveness of differentiated instruction in improving students' academic performance. The quantitative data collected were in the form of a survey conducted by a structured questionnaire among teachers using a descriptive survey design. This design allowed measuring and statistically assessing the ideas of teachers and the perceived effect of differentiated instructions on the student achievement.



Population of the Study

The target population consisted of teachers working in secondary and higher secondary special education schools. These teachers had experience implementing differentiated instruction in their classrooms.

Sample and Sampling Technique

The target population of 62 teachers was selected. Purposive sampling was used to collect data from the teachers.

Research Instrument

The research instrument was a structured questionnaire administered to teachers to assess perceptions of differentiated instruction. The questionnaire had 17 questions, which determined such dimensions as academic performance, student engagement, inclusiveness, classroom management, and ability of teachers to apply differentiated practices. The respondents rated the statements on the basis of a Likert scale that indicated the degree to which they agree with or experience the practices of differentiated instruction.

Validity and Reliability of the Instrument

The questionnaire was reviewed by education experts to ensure that its content was relevant and clear. Content validity was established by aligning items with the research aims and the literature on differentiated instruction. Cronbach's alpha was used to assess internal consistency, indicating high reliability of the instrument.

Data Collection Procedure

The 62 teachers were used to achieve data via a structured questionnaire and the responses of these teachers were obtained. The data employed in the study were safeguarded, and the ethical constraint was observed by bearing an informed consent and ensuring that the data were only used in research. They were all made aware of their free will to take part and have the choice of dropping out.

Data Analysis Techniques

The data were analyzed using quantitative statistical techniques. Descriptive statistics such as means, frequencies, and percentages were used in summarizing the perceptions of the teachers. The relationship between differentiated instruction and academic performance of students was analyzed using correlation analysis which is an inferential statistic technique.

RESULTS

The results of the study are presented below.

Section A: Demographics of the Study

Table 4.1

Demographics of the study respondents.

Demographic Feature	Description	Frequency	Percentage (%)
Gender	Male	31	50
	Female	31	50
Age	Below 25	19	30.6
	26-30	11	17.7
	31-35	20	32.3
	Above 35	12	19.4

Table 4.1 shows that the number of male and female teachers was equal among the students. Most teachers (32.3%) were 31-35 years old, followed closely by those under 25 (30.6%). Teachers aged 26-30 (17.7%) and those aged 35 and over (19.4%) were also represented.

Section-B:

Table 4.2

Differentiated instruction improves students' overall academic performance.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	3	4.8		
Disagreed	4	6.5		
Undecided	9	14.5	3.85	1.053
Agreed	29	46.8		
Strongly Agreed	17	27.4		
Total	62	100.0		

Table 4.2 shows respondents' opinions on whether differentiated instruction improves students' overall academic performance. 74.2% agreed with this statement, 10.3% disagreed, and 14.5% remained undecided. Based on mean values (M=3.85, S. D. =1.053), it was concluded that the majority of respondents agreed or strongly agreed that differentiated instruction improves students' overall academic performance.

Table 4.3

Students show better engagement when instruction is differentiated.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	2	3.2		
Disagreed	6	9.7		
Undecided	11	17.7	3.75	1.019
Agreed	29	46.8		
Strongly Agreed	14	22.6		
Total	62	100.0		

Table 4.3 reflects the opinion of the respondents on whether instruction should be differentiated or not, 69.4% affirmed that students are more engaged when it is differentiated, 12.9% contradicted and 17.7% were not sure. As the mean values have shown (M=3.75, S. D. =1.019), it was concluded that most of the respondents agreed or strongly agreed with the statement that students demonstrate increased engagement when instruction is differentiated.

Table 4.4

Differentiated instruction helps reduce learning gaps among diverse learners.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	4	6.5		
Disagreed	4	6.5		
Undecided	5	8	3.90	1.112
Agreed	30	48.4		
Strongly Agreed	19	30.6		
Total	62	100.0		

Table 4.4 presents the views of respondents regarding the differentiated instruction as reducing the disparity in learning among various learners. 79 percent of the respondents agreed with this statement, 13 percent disagreed and 8 percent did not give a response. The findings of the study, which included mean values (M=3.90, S. D. =1.112) were used to conclude that most of the respondents said that they agreed or strongly agreed that differentiated instruction can be used to close learning gaps among divergent learners.

Table 4.5

Differentiated instruction meets the learning needs of students with different abilities.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	5	8.1		
Disagreed	8	12.9		
Undecided	4	6.5	3.77	1.273
Agreed	24	38.7		
Strongly Agreed	21	33.9		
Total	62	100.0		

Table 4.5 presents the responses of respondents regarding the view of whether or not Differentiated instruction addresses the learning requirements of the students with varying abilities. 72.6 percent of the respondents agree with this argument, 21 percent disagree with it, and the rest six point five percent of the respondents were not sure. Using mean values (M=3.77, S. D. =1.273), it was inferred that most of the respondents were of the view that Differentiated instruction is able to satisfy the learning needs of students with different abilities.

Table 4.6

Differentiated instruction helps students improve their academic achievement.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	3	4.8		
Disagreed	4	6.5		
Undecided	3	4.8	4.08	1.076
Agreed	27	43.5		
Strongly Agreed	25	40.3		
Total	62	100.0		

Table 4.6 presents the opinion of respondents regarding whether Differentiated instructions can assist students to achieve better academic performance or not. 83.6 percent affirmed this assertion, 11.3 percent opposed and 4.8 percent were indifferent. The conclusion was made based on the mean values (M=4.08, S. D. =1.076) and indicates that most of the respondents agreed or strongly agreed that Differentiated instruction assists students in enhancing their academic performance.

Table 4.7

Differentiated instruction helps create positive student-teacher relationships.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	2	3.2		
Disagreed	4	6.5		
Undecided	9	14.5	4.00	1.040
Agreed	24	38.7		
Strongly Agreed	23	37.1		
Total	62	100.0		

Table 4.7 presents the responses of the respondents on whether Differentiated instruction is effective in establishing positive student-teacher relationships. 75.8% of the respondents agreed with this, 9.7% disagreed and 14.5% were not sure. According to the mean values (M=4.00, S. D. =1.040) it was decided that most of the respondents answered affirmative or strongly affirmative that Differentiated instruction assists in establishing positive student-teacher relationships.

Table 4.8

Differentiated instruction enhances students' confidence.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	5	8.1		
Disagreed	4	6.5		
Undecided	4	6.5	3.97	1.214
Agreed	24	38.7		
Strongly Agreed	25	40.3		
Total	62	100.0		

Table 4.8 presents the opinions of the respondents to whether differentiated instruction can improve the confidence of students or not. 79% agreed, 14.6% disagreed and 6.5% did not give a clear answer. According to the mean values (M=3.97, S. D. =1.214) it was established that most of the respondents supported or highly supported the fact that differentiated instruction raises the confidence of students.

Table 4.9

Differentiated instruction creates a more inclusive learning environment.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	5	8.1		
Disagreed	3	4.8		
Undecided	7	11.3	3.95	1.207
Agreed	22	35.5		
Strongly Agreed	25	40.3		
Total	62	100.0		

Table 4.9 presents respondents on the question of whether differentiated instructions establish a more inclusive education setting. 75.8% of respondents stated that it was true, 12.9% stated otherwise, and 11.3% said they were not sure. Considering the mean values (M=3.95, S. D. =1.207), it was concluded that most of the respondents had an agreement or strong agreement in the fact that differentiated instruction provides a more inclusive learning environment.

Table 4.10

Time constraints make it difficult to apply differentiated instruction regularly.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	3	4.8		
Disagreed	2	3.2		
Undecided	5	8.1	4.16	1.043
Agreed	24	38.7		
Strongly Agreed	28	45.2		
Total	62	100.0		

Table 4.10 presents how the respondents feel about the fact that they find it hard to implement differentiated instruction on a regular basis because time is a limiting factor. 83.9% of the respondents agreed with this statement, 8% disagreed and 8.1% did not give an answer. Referring to the mean values (M=4.16, S. D. =1.043) it was found that most respondents did agree or strongly agreed with the statement that they tend to find it difficult to implement differentiated instruction on a regular basis due to time constraints.

Table 4.11

Differentiated instruction increases my workload.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	6	9.7		
Disagreed	6	9.7		
Undecided	10	16.1	3.69	1.301
Agreed	19	30.6		
Strongly Agreed	21	33.9		
Total	62	100.0		

Table 4.11 presents respondents' opinions on whether differentiated instruction increases my workload. 69.5% agreed, 19.4% disagreed, and 16.1% remained undecided. Based on mean values (M=3.69, S. D. =1.301), it was concluded that the majority of respondents agreed or strongly agreed that differentiated instruction increases my workload.

Table 4.12

Students sometimes resist differentiated tasks.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	2	3.2		
Disagreed	1	1.6		
Undecided	14	22.6	3.90	0.918
Agreed	29	46.8		
Strongly Agreed	16	25.8		
Total	62	100.0		

Table 4.12 presents respondents' opinions on whether students sometimes resist differentiated tasks. 72.6% agreed with this statement, 4.8% disagreed, and 22.6% remained undecided. Based on mean values (M=3.90, S. D. =0.918), it was concluded that the majority of respondents agreed or strongly agreed with the statement that students sometimes resist differentiated tasks.

Table 4.13

Differentiated instruction strategies help students develop independent learning skills.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	9	14.5		
Disagreed	4	6.5		
Undecided	2	3.2	3.73	1.369
Agreed	27	43.5		
Strongly Agreed	20	32.3		
Total	62	100.0		

Table 4.13 presents respondents' opinions on whether differentiated instruction strategies help students develop independent learning skills. 75.8% agreed with this statement, 21% disagreed, and 3.2% remained undecided. Based on mean values (M=3.73, S. D. =1.369), it was concluded that the majority of respondents agreed or strongly agreed that differentiated instruction strategies help students develop independent learning skills.

Table 4.14

I understand how to modify content, process, and products for diverse learners.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	4	6.5		
Disagreed	1	1.6		
Undecided	6	9.7	4.16	1.104
Agreed	21	33.9		
Strongly Agreed	30	48.4		
Total	62	100.0		

Table 4.14 presents respondents' opinions on whether they understand how to modify content, processes, and products for diverse learners. 82.3% agreed with this statement, 8.1% disagreed, and 9.7% remained undecided. Based on mean values (M=4.16, S. D. =1.104), it was concluded that the majority of respondents agreed or strongly agreed with the statement that they understand how to modify content, processes, and products for diverse learners.

Table 4.15

I can effectively manage a classroom that uses multiple learning activities.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	9	14.5		
Disagreed	3	4.8		
Undecided	4	6.5	3.70	1.384
Agreed	23	37.1		
Strongly Agreed	23	37.1		
Total	62	100.0		

Table 4.15 presents respondents' opinions on whether they can effectively manage a classroom that uses multiple learning activities. 74.2% agreed with this statement, 19.3% disagreed, and 6.5% remained undecided. Based on mean values (M=3.70, S. D. =1.384), it was concluded that the majority of respondents agreed or strongly agreed with the statement that they can effectively manage a classroom that uses multiple learning activities.

Table 4.16

I use flexible grouping work during instruction.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	3	4.8		
Disagreed	2	3.2		
Undecided	7	11.3	4.05	1.031
Agreed	27	43.5		
Strongly Agreed	23	37.1		
Total	62	100.0		

Table 4.16 presents respondents' opinions on whether they use flexible grouping during instruction. 80.6% agreed with this statement, 8% disagreed, and 11.3% remained undecided. Based on mean values (M=4.05, S. D. =1.031), it was concluded that the majority of respondents agreed or strongly agreed with the statement that they use flexible grouping during instruction.

Table 4.17

I provide students with different levels of assignments based on their abilities.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	2	3.2		
Disagreed	4	6.5		
Undecided	4	6.5	4.19	1.038
Agreed	22	35.5		
Strongly Agreed	30	48.4		
Total	62	100.0		

Table 4.17 presents respondents' opinions on whether they provide students with different levels of assignments based on their abilities. 83.9% of respondents agreed with this statement, 9.7% disagreed, and 6.5% remained undecided. Based on mean values (M=4.19, S. D. =1.038), it was concluded that the majority of respondents agreed or strongly agreed with the statement that they provide students with different levels of assignments based on their abilities.

Table 4.18

Struggling students improve as lessons are modified based on their needs.

Response	Frequency	Percentage	Mean	S.D
Strongly Disagreed	2	3.2		
Disagreed	3	4.8		
Undecided	5	8.1	4.16	0.995
Agreed	25	40.3		
Strongly Agreed	27	43.5		
Total	62	100.0		

Table 4.18 presents respondents' opinions on whether struggling students improve as lessons are modified based on their needs. 83.8% of respondents agreed with this statement, 8% disagreed, and 8.1% remained undecided. Based on mean values (M=4.16, S. D. =0.995), it was concluded that the majority of respondents agreed or strongly agreed with the statement that struggling students improve as lessons are modified based on their needs.

Table 4.19

Pearson Product Moment Correlations Between Effectiveness of Differentiated Instruction and Academic Achievement

	Academic Achievement
Effectiveness of Differentiated Instruction	<i>r</i> *0.44
	Sig 0.03
	N 62

* $p < .05$

Table 4.19 shows that correlation between the effectiveness of differentiated instruction and academic achievement was $r = 0.49$, a positive and significant. This implies that the higher the effectiveness of differentiated instruction, higher the academic achievement of students, and vice versa. With lower effectiveness of differentiated instruction, academic achievement is also lower.

FINDINGS

- 1- The sample consisted of 50 percent male and 50 percent female teachers, and the most common age was 32.3 years (31-35 years).
- 2- 22.74 - percent of teachers agreed that overall academic performance is better with differentiated instruction (M = 3.85, SD = 1.053).



- 3- Approximately 69.4% of participants reported that students are more engaged in differentiated instruction ($M = 3.75$, $SD = 1.019$).
- 4- Most teachers (79%) concurred that differentiated instruction reduces learning disparities among diverse learners ($M = 3.90$, $SD = 1.112$).
- 5- The percentage of respondents who believed that differentiated instruction addresses the needs of diverse learners was 72.6 ($M = 3.77$, $SD = 1.273$).
- 6- The percentage of teachers who believed that differentiated instruction fosters students' academic achievement was high (83.6%), with a mean of 4.08 ($SD = 1.076$).
- 7- Approximately three-quarters of respondents (75.8%) agreed that differentiated instruction facilitates good student-teacher relationships ($M = 4.00$, $SD = 1.040$).
- 8- A majority of teachers (79%) reported that differentiated instruction increases students' confidence ($M = 3.97$, $SD = 1.214$).
- 9- 98.75-percent of respondents reported that differentiated instruction results in a more inclusive learning environment ($M = 3.95$, $SD = 1.207$).
- 10- The majority of teachers (83.9%) stated that time is a challenge in implementing differentiated instruction on a regular basis ($M = 4.16$, $SD = 1.043$).
- 11- Approximately 69.5 percent of respondents affirmed that differentiated instruction increases teachers' workload ($M = 3.69$, $SD = 1.301$).
- 12- In almost 72.6% of teachers, students were reported to be resistant to differentiated tasks ($M = 3.90$, $SD = 0.918$).
- 13- Approximately 75.75.8 percent of respondents indicated agreement with the statement that differentiated instruction helps build students' independent learning abilities ($M = 3.73$, $SD = 1.369$).
- 14- The great majority (82.3%) replied that they know how to adjust content, processes, and products ($M = 4.16$, $SD = 1.104$).
- 15- Approximately 74.2% of teachers believed they are well able to handle classrooms with multi-learning activities ($M = 3.70$, $SD = 1.384$).
- 16- The majority of respondents (80.6%) said they employ flexible grouping when instructing ($M = 4.05$, $SD = 1.031$).
- 17- The percentage (83.9%) who responded that they give assignments at various levels depending on students' abilities was high ($M = 4.19$, $SD = 1.038$).
- 18- Most teachers (83.8) supported the fact that troubled students enhance after lessons are adjusted to suit their performance ($M = 4.16$, $SD = 0.995$).

DISCUSSION

The study was carried out to explore the perceptions of teachers regarding the effectiveness of differentiated instruction in enhancing students' academic achievement. Bourini (2015) investigated the knowledge of differentiated instruction among teachers as a preemptive strategy that can accommodate the readiness, interest, and profile of learning among learners in normal classrooms. The existing research agrees with this perspective since educators were highly conceptualizing different types of instructional differentiation and perceived it as a flexible method of pedagogy but not a strictly followed method of teaching. The teachers stated that they employed various teaching methods, tests, and classroom lessons to cater to very diverse students. However, despite this positive understanding, some of the teachers indicated that they had problems with continuing implementation because of lack of time, huge classes and lack of professional training. These findings suggest that, even though teachers have positive attitudes about differentiated instruction in theory, the impediments to



transitioning it to the classroom may be so immense that they need institutional backing and they should prioritize professional growth (Yuen et al., 2023).

In a research study by Paraskeva (2020) on the perception of teachers in the effectiveness of differentiated instruction, the authors discovered that teachers most frequently related it with improved student engagement and academic achievement. As expected, based on the same results, the teachers in this study believed that differentiated instruction had a positive impact on the academic achievements of students, especially by closing individual learning gaps and facilitating the active engagement of students. The teachers reported that students who were taught on differentiated strategies had a stronger understanding, motivation and assessment results as compared to students who were taught on a traditional method. With these perceptions, one can conclude that differentiated instruction has not only been perceived as an inclusive practice but also as an academic enhancing practice. The teachers however pointed out that its success is subject to adequate resources, workable responsibilities and continuous teaching assistance.

CONCLUSION

This study concludes that teachers generally hold positive perceptions of the effectiveness of differentiated instruction in enhancing students' academic achievement. The findings demonstrate that most teachers have a clear sense of differentiated instruction as a flexible student-centered instructional technique that can adapt to the varied needs, talents, and interests of the learner in the classroom. Teachers consider differentiated instruction as one of the effective strategies to promote active learning among students, their conceptual knowledge, and offer inclusive learning opportunities. Moreover, the interviewees are convinced that differentiated instruction allows students to study at their pace, and instructional methods, instructional content and assessment strategies can be used to improve the learning gaps and the overall student performance in the school. Motivation, involvement, and confidence in students stand out as the most of the perceived effects of differentiated instruction, which has a positive effect on academic performance. However, teachers also confess that implementation of differentiated instruction also needs training, time and institutional support to be effective. Overall, the paper highlights the importance of teachers viewing differentiated instruction as an effective pedagogical tool that can have a positive impact on the academic performance of students effectively in case it is implemented, and that ongoing professional development and positive school policies would help to take advantage of the opportunities.

RECOMMENDATIONS

- 1- Teachers should be provided with ongoing professional development programs to strengthen their practical understanding of differentiated instruction strategies.
- 2- Schools should encourage the integration of differentiated instruction into daily classroom practices to address diverse learning needs effectively.
- 3- Adequate teaching resources and instructional materials should be provided to support the successful implementation of differentiated instruction.
- 4- School administrations should promote collaborative planning among teachers to share effective differentiated instruction practices.
- 5- Regular monitoring and evaluation should be conducted to assess the impact of differentiated instruction on students' academic achievement and to make necessary improvements.

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