BASIC SCHOOL TEACHERS' KNOWLEDGE AND USE OF DIFFERENTIATED INSTRUCTION

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Abstract:

The school as a microcosm of the society in which it is situated is as diverse as the society. Heterogenous classrooms pose a challenge to teachers. Teachers have to work hard to overcome the challenge posed by teaching learners with diverse learning needs. Overcoming this challenge calls for teachers to be creative, dexterous, and innovative in applying differentiated instruction. The study sought to investigate basic school teachers understanding and use of differentiated instruction. The study adopted a descriptive survey research design. A stratified sampling technique was used to sample 95 basic school teachers, comprising 44 private school teachers and 51 public school teachers. Data was collected using Differentiated Instruction Assessment Questionnaire. Data were analyzed using descriptive statistics. Results indicated that teachers who participated in the study did not have a good knowledge of differentiated instruction and its application in classrooms. Most of the teachers had not attended workshops and in-service training on differentiated instruction. With respect to the use of pre-determined teaching strategies, it can be concluded that teachers do not mostly employ such strategies in their classrooms. The study recommended that teachers are trained through in-service training and workshops on differentiated instruction and its application, as well as using multiple teaching strategies in teaching learners with diverse needs.

Keywords: public school, private school, differentiated instruction, differentiating instruction, basic school

1. Introduction

Classrooms have become more diverse than ever. The world today has become more and more diverse, and classrooms mirror the diversity in the world. Classrooms are composed of learners with diverse characteristics and learning needs (Morgan, 2014). The

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diversity of learners in classrooms poses some challenges to teachers. One of the puzzles teachers face in their diverse classrooms is how to design instructions that accommodate the diverse needs of every learner. Policymakers and policy think tanks have been making strenuous efforts to deal with heterogeneity by organizing and streamlining the school system into streams or tracks and providing professional training to in-service teachers. Despite these efforts Dixon, Yssel, McConnell, and Hardin (2014) stated that teachers still lament that the heterogeneity of the student population is substantial and continuously increasing. Teachers must be prepared to deal with the challenges of teaching a heterogeneous class since classrooms will be more heterogenous so long as the world embraces diversity (Sliwka, 2010).

Heterogenous classrooms are often described in terms of academic achievement and academic readiness, however, heterogeneity is not only limited to learners' academic achievement and academic readiness. As indicated by Smets (2017), homogeneity goes beyond academic achievements and readiness. It includes differences in attributes such as gender and self-regulatory competencies, socio-economic background, and linguistics. Rytivaara (2011) looked at heterogeneity in the classroom from the learning and cognitive styles perspective. To Rytivaara (2011), in a heterogenous class learners may differ in learning styles, cognitive abilities, and learning preferences. Therefore, having learners who differ in their learning style, cognitive abilities, and learning preferences make a classroom heterogeneous. Smits and Janssenswillen (2020) suggested that heterogeneity is a perceived variety encompassing the possible differences existing among learners in a classroom. According to Smits and Janssenswillen (2020), traditionally heterogeneity was associated with gender, social class, and ethnic background. However, the predominant factor that causes diversity in classrooms is ethnicity. In effect, to Smits and Janssenswillen (2020) a heterogeneous classroom is one in which the learners have different ethnic backgrounds. A heterogeneous classroom is therefore made up of students of different socio-cultural backgrounds and have different learning needs.

Dealing with a heterogenous class requires effort and skills. As learners become heterogenous, the teacher is challenged to provide instruction that will make each learner experience successful and meaningful learning. It is widely acknowledged that teachers must be able to diagnose and discriminate between a range of learning needs, abilities, learning styles, preferences, and motivations. Addressing the needs of learners in a heterogenous classroom, therefore, places a demand on the teachers to be proficient in pedagogy. Pedagogy proficiency is needed to avoid the dangers associated with using a singular teaching approach. The employment of singular teaching approaches may threaten classroom inclusiveness and put some groups of learners at risk of lagging, losing motivation, dropping out, failing to learn, and not maximizing their potential (Onyishi, & Sefotho, 2020). Onyishi and Sefotho (2020) recommended differentiated instruction, which is an empirically established approach, used to maximize learning among learners of diverse needs. Just as reported in other countries, Ghanaian classrooms are made up of learners with multidimensional potentials, experiences, socio-economic backgrounds, interests, and learning styles (Ako, Kwame, & Amihere, 2019). This study

surveyed teachers' use of differentiated instruction in some Ghanaian basic school teachers.

2. Differentiated Instruction

In heterogeneous classrooms, teachers must design instruction that accommodates and addresses the diverse learning needs of each student. Instruction that takes into consideration the various learning needs of the students will not involve one teaching approach. It will be eclectic. The different approaches will then satisfy the different needs of the students. To differentiate instruction, the teacher makes a conscious effort to observe and understand the individual differences among the students and plan instruction based on the information gathered on differentiated instruction (Onyishi, & Sefotho, 2020). It may also require teachers to design instruction specifically to address the learning needs of one student. In such a situation, the teacher design instruction for the rest of the class, and then while the rest of the class is doing a task, the teacher provides instruction for that student who has a particular learning need. Differentiating instruction by any of the aforementioned means no student is either intentionally or unintentionally left behind. Satisfying the diverse needs of learners such that each student's potential is maximized is the central idea of differentiated instruction.

Differentiated instruction, is a type of instruction in which the teacher recognizes and teach students according to their talents and learning styles (Morgan, 2014). Roy, Guay, and Valois (2013) defined differentiated instruction as a teaching approach in which the teacher varies his/her teaching to match students' abilities. Pozas, Letzel, and Schneider (2020) conceptualized differentiated instruction as a toolbox of instructional practices, that helps teachers to cater for students' specific learning requirements appropriately and help all students within a diverse classroom to learn meaningfully. Smale-Jacobse, Meijer, Helms-Lorenz, and Maulana (2019), defined differentiated instruction from a philosophical point of view. They viewed differentiated instruction as a philosophy of teaching that is founded on respect for students, the acknowledgment of the existence of differences, and the drive to assist all students to thrive. From the afore definitions, it is clear that the basic element of differentiated instruction is the acknowledgment that the classroom is diverse and so a one-size-fit-all teaching approach will not lead to meaningful learning for all students in the classroom (Onyishi, & Sefotho, 2020; van Geel, et al., 2019).

Differentiated instructions can be viewed from two perspectives – pedagogy and deductive instruction and the organizational aspects of differentiated instruction (Smale-Jacobse, Meijer, Helms-Lorenz, & Maulana, 2019). Pedagogy and deductive instruction relate principally, to the teaching practices and teaching techniques or approaches teachers employ and how these help in differentiating instruction. Teachers can adapt content to diverse students. As indicated by Flores, Ari, Inan, and Arslan-Ari (2012), content adaptation in differentiated instruction may be considered as stratifying content based on student learning styles; knowledge levels, and student preferences. The various strata are then presented to the various groups. Teachers may use varied teaching

approaches and assessment procedures in the teaching and learning process. Another way of differentiating instruction through pedagogy and deductive instruction is to offer low achievers more time to complete tasks and encourage the high achievers to perform more tasks in a relatively short period. For the low achievers, they can be offered pre-teaching or extended instruction. With respect to organization, teachers may put students into homogenous groups to make the use of pedagogy and deductive instruction easy or provide conditions that promote individualization, so that students will work at their rate and level (Smale-Jacobse, Meijer, Helms-Lorenz, & Maulana, 2019).

Based on the diversity of the learners in the classroom settings, learners must collaborate, interact, and also make inquiries to solve a task. This accentuates that learners within a differentiated classroom must autonomously create their thoughts, idea, and knowledge on a given phenomenon. As noted by Magableh, and Abdullah (2020), new evidence regularly emerges in support of the premise that all children do not learn in the same way. In view of this, awareness of different learning styles is an important tool to understand differences and assist with student development accordingly. Learners should be given tasks based on their level of understanding. With the theory underlying differentiated instruction, it is explicit that teachers scaffold learners in order to master the relevant knowledge and skills. This relevant knowledge and skills should aid learners to create their products and solve persistent issues in society. Teachers should incorporate pedagogic strategies such as inquiry-based learning, project-based learning, self-directed learning, learning blends, jigsaw, write-around, and other creative and innovative pedagogic approaches that will ensure a fruitful lesson or instruction.

2. Theoretical Framework

The theoretical framework of differentiated instruction presented in this section is based on two theories; Gardner's theory of multiple intelligence and Vygotsky's Zone of proximal development contained in Vygotsky's sociocultural theory of cognitive development.

2.1 Multiple Intelligences
Differentiated instructions principally hinge on Howard Gardner's multiple intelligence theory. Gardner (1999) posits that individuals may possess eight or more somewhat autonomous intelligence. To Gardner (2006), individuals draw on the intelligence they possess, either singularly or cooperatively, to solve problems and create products that are significant to the societies in which they live. Gardner (1999) identified logical-mathematical intelligence, spatial intelligence, intrapersonal intelligence, musical intelligence, bodily-kinesthetic intelligence, naturalistic intelligence, linguistic intelligence, and interpersonal intelligence as some of the intelligence individuals possess. From the multiple intelligence theory, Gardner made important claims: first, every individual possesses the full range of intelligence, and second, no two individuals exhibit the same profile of intellectual strengths and weaknesses.

The claim that not even identical twins exhibit the same profile of intelligence has a direct bearing on differentiated instruction. This denotes that, teachers should plan and strategize their classroom lessons to suit the diverse needs and abilities of learners in the classroom. Differentiated instruction seeks to maximize the skill set of learners. With differentiated instruction, students rely on their strongest intelligence when dealing with their tasks. So, when teachers provide students with tasks and they allow the students to apply their preferred intelligence in dealing with the given task, the teachers provide students with the necessary scaffolding students need to be successful (Magableh, & Abdullah, 2020). Also, as Morgan (2014) asserts, if teachers apply multiple teaching approaches in their teaching, they are more likely to satisfy the learning styles of each student.

2.2 Zone of Proximal Development

Vygotsky opined that learners are the creators and constructors of their knowledge. Vygotsky underlines that social interaction and cultural interplay exert a significant role in learning. Vygotsky considered learning as a process rather than a product. Vygotsky's tenet behooves that learning is collaborative, simulative, and interactive. Knowledge is earned as learners discuss, interact and compare ideas, and shares their thoughts with others within their environs such as teachers and knowledgeable others. This aids the learner to advance in cognitive development. Vygotsky believes that there is a lacuna between what a learner cannot do and what a learner can do independently without any support. This lacuna is referred to as the zone of proximal development (ZPD). The highest point is where the learner cannot do or perform a task, even with assistance, and the lowest point is where learners can do or perform tasks independently without assistance. The fundamental premise is that a more knowledgeable person (teacher or skilled peer) can enhance a student's learning by assisting them through a task slightly above their level of ability. As learners are becoming more competent, the expert gradually withdraws his or her assistance until the student can perform the task or skill tasks by himself or herself. The zone of proximal development is attained through consistent interaction and dialogue. The theory has a sequential influence on differentiated instruction. It stresses social interaction between teacher-students and student-teacher.

3. Purpose of the Study

The purpose of this study was to explore primary school teachers' knowledge and practices of differentiated instruction. Specifically, the study sought to achieve the following research objectives:
1) Assess primary school teachers' knowledge of differentiated instruction.
2) To find out the teaching strategies basic school teachers use to differentiate instruction.

3.1 Research Questions

The study aimed to answer the following basic research questions:

1) What is the knowledge of primary school teachers on differentiated instruction?
2) Which teaching strategies do basic school teachers use in differentiated instruction?

4. Methods

The design used for the study was a descriptive survey. The design was used to survey basic school teachers' understanding and use of differentiated instruction. The population for the study was basic school teachers in both private and public schools in a small town in the Central Region of Ghana. A stratified sampling technique was used to stratify the basic school teachers into private school teachers and public-school teachers. A simple random sampling technique was used to select 44 private school teachers and 51 public school teachers. Data was collected from the sample using the Differentiated Instruction Assessment Questionnaire. The questionnaire was made up of three sections. Section A collected respondents' demographic data. Section B contained questions that elicited the respondents' knowledge of differentiated instructions. In Section C, a list of teaching strategies was presented and the respondents were to indicate how often they used these teaching strategies to differentiate instruction. The questionnaire was administered by the researchers and collected from the respondent just when the respondents completed the questionnaire. The data were analyzed using descriptive statistics.

5. Results

In this section, the responses from the respondents have been presented in frequency distribution tables and analyzed according. To test the basic school teachers' knowledge of differentiated instruction, a list of statements was presented and the respondents were to select the statements that best describe differentiated instruction. The responses have been presented in Table 1.

Table 1: The Meaning of Differentiated Instruction

Meaning of Differentiated Instruction	Frequency		
	Total	Public	Private
It is a type of instruction that involves the learners in the teaching-learning processes.	1	0	1
It is a way of teaching based on different students' interests, abilities, and readiness.	58	33	25
It is an approach to instruction used to maximize each learner's potential and growth.	0	0	0
It is an approach to instruction that caters to the needs of learners equally.	1	0	1

Table 2 shows how the teachers conceptualized differentiated instruction. The total number of teachers who accepted that differentiated instruction involves the learners in the teaching-learning processes was 1. The teacher was a private school teacher. None of the public-school teachers accepted such a definition. The total number of teachers who accepted that differentiated instruction is a way of teaching based on different students' interests, abilities and readiness was 58. The number of public-school teachers who subscribed to this meaning was 33. The remaining 25 were private school teachers. None subscribed that differentiated instruction is an approach to instruction used to maximize each learner's potential and growth. There was only 1 private school teacher who indicated that differentiated instruction is an approach to instruction that caters for the needs of learners equally.

Table 2: Description of Differentiated Instruction

Description	Frequency		
	Total	Public	Private
Content, process, and product	34	14	20
Curriculum, methodology, and process	1	0	1
Classroom management, teacher and strategies	0	0	0
Content, supervision, and assessment	0	0	0

From Table 2, the total number of teachers who agree that content, process, and product describe differentiated instruction is 34. The teachers from public schools were 14 while the teachers from private schools were 20. Only 1 private school teacher agreed with the curriculum, methodology, and process. None of the teachers indicated that differentiated instruction can be described in terms of 'Classroom management, teacher and strategies' and 'Content, supervision and assessment'.

Table 3: Trained in Differentiated Instruction

Trained in Differentiated Instruction	Frequency		
	Total	Public	Private
Yes	41	24	17
No	50	24	26

As shown in Table 3, the total number of teachers trained in differentiated instruction was 41. They were made up of 24 public school teachers and 17 private school teachers. The total number of teachers who have not received any training on differentiated instruction was 50. They comprised 24 public school teachers and 26 private school teachers.

Table 4: In-service Training on Differentiated Instruction

Received in-service workshop on differentiated instruction	Frequency		
	Total	Public	Private
Yes	30	17	13
No	61	31	30

From Table 4, the total number of teachers who have attended in-service training on differentiated instruction was 30. 17 public school teachers and 13 private school teachers. The majority of teachers had not received any in-service training on differentiated instruction. The total number of teachers who have not received any in-service workshop on differentiated instruction was 61. The teachers from the public schools were 31 and 30 were private school teachers.

Table 5: Teachers' Knowledge of Differentiated Instruction

Knowledge of differentiated instruction	Frequency			
	VI	I	FA	A
Knowledge of the underlying philosophy of differentiated instruction	19	31	16	3
Knowledge of the characteristics or elements of differentiated instruction	15	39	30	7
Knowledge of the importance of differentiated instruction	13	29	32	8

Note: VI=Very inadequate. I=Inadequate. FA=Fairly Adequate. A= Adequate

It can be seen from Table 5 that, of the three concepts presented to the teachers, their knowledge of philosophy was the weakest. The total number of teachers who had very inadequate knowledge of the philosophy of differentiated instruction was 19 while 31 teachers had inadequate knowledge. Only three teachers reported having adequate knowledge of the philosophy underlying differentiated instruction. While 16 had fairly inadequate knowledge and 3 had adequate knowledge of the philosophy of differentiated instruction. Between knowledge of the characteristics of differentiated instruction and knowledge of the importance of differentiated instruction, the teacher's knowledge of the importance of differentiated instruction was better than knowledge of the characteristics or elements of differentiated instruction. For the characteristics of the elements of differentiated instruction, a total of 15 teachers had very inadequate knowledge, 39 had inadequate knowledge, 30 had fairly adequate knowledge and 7 had adequate knowledge of the characteristics or elements of differentiated instruction. Concerning knowledge of the importance of differentiated instruction, 13 teachers had very inadequate knowledge, 39 had inadequate knowledge, 32 had fairly inadequate knowledge and 8 teachers had adequate knowledge of the importance of differentiated instruction.

Table 6: Private School Teachers' Knowledge of Differentiated Instruction

Knowledge of differentiated instruction	Frequency			
	VI	I	FA	A
Knowledge of the underlying philosophy of differentiated instruction	10	14	16	3
Knowledge of the characteristics or elements of differentiated instruction	8	17	13	4
Knowledge of the importance of differentiated instruction	8	11	20	2

Note: VI=Very inadequate, I=Inadequate, FA=Fairly Adequate, A= Adequate

The trend of the knowledge of the three concepts shown in Table 6 follows that of Table 5. The number of private school teachers who had very inadequate knowledge of the philosophy of differentiated instruction was 10. Those with inadequate knowledge were 14 while fairly adequate was 16 and those with adequate knowledge of the philosophy of differentiated instruction were 3. On the characteristics of the elements of differentiated instruction, a total of 8 teachers had very inadequate knowledge, 17 had inadequate knowledge, 13 had fairly adequate knowledge and 4 had adequate knowledge of the characteristics or elements of differentiated instruction. Even though 8 teachers each had very inadequate knowledge of the characteristics and importance, 6 more teachers had inadequate knowledge of the characteristics than the importance of differentiated instruction. More teachers had fairly adequate knowledge of the importance of differentiated instruction than the characteristics or elements of differentiated instruction. A total of 20 teachers had fairly inadequate knowledge and 2 teachers had adequate knowledge of the importance of differentiated instruction.

Table 7: Public School Teachers' Knowledge of Differentiated Instruction

Knowledge of differentiated instruction	Frequency			
	VI	I	FA	A
Knowledge of the underlying philosophy of differentiated instruction	9	17	0	0
Knowledge of the characteristics or elements of differentiated instruction	7	22	17	3
Knowledge of the importance of differentiated instruction	5	18	12	6

Note: VI=Very inadequate, I=Inadequate, FA=Fairly Adequate, A=Adequate

As shown in Table 7, none of the public-school teachers reported that they have fairly adequate or adequate knowledge of the philosophy of differentiated instruction. The number of public-school teachers who had very inadequate knowledge of the philosophy of differentiated instruction was 9; those with inadequate knowledge were 17. With respect to the characteristics of the elements of differentiated instruction, a total of 7 teachers had very inadequate knowledge,22 had inadequate knowledge,17 had fairly adequate knowledge and 3 had adequate knowledge of the characteristics or elements of differentiated instruction. It can also be seen from Table 9 that, 5 teachers had very inadequate knowledge, 18 had inadequate knowledge, 12 had fairly inadequate knowledge and 6 teachers had adequate knowledge of the importance of differentiated instruction.

Table 8: Employment of Multifaceted Strategies in Differentiated Instruction

Do you employ multifaceted strategies in your differentiated instruction?	Frequency		
	Combined	Public	Private
Yes	57	27	30
No	36	18	13

The teachers were asked to indicate whether they employ multifaceted teaching strategies in their differentiated instruction. The response of the teachers is shown in Table 8. The total number of teachers who used multifaceted strategies in their differentiated instruction was 57. This was made up of 27 public school teachers and 30 private school teachers. The total number of teachers who did not use multifaceted strategies in their differentiated instruction was 36. Of this number, 18 were public school teachers and 13 were private school teachers.

Table 9: Use of Some Teaching Strategies

Teaching strategies	Frequency			
	Most of the time	Occasionally	Rarely	Never
Write around	32	33	14	4
Jigsaws	8	36	13	17
Reciprocal teaching	25	33	17	3
Project-based learning	23	33	18	5
Tiered learning target	19	20	24	13
Curriculum mapping	23	33	21	5

In Table 9, some teaching strategies were listed for the teachers to indicate their frequency of use of each of the listed strategies. It can be seen from Table 10, that the most used strategy is 'write around' while the least used strategy is the use of Jigsaws. While 36 indicated that they used Jigsaws occasionally, 17 reported that they have never used Jigsaws in their lessons and eight indicated they used Jigsaws most of the time. As many as 32 teachers used 'write around' most of the time and 33 used it occasionally. Reciprocal teaching was the second most frequently used strategy. While only three teachers reported that they have never used reciprocal teaching, 25 teachers reported that they used it most of the time and 33 used it occasionally. It appears Project-Based learning and Curriculum mapping were used by the same teachers, however, there is no data to prove that it is the same teachers. Apart from the difference of three in those who reported that they rarely used Project-Based learning and Curriculum mapping, the number of teachers who used these strategies most of the time (23), occasionally (33) and never (5) were the same.

Table 10: Private School Teachers' Use of Some Teaching Strategies

Teaching strategies	Frequency			
	Most of the time	Occasionally	Rarely	Never
Write around	19	13	10	1
Jigsaws	5	17	5	9
Reciprocal teaching	10	19	9	2
Project-based learning	10	18	9	3
Tiered learning target	15	10	12	3
Curriculum mapping	11	17	11	3

The data presented in Table 10 shows that the private school teachers' most popular strategy is write around. Only one private school teacher indicated that she or he has

never used is 'write around'. While 13 reported that they use write around occasionally, 19 used it most of the time. Jigsaws were the most unpopular teaching strategy among private school teachers. Those who had never used jigsaws were more than those who used jigsaws most of the time. Table 10 shows that 17 teachers used jigsaws occasionally. For private school teachers, tiered learning target was the second strategy used most of the time. However, those who reported that they used tiered learning target were 10, making tiered learning target the least occasionally used strategy. More private school teachers used reciprocal teaching more occasionally than any other strategy, making it the second most popular strategy. Other than that, those who have never used project-based learning and curriculum mapping are the same, that is 3, and the other figures were not the same. For example, while 11 used Curriculum mapping most of the time, 10 used Project- Based learning most of the time.

Table 11: Public School Teachers' Use of Some Teaching Strategies

Teaching strategies	Frequency			
	Most of the time	Occasionally	Rarely	Never
Write around	13	20	4	3
Jigsaws	3	19	8	8
Reciprocal teaching	15	14	8	1
Project-based learning	13	15	9	2
Tiered learning target	14	10	12	10
Curriculum mapping	12	16	10	2

From Table 11, the teaching strategy that is used most of the time by public school teachers is reciprocal teaching. Only one public school teacher reported that he/she has never used reciprocal teaching. Unlike the private school teachers, 14 public school teachers indicated that they frequently used tiered learning target, making tiered learning target, the second most frequently used teaching strategy. Though the tiered learning target was the second most frequently used strategy, it was the strategy that most public-school teachers (10) reported they had never used. Just as Jigsaw was the most unpopular teaching strategy among private school teachers, it was unpopular among public school teachers. Those who had never used jigsaws were 8, while the public-school teachers who used jigsaws were 3. Other than that, those who have never used project-based learning and curriculum mapping are the same, that is 3, and the other figures were not the same. For example, while 11 used Curriculum mapping most of the time, 10 used Project- Based learning most of the time. The public-school teachers who have never used project-based learning and curriculum mapping were the same, that is 2 each. The other figures were not the same. For example, while 16 used Curriculum mapping most of the time, 15 used Project-Based learning occasionally.

6. Discussion

The findings of the study revealed that the majority of teachers (public & private) who participated in the study have inadequate knowledge and understanding of

differentiated instruction. Van Tassel-Baska and Stambaugh (2005) identified some reasons why teachers do not or ineffectively use differentiated instruction. Top of the list was inadequate knowledge of the application of differentiated instruction in the classroom and weak classroom management skills needed to scaffold differentiated instruction. Furthermore, Tobin and Tippett (2014) also elucidated some factors that inhibit teachers' knowledge and practices of differentiated instruction in the classroom. These barriers are; teachers experienced fears and insecurities related to the new expectation about their performance, the lack of time, curricular and assessment demand, and the lack of resources. This reiterates that teachers' use of differentiated instruction is been hampered by the above factors.

Only a few teachers who participated in the study were able to describe differentiated instruction correctly. Out of the 95 teachers who participated, only 34 teachers were able to describe correctly the characteristics of differentiated instruction. Ginja and Chen (2020) reported in their study that, teachers' knowledge of differentiated instruction was low and superficial. The prime reason for this is the lack of attention teacher educators and schools give to differentiated instruction. Once teachers graduate from colleges and universities, their training in differentiated instruction appears to cease (Ginja & Chen, 2020). It is not strange therefore to find more than half of the respondents indicating they have not attended workshops on or received in-service training on the application of differentiated instruction (Melesse, 2015). In-service training and workshops are good avenues for enhancing teachers understanding and use of differentiated instruction. With teachers' knowledge of the underlying philosophy, characteristics, and importance of differentiated instruction a total of 18 teachers had adequate knowledge of differentiated instruction. Generally, only a few teachers have in-depth knowledge of differentiated instruction.

In the area of the employment of multifaceted strategies in differentiated instruction, some teachers indicated that they use varied teaching strategies in differentiated instruction. Due to their inadequate understanding of differentiated instruction, these teachers may be applying different teaching strategies but in a one-size-fits approach as found by Merawi (2020). Merawi, (2020), found that teachers differentiated the process but did not differentiate neither content nor assessment, because of their overreliance on the 'traditional' method of teaching. Melesse (2015), noted that though teachers' knowledge of differentiated instruction was low, they implement best practices to improve students' academic performance. This was found to be true for the sample used in this study. The sample for the study were using a variety of teaching strategies to teach the students. The use of a variety of teaching strategies in a lesson is one way of differentiating instruction. So, in effect, the teachers were applying some kind of differentiated instruction without knowing.

The teachers reported that their frequency of use of the pre-defined teaching strategies varied. The teaching strategy used by most teachers was 'write around'. The total number of teachers who use the write-around teaching strategy was 32. This constitutes only 34% of the sample. This suggests that the majority of the teachers were not using the teaching strategies frequently. This also suggests that teachers were using

the one-size-fits 'traditional' approach most often in their teaching. Write-around is a teaching strategy that fosters cooperative learning in small groups. Students of different learning abilities come together to form a team. The Teacher gives the team a starter sentence and each member of the team will read a sentence and add another sentence, according to his or her ability, to finish the text (Muziatun, Virginia, & Jusuf, 2020; Tawali, 2020). Another cooperative learning strategy that can be used in differentiated instruction is Jigsaw (Tomaswick, 2017; Boştină-Bratu, & Negoescu, 2016). However, the majority of teachers did not use the jigsaw teaching strategy. The low use of predefined teaching strategies may be due to inadequate knowledge of their application, and the idea that in a fixed and standardized curriculum, it is difficult to differentiate contents and assessments for diverse students (Merawi, 2020).

The results of the study show that the majority of teachers both public and private have no training on differentiated instruction and its application in the classroom. Teachers may have heard of differentiated instruction but may not know how to apply differentiated in the teaching and learning process. Training on the use of differentiated instruction is therefore crucial if teachers are to effectively apply differentiated instruction. As reported by Munro (2012) teachers can differentiate their teaching more efficiently and effectively only when they understand how these learners learn and think, know a range of teaching options for differentiating their teaching, have the appropriate motivation and orientation, and, can read the culture and climate in their school and classroom in terms of differentiation. For teachers to carry out differentiated instruction smoothly in the classroom they need to have good pedagogical and content knowledge in teaching, learning, and differentiation (Agwagah, 2013).

7. Conclusion

Teaching students in a classroom as though they have the same abilities and socio-economic background puts some students at a disadvantage. One way of ensuring that all students in a diverse classroom successfully learn is by applying differentiated instruction. The teachers who participated in the study did not have a good knowledge of differentiated instruction and its application in classrooms. Most of the teachers had not attended workshops and in-service training on differentiated instruction. It means that the teachers in both private and public basic schools are predominantly applying the one-size-fits approach to deliver lessons even though their classrooms are heterogeneous. With respect to the use of pre-determined teaching strategies, it can be concluded that teachers do not mostly employ such strategies in their classrooms. Since these strategies accommodate the learning needs of diverse students, it can be concluded, most of the teachers were applying teaching strategies that do not make room for differentiation. The teachers, therefore, need in-service training and workshops on differentiated instruction and its application, as well as training on the use of multiple teaching strategies in teaching learners with diverse needs.

Conflict of Interest Statement
The authors declare no conflicts of interest.

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