



Original Article

Differentiation in the Classroom: A Pedagogical Approach for a Successful Engagement of Students in Secondary Schools

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Teaching and learning are important educational processes that prepare young people for the greatest common good. This common good is not conditioned by the requirements of young people but by the requirements of the human family. The greatest good demands that young people, regardless of their abilities or disabilities, race, language, or religion receive the best educational opportunities of their generation. To fulfil their aspirations, all methods of differentiation must be utilised to provide the greatest educational opportunities for all. In this study, the aim was to understand how differentiation processes are harmoniously used by teachers to provide successful engagement of students. The study was carried out by reviewing the literature on how differentiation of instructions, curriculum, and assessment improves the engagement of students in secondary school settings. Differentiation is a framework of teaching that aims to address individual learning needs and maximise students' learning opportunities, which may then lead to a positive change in students so that they can achieve positive learning outcomes. It is reported that once the instructions and curriculum are differentiated, different types of assessments can be created to meet the diverse needs of the students. Because students in the classrooms are not homogeneous, they bring with them a conundrum of issues, which can only be resolved when teachers become part of the solution, differentiating not only their teaching styles but also their programs of teaching. The teachers can then produce assessments that are pitched at the right level to test whether the students have understood the concepts taught.

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INTRODUCTION

Teaching and learning are important key processes of education. These processes can transform people in society to become better citizens. The processes change the personality of people, provide a physical and mental standard, and transform their living standards (Napanan & Alinsug, 2021). Moreover, education allows individuals to change, and in most cases, the individuals lead a better life and a better future. Because of what education can do in human life, it is a right for all, not a privilege for a few. All young people are to participate in learning, not because it is their demand, but because it is for the greatest common good of the human family. However, today, teaching and learning do not provide the same education outcomes to all learners or at least to the same degree in most schools (Pendergast et al., 2020). This difference arises because of the increasing deficit of specialist teachers in many schools and the increasing student diversity in the classrooms. The diversity arises due to migration flows, language diversity, students' interests, and students' abilities and disabilities (Vantieghem et al., 2020). Moreover, most students have varied learning styles and motivations. Because of their varied needs and interests, students present with a myriad of behaviour issues in the classrooms.

In the present generation, students' interests and learning needs are diverse in every classroom. Because of this diversity, governments, policymakers, and parents demand that the classrooms and the learning environments be inclusive (Gheysens et al., 2021). Presently, the

most widespread and well-known concept of inclusive education is tied to the Salamanca Statement and Framework for Action by the Ministry of Education and Science, Madrid (Spain), and the United Nations Educational, Scientific, and Cultural Organization, Paris (France) of 1994 (Sailor, 2017), which explicitly links inclusive education to the presence of and participation of children with disability in the regular classrooms (Migliarini et al., 2019 & Sailor, 2017). However, over the years, the concept of inclusive education has evolved, broadening the scope from students with disabilities to all marginalised groups, such as students from ethnic minorities and disadvantaged families (Vantieghem et al., 2020). To meet the expectations of parents and the learning needs of students require that, first, schools must have inclusive teaching staff and leadership, and second, the teachers must have a good and clear understanding of the processes of differentiation. The processes of differentiation are the ultimate key strategies in developing inclusive and sustainable learning environments.

Over the years, the notion of diversity appears to have been misconstrued. While the Salamanca statement was explicit about students with disability (Juma & Lehtomäki, 2016; Migliarini et al., 2019), students who do not have disabilities but refuse to engage in their own learning contribute significantly to a more challenging learning environment than students with disability. Do students with behavioural issues in the classrooms need differentiation? What steps are to take to support students who refuse to engage in their own learning? It is documented that students'

engagement also means that they attend school every day, they comply with school rules, and they participate in classroom and extracurricular activities (Harris, 2011).

It appears that the concept of differentiation is less understood and possibly misunderstood by most teachers, especially those teaching in the middle years of schooling. Although teachers differentiate in every classroom in a subtle way, the middle years of schooling is a particularly critical period in the academic development and learning outcomes of the students (Pendergast et al., 2020). Providing the best learning opportunities to these students is extremely challenging. These students have a lot of endogenous and exogenous needs, most of which are related to different characteristics, such as their interests, their learning styles, their developmental levels, their learning speed, their abilities, their cultural background, their language levels, attitudes, and regulation approaches (Suprayogi et al., 2017). In this study, therefore, the aim was to review the processes of differentiation. These processes are discussed together because when the teachers differentiate their teaching approaches and the curriculum, they must also differentiate the assessments (Confrey et al., 2018). As Dowden (2014) suggested, the differentiation of assessments begins with the differentiation of instructions and curriculum, as both are key elements in high-quality learning.

METHOD OF THE STUDY

The study was conducted by carrying out a review of the literature on differentiation. In particular, the methods of differentiating the instructions, the curriculum, and the assessments were carried out. The phrases differentiation of instructions, differentiation of curriculum, and differentiation of assessments were used to search for articles using the Google search engine, Google Scholar, Elsevier, ERIC, Taylor & Francis Online, SAGE, and other databases. Textbooks that report on different methods of differentiation were also studied. A total of 100 full articles on differentiation were retrieved

and reviewed. Most of the articles provided comprehensive descriptions of the differentiation of instructions, curriculum, and assessments. The articles that did not describe the methods of differentiation adequately were excluded and those used in the study are referred to in the article. After the synthesis of the articles on different methods of differentiation, the findings were supplemented with the reality that occurs in the classrooms in educational institutions and how the education leaders and teachers try to institute differentiation in their learning institutions.

REVIEW OF LITERATURE ON METHODS OF DIFFERENTIATION

In the changing learning environments, many reforms need to be instituted. For these reforms to become effective, there is a need to move away from creating a large pool of generalised teachers in schools and focus on specialist teachers. With specialist teachers in the classrooms, there come the processes of differentiation, which require that these teachers are driven by the love of teaching. Teachers who feel that they do not have the qualifications or skills to teach students who are working below their year-level expectations find it inherently difficult to teach (McKay et al., 2014). These teachers require guidance on how to differentiate their teaching instructions, curriculum, and assessments. Presently, students' behaviour in the classrooms has significantly contributed to teacher attrition (Paris, 2013). However, this cannot be used to justify the lack of provision of quality teaching. No doubt, without the love of teaching and learning, the teaching profession becomes complex and challenging (Valiandes, 2015).

Currently, many countries of the world are faced with challenges in recruiting new, skilful teaching staff, retaining existing teachers, and preventing attrition (Saks et al., 2021). The difficulty of recruiting and retaining good teachers is also endemic across societies. With students' behaviour in the classrooms and the changing teaching and learning environments, governments, education

leaders, and parents can never coerce or command teacher commitment or compliance to differentiate their teaching methods. In fact, there is no amount of coercion or remuneration that can influence the teachers to comply or commit to differentiation when the learning environment is toxic. Therefore, governments and education leaders need to enable teachers to commit and comply with differentiation by providing better teaching environments where the teachers feel valued and that they are part of leading change.

Adolescents Learning in the Middle Years of Schooling

It is stated that the transition from childhood to adolescence is characterised by a marked increase in developmental plasticity. This transition results in considerable changes that take place within individuals and their contexts. At this level, the onset of puberty initiates substantial hormonal changes and alterations to the brain structure and function. The changes underlie increases in reactivity and sensitivity to environmental stimuli, particularly social stimuli, which allows for vast learning and psychosocial development to take place (Vannucci & Ohannessian, 2019). However, despite advances in autonomy, identity formation, and coping skills that occur during early adolescence, executive functioning capabilities remain immature in adolescents due to the protracted development of prefrontal cortical brain regions relative to socio-emotional salience regions (Do et al., 2017). At the contextual level, peer relationships become increasingly important and central to self-evaluation (Education, 2013), family relationships realign as adolescents strive for independence (Pendergast et al., 2020), and the school environment becomes larger and more complex.

For some adolescents, negotiating many changes in such a short time is challenging, especially given the imbalance between enhanced socio-environmental sensitivity and immature executive functioning. As such, early adolescence is characterised by a marked

increase in internalising and externalising problems (Vannucci & Ohannessian, 2019). As reported elsewhere, adolescents become more self-aware, self-conscious, and self-reflective than prepubescent children. They develop the capacity to hold in mind more multidimensional concepts (Choudhury, 2006). It is this group of students who are of interest, and differentiated pedagogical approaches are particularly mandatory for them. Reports suggest that the failure of teachers and schools to respond to adolescent needs in the early years of secondary schooling by not utilising effective teaching practices and appropriate, coherent curricula and a general lack of individual attention (Dinham & Rowe, 2007) makes them develop disliking for learning, and therefore, they misbehave in the classrooms (Hill & Tyson, 2009).

It is documented that students who disengage in the middle years of schooling find it extremely challenging to cope with the leaps and bounds of learning in their senior years (Tomlinson & Moon, 2013). Most of these students often drop out after year ten to follow vocational education, work, or training pathways. However, it is reported that through differentiation of instructions, the curriculum, teaching approaches, and assessment methods, it may be possible to refocus the students who disengage, revive, and enable them to improve their skills, develop an understanding of the subjects that they study, and develop the love of learning. When students love to learn, they may become engaged in learning or become lifelong learners (Pendergast et al., 2020). Because of the love for learning, each student can reach his or her academic potential in his or her own time.

The Meaning of Middle Years of Schooling

Middle schooling is an approach to teaching and learning that meets the unique developmental and educational imperatives of middle years students within the context of contemporary society. It is tailored towards adolescents to meet their full range of needs, interests, and achievements (Bahr & Pendergast, 2007). Students in middle school

present a few challenges that undermine parents' ability to effectively get involved in their education and work productively with schools. First, middle schools are large and complex, therefore, making it difficult for parents to figure out how to be effectively involved. Second, middle school teachers instruct many students, making it difficult for the teachers to develop and maintain productive relations with each student. In addition, the nature of the curriculum of each academic subject results in teachers having fewer interactions with individual students. Third, and in conjunction with the previous points, the increase in the number of subjects taught makes it difficult for teachers to have maximum contact with the students. Fourth, the complexity of curricular choices and the often-observed nature of course track in middle school complicate parental involvement in the progress of their children (Vantieghem et al., 2020).

Middle schooling impacts involvement and adolescents' development and how the parents can maintain involvement and effectiveness (Hill & Tyson, 2009). Therefore, the middle school requires three essential elements: clear philosophy, a comprehensive range of approaches and practices, and evidence-based approaches to teaching and learning (Pendergast et al., 2020). In other countries, middle school is called junior secondary, and it begins in Years 7 – 9. In Western Australia, the junior school is now merged with the senior secondary, making the transition of students confusing. Moreover, students in Years 7 – 9 experience a lot of physical and hormonal changes. These changes always compound the ability of the students to settle and follow instructions. Because of the difficulty of settling, it is hard to provide the best educational opportunities to these students (Australian Council for Education Research, 2013). Regardless of the difficulty, however, teachers and school leaders must shift to an outcomes-focused curriculum (Education, 2013) in adolescents, considering that they are in a stage of rapid physical and emotional changes.

Equality of Conditions in Schools

The concept of one-size-fits-all (Suprayogi et al., 2017) and the idea that all students in the classroom are homogeneous is fictitious and should not be encouraged in multicultural, multiracial, multireligious, and multilingual school settings. Because of the heterogeneous nature of society, the classrooms are also heterogeneous, and therefore, there must be equality of conditions in all schools. Here, the equality of conditions refers to not only equality in education resources but also to equality of respect and recognition, equality of power, equality of love, care, and equality of solidarity (Valiandes, 2015). All students come to their middle years of schooling with different readiness levels, different interests, different learning styles, different prior knowledge, different learning needs, different experiences, different personalities, different social skills, and different socioeconomic statuses (Gheysens et al., 2021; Valientes, 2015). Therefore, they need equality of conditions at the onset of their middle schooling. Teachers know or should know that in every class, there are students who are at least two years behind in their grade level, especially in the science and mathematics strands. There are also students who are well above their grade level, and there are students who are intelligent but do not engage in their own learning. Moreover, there are those students whose interests differ widely. In fact, there is a lot of student diversity even when disability, migration flows, and language variation are removed.

Tomlinson & Moon (2013) postulated that student diversity ranges from cultural to linguistic differences and socioeconomic status to a spectrum of physical, emotional, and cognitive disparities. Woolfolk and Margetts (2013) also pointed out that every student is unique, and he or she is a distinct collection of talents, abilities, and limitations. With the diverse student population in the classrooms, what can the school leaders and teachers do to bring hope to the parents and a smile to every learner in the middle years? There must be differentiated

pedagogical practices, which should include flipped classrooms (Hao & Lee, 2016) and didactic learning methods at all levels (Wilson et al., 2019). And for the successful development of differentiated pedagogy, there is a need for sustainable reforms in school systems. These reforms should include changes in pedagogical approaches at all levels, the establishment of collaborative practices between teachers and school leaders, the development of middle-layer leaders, and the building of responsible future leaders.

Teachers as Collaborators in Students' Learning

In their book, Pendergast et al. (2020) suggested that teachers are mentors and role models, collaborators and guides, disciplinarians and managers, assessors, and designers. And to be effective educators, teachers need to know that effective teaching is based on two fundamental principles: understanding, appreciating, and connecting with the students, that is, knowing who their students are. The teachers need to have the capabilities to develop relevant and empowering curricula and utilise meaningful assessments for learning, that is, know what to teach, how to teach it, and how to assess the students.

Differentiation in the classroom is not an easy task, but teachers can gain an understanding of it in a short time. It is an experience of many years of teaching and assessing and having mentors who provide encouraging feedback. In addition, for a teacher to design a differentiated program that captures the interest of students, the teacher should be a specialist in the subject for which the program is developed, and he or she should have explicit pedagogical content knowledge of the subject to cater for the diverse learning needs of all the students. To differentiate effectively, teachers need to ensure that their teaching makes sense and is responsive, relevant, and promotes students' success. Their strategies should also assist students in becoming self-regulated learners. The teaching programs must be relevant to allow the students to respond positively and develop their own learning.

Once the program and instructions are clear, the teachers can develop assessments that test a range of abilities. In this way, the diverse needs of students are taken through a process of differentiated pedagogical approaches (Education, 2013).

Methods of Differentiation

In schools today, differentiation is an important facet of pedagogical practice to enable students to achieve their goals. The key elements in differentiating teaching approaches are to differentiate the instructions and content, that is, what the students should know; to differentiate the process, that is, what students should be able to do; to differentiate the products, that is, how students demonstrate their learning, and to differentiate the learning environment, that is, the physical and the effective domain of the classroom (Pendergast et al., 2020). But these approaches have limited value if the teachers do not know what they are to teach, the status of their students, and understand what the students can do. With a clear background knowledge, the teacher can then plan to move the student forward with knowledge and skills so that these students can achieve mastery. Experienced teachers with adequate knowledge of the content can move forward and backwards the curriculum with ease. And when teachers can move their teaching forward and backwards, they can focus the students on concepts that they need to understand. When students find meaning in their learning, they are more likely to become encouraged and engrossed in learning and the quest for more knowledge (Confrey et al., 2018). But for students to understand a concept, they need to make sense of what they have learned (Dinham & Rowe, 2007). This means that the content must be clearly organised and sequentially taught so that the knowledge gained in the first concept leads to an understanding of the next concept. The teachers must create sense-making tasks so that students can use these tasks to build their skills and explore, apply, extend, and create knowledge with

understanding. The tasks that make students connect knowledge, understanding, and skills are particularly potent in students' learning journey.

Differentiating Instructions

When children with disabilities and students with behaviour issues are included in traditional classrooms, regular education teachers face a dilemma. How can they teach the standard curriculum? How can they teach students with different heritages and linguistic backgrounds in the same classroom without modifying their teaching approaches? (Reeves, 2009). The only way out of this is that teachers to differentiate their instructions to meet the needs of all these students. Differentiating instructions may be considered a flexible, equitable, and intelligent way to approach teaching and learning. It stresses that a single teaching style will not accommodate every student, especially when this style is not matched student needs (Kaplan, 2007). Differentiating instructions start from the premise that learners are different and learn differently. Based on this premise, differentiation can allow teachers to present varying learning activities and content, as well as adopt varying modes of assessment to meet the needs of the students (Dowden, 2014). In other words, teachers are expected to make explicit choices as to the nature of the learning content, process, and product for each learner across the school levels.

Given the time and available resources, individualised instruction, adaptive instruction, personalised learning, and response to intervention, as proposed by Universal Design for Learning (Carrington et al., 2020), can be followed. The teacher copes with student diversity; adopts specific teaching strategies; invokes a variety of learning activities; monitors individual student needs, and pursues optimal learning outcomes (Suprayogi et al., 2017). Differentiated instruction is a teaching and learning philosophy that emphasises students at the core because each student is different. Instead of waiting for a student to fail, lag in progress, or struggle, instructions are planned so that the needs

of the students are met on the front end of the learning process. The Universal Design for Learning came from the ideas of architecture. It postulates that it is easier to build a home or working space that is accessible and easily reachable than to adapt or retrofit an environment for living. When discussing classroom strategies, the concept that instructional materials, strategies, and assessment tools are developed with scaffolded learning tasks is likely to provide success opportunities for all students (Wormeli, 2006).

Differentiating the Curriculum

Differentiation of curriculum is the process of what the teachers plan to teach and how they plan to teach it. In the curriculum, the quality of what the teachers plan to teach and ask students should be made clear. A layered approach to differentiate curriculum has been suggested as a better pedagogical approach that can accommodate a range of goals including core, differentiated, classic, individualised, theme and generalisation. Each layer represents a specific goal. The layered approach to differentiated curriculum is thought to provide educators with options to acknowledge multiple goals that respond to the abilities, needs and interests of gifted students (Kaplan, 2007). The curriculum must have clear goals and what the students should know, understand, and be able to do. In short, the curriculum must be student-centred in nature (Dowden, 2014). When there is a lack of what students should know, understand, and do, the implementation of the curriculum becomes difficult, if not impossible.

Differentiating Assessments

The word assessment describes activities that teachers use to obtain information about the knowledge, skills, and attitudes of students in their learning (Woolfolk & Margetts, 2013). Assessments are intended to communicate to teachers how to make instruction more effective, promote instruction, be fair to all students, and measure a broad range of abilities of all students

involved (Marsh, 2008). Assessments are undertaken to diagnose and monitor the progress of students, grade the students, predict future achievements, motivate students, and inform the teachers about their teaching processes. However, assessments can discourage and disengage students if they are not pitched at the right level.

When teachers write assessments, they need to provide students with opportunities to demonstrate their learning by following the learning instructions that are created in the teaching program. The assessment should also align with the revised Bloom's taxonomy (Waite et al., 2020). When teachers differentiate assessments, they do not need to change the content. Instead, they select specific content to examine. In addition, the teachers need to provide clear and easy-to-understand instructions in the assessment. Assessments can take different forms: short answers, essays, multiple choice, matching, and true and faults, but each must test the same learning outcomes. Objective testing is a valuable tool to differentiate students' learning if it considers the revised Bloom's taxonomy. The word objective means that the assessment is not open to many interpretations and it is not subjective. Objective testing includes multiple choice questions, matching exercises, true and false statements, short answer statements, and fill-in-the-blank statements. When using objective testing, teachers can retain the question but reduce the number of choices so that struggling students have at least a 50% chance of getting the correct answer. In every assessment, the teachers need to ensure its reliability, validity, and fairness (Woolfolk & Margetts, 2013). This approach of differentiation challenges most teachers, including experienced teachers, when assessing students with different capabilities.

Depending on the type of assessment, teachers can also write short answer questions and extended response questions to test different abilities in students. For example, some questions can be factual, conceptual, procedural, or metacognitive (Waite et al., 2020). In this way, students can recall, interpret, apply, analyse, evaluate, and create knowledge. This is differentiation, and it is inclusive and caters for the diverse knowledge of students. For struggling students, the questions can be scaffolded to guide the student in making the right decision. Differentiating the assessments in this way, the curriculum is not compromised, the students are not disadvantaged, and the goals are achieved (Venville & Dawson, 2012). Differentiation does not mean that the teachers assign less work to the struggling students and more work to students who grasp the content readily. In fact, it is useless to do less of what you do not know or understand and more of what you already know. Doing so is a waste of students' time, making students give up, withdraw, and become bored, frustrated, angry and disruptive. Providing more of the same to students who know and less to students who do not know are errors that make differentiation a failure.

FINDINGS OF THE STUDY

The methods of differentiation have been explained in the text. What each method means and how students respond to the methods are shown in *Table 1*. The actions of the teachers in implementing differentiation are shown in *Table 2*. The assessment types, as part of pedagogical approaches and their advantages and disadvantages, are shown in *Table 3*.

Table 1: Differentiation in the classroom and what it integrates.

Differentiation of	What the teacher does	What differentiation integrates
The instructions	<ul style="list-style-type: none"> • Teacher uses a language that every student understands. • Teacher sets clear objectives for learning written on the board for students to see. 	<ul style="list-style-type: none"> • Students understand what the teacher teaches.
The curriculum	<ul style="list-style-type: none"> • Teacher writes a program of learning that the students and parents understand and can easily follow it. • The program of learning must show the pages of the textbook that the students use so that the students can easily access the required information. 	<ul style="list-style-type: none"> • Students can use the program of teaching to move forward and backwards with learning. • Students understand exactly what is required of them to learn and know.
The assessment	<ul style="list-style-type: none"> • Teacher sets different types of assessments that include objectives, matching, short answer questions, and questions that implore reasoning. • Teacher provides clear guidelines to students for what the assessment is all about. 	<ul style="list-style-type: none"> • Students know exactly where the assessments will come from and what this means. • Students trust that the teacher has their interests at heart.

Source: (Pendergast, Main, & Bahr, 2020)

Table 2: The characteristics and actions that teachers take in implementing differentiation.

Traits of a teacher	Influence of the trait on the teacher	Outcome for the student's success
Teacher behaviour	<ul style="list-style-type: none"> • Teacher copes with student diversity. • Teacher adopts specific teaching strategies. • Teacher invokes a variety of learning activities. • Teacher monitors individual student needs. • Teacher pursues optimal learning outcomes. 	<ul style="list-style-type: none"> • Students are provided with clear instructions and directions. • Students are directed to achieve specific goals. • Students are constantly reminded to follow instructions. • Students feel they are required to achieve certain goals. • Students gain knowledge and trust the teacher.
Teacher competencies and self-efficacy	<ul style="list-style-type: none"> • Teacher is persistent in his or her teaching in a challenging situation. • Teacher focuses on groups rather than the whole class. • Teacher is flexible in delivering his or her intended lesson. • Teacher sets goals to be achieved by groups of students. • Teacher has adequate knowledge of the subject that he or she teaches. • Teacher has adequate knowledge of students' characteristics. 	<ul style="list-style-type: none"> • Students realise that the teacher wants them to learn, and they fix themselves. • Students realise that they are important and begin to change their behaviour. • Students develop confidence and trust in the teacher and begin to act appropriately. • Students begin to meet the goals set by the teacher.

Traits of a teacher	Influence of the trait on the teacher	Outcome for the student's success
Teacher beliefs	<ul style="list-style-type: none"> • Teacher beliefs influence perception. • Teacher beliefs strongly affect related behaviour. • Teacher beliefs guide his or her actions and pedagogical decisions. • Teacher beliefs influence classroom behaviour. • Teacher beliefs influence his or her efforts, persistence, and resilience. • Teacher beliefs influence his or her willingness to embrace differentiated instructions. 	<ul style="list-style-type: none"> • Students realise that the teacher cares about them and they begin to cooperate. • Students think that the teacher knows what he or she wants them to learn. • Students begin to appreciate what the teacher does and embrace the processes of learning. • Students become willing to participate in their own learning.
Teacher identity	<ul style="list-style-type: none"> • Teacher knows his or her subject matter very well, didactically and pedagogically. • Teacher nurtures and guides students considering their characteristics. • Teacher has a good experience and education. 	<ul style="list-style-type: none"> • Students begin to know that the teacher knows the subject well and they begin to fix themselves. • Students believe that they can benefit from what the teacher is teaching. • Students appreciate the teacher and collaborate with him or her.

Source: (Suprayogi, Valcke, & Godwin, 2017)

Table 3: The advantages and disadvantages of different kinds of test items and how these test items can provide means of differentiation so that all students benefit and experience success.

Types of Assessment	Advantages	Disadvantages
Short Answer	<ul style="list-style-type: none"> • Measure facts in a short time. • Fairly easy to score. • Tests recall. • Excellent format for mathematics and science. 	<ul style="list-style-type: none"> • Difficult to measure complex learning. • Sometimes it is ambiguous.
Essay/Long Answer	<ul style="list-style-type: none"> • Can test complex learning. • It assesses the thinking process and creativity. • Easily applied in all areas. 	<ul style="list-style-type: none"> • It is difficult to score objectively. • It is subjective and uses a lot of time in testing.
True/False	<ul style="list-style-type: none"> • This tests facts in a short time. • It is easy to score. • It tests recognition. • It is objective. 	<ul style="list-style-type: none"> • It is difficult to measure complex learning. • It is difficult to write reliable items. • It is subject to guessing.
Matching	<ul style="list-style-type: none"> • It is an excellent item to test the association and recognition of facts. • It can test complex learning concepts. • It is objective. 	<ul style="list-style-type: none"> • It is difficult to write effective items. • It is subject to process of elimination.
Multiple Choice	<ul style="list-style-type: none"> • Can assess learning at all levels of complexity. • It fairly tests a large knowledge base in a short time. • It is highly reliable and easy to score. 	<ul style="list-style-type: none"> • It is difficult to write. • It is subject to guessing. • It benefits students who understand what they study.

Source: (Woolfolk & Margetts, 2013),

DISCUSSION

The aim of this study was to investigate if differentiation processes could be used to improve students' engagement in the classroom. Through the review of the literature, the study has confirmed that differentiation, as a pedagogical process, includes differentiation of instructions, differentiation of curriculum, and differentiation of assessments (Table 1). These processes are important in engaging students in their own learning. However, for the effective implementation of these processes, there has to be true and inclusive teacher leadership, a leadership that models the way for students to follow, a leadership that inspires the students to accept challenges and learn, a leadership that challenges the students to engage in effective learning opportunities, a leadership that enables and encourages the teachers to provide the best learning outcomes for all students. As reported by Kouzes and Posner, being a teacher is not just the affair of the head, but it is also the affair of the heart (Kouzes & Posner, 2017). Furthermore, the teachers should possess characteristics and actions that they can use to implement differentiation. Teacher behaviour, competencies and self-efficacy, beliefs, and social identity (Table 2) influence how he or she implements the processes of differentiation. A teacher who does not believe in student diversity will not cope with students' heterogeneous classroom behaviour. This teacher will not persist in challenging situations.

The Salamanca Statement on inclusive education is a political document that defines its principles (Migliarini et al., 2019). It does not compel teachers or education leaders to impose differentiation in the classroom. However, the present study shows that every student has the right to develop according to his or her potential and to develop the competencies that will allow him or her to participate fully in society. To achieve this goal, the school systems have the responsibility of offering quality education to all students. Although the Salamanca statement is widely acknowledged, the inclusion principle is not

an uncontroversial theme (Freire, 2009). There are two camps when it comes to Salamanca Statement, one which supports inclusive classrooms and another which opposes it. Many people who oppose the statement point out the difficulty of offering the same quality education to diverse students presenting with a wide variety of learning needs and characteristics. However, those who defend the inclusion principle stress that for the school systems to care for the needs of a heterogeneous classroom, there is a need for a huge transformation, notably that the schools must become flexible in their structures, organisation, and curriculum delivery by diversifying strategies, methods, and materials (Freire, 2009).

In the last few decades, most societies across the continents have become more diverse, and education systems, now more than ever, require inclusive pedagogies. These societies are also signatories to the Convention on the Rights of Persons with Disability to reallocate resources for purposes of inclusive education and to reduce segregation (Bruin, 2019). Therefore, framing education systems as categorical and specialised service delivery to discrete populations makes education inclusion an unsolvable problem (Sailor, 2017). Because of the demand for inclusive classrooms, teachers are challenged more than ever to meet the needs of diverse learning environments (Vantieghem et al., 2020). The teacher must, therefore, know his or her content subject didactically and pedagogically so that he or she can provide for the diverse needs of the students. However, because of the general lack of specialist teachers in the classrooms, differentiation will continue to remain a challenge in most learning institutions.

Differentiation of students' learning is also based on the notion that there are cognitive differences that exist in all classroom settings because of the mixed abilities and streaming (Valiandes, 2015). Based on this notion, school achievements cannot be considered the only difference between students.

We now know that student's readiness level, learning style, interests, prior knowledge, experiences, socioeconomic status, personality, and social skills are important contributing factors to students' learning in the classroom. These factors dictate that teaching to the middle cannot meet the multiple and diverse needs and strengths of every student. Therefore, to mediate and meet the needs of the students, differentiation of instructions, curriculum, and assessments are key pedagogical approaches that may ameliorate students' achievements. These processes assume that the teacher has acceptable knowledge of the subject that he or she teaches, the teacher has acceptable knowledge of students' different learning abilities, interests, knowledge, and attitudes, and the teacher has the best interest of every student at heart. Differentiation in a mixed-ability classroom is possible through systematic, focused, and continuous teacher training and support.

Factors that Influence Differentiation

To give students the opportunities to maximally develop their talents, these students must be academically addressed at a level that meets their cognitive needs (Eysink et al., 2017). However, in most schools, at-risk students, average students, and gifted students, because they are of the same age, are brought together, creating large variations in ability levels within the classroom. In the classroom, there are also students who are not ready to learn. This mix of students calls for extraordinary effort from teachers to differentiate and tailor their instructions to meet the cognitive needs of all these children. Student diversity in the classrooms across societies is, therefore, the main factor why differentiation of instructions, curriculum, and assessment is needed in all schools.

Most Education Departments have provided some learning principles for adolescents (Education, 2013). In these principles, the teachers focus on the students to learn, make sense of what they learn, and avoid rote learning, memorising, and recalling. This means that the content must be clearly organised to

make meaning and connect with the lives and experiences of students. The teachers must create sense-making tasks so that the students use important knowledge and skills to explore, apply, extend, and create new knowledge with essential understanding. These sense-making tasks help students connect knowledge and skills. These are important factors that influence learning. However, as always, every test item has its advantages and disadvantages (*Table 3*).

Perhaps teachers who are overwhelmed with a range of diversity issues in the classroom are the common factors that influence the effect of differentiation in most schools. Having thirty-two students in one classroom, each requiring differentiated instructions, curriculum, and assessment is quite overwhelming. There are also teachers who do not recognise student diversity. At times, there is not enough space or time to plan and carry out differentiation. Similarly, there may be a lack of support from other teachers or school leaders. In other cases, the teachers do not have enough knowledge on how to differentiate. Furthermore, in some schools, the pressure from parents that their children are given the same treatment as other students makes differentiation a difficult task. Therefore, teachers need appropriate training on how to initiate and carry out differentiation.

Lack of Cooperation Between Teachers and School Leaders

The need to reform schools and education systems to minimise teacher turnover so that they can support students in the middle years and students with diverse needs remains firmly on the agenda. While it is certain that the core elements that make the teachers' professional identity and affect their retention are motivation and commitment, beliefs, personal and professional values, efficacy, and job satisfaction (Sacks et al., 2021), there is an urgent need for cooperation between school leaders and teachers. Without cooperation, the dip in the knowledge gap between students will remain high. Regardless of sophisticated strategies adopted by

some schools, these strategies will find no firm commitment due to teacher attrition and high turnover (Mason & Matas, 2015; Paris, 2013). From professional experience, most pedagogical approaches are hampered by a lack of education leaders who are committed to school reforms. In normal circumstances, school leaders are people who have enough knowledge and leadership skills to manage the affairs of the schools and guide the teachers to provide the best learning outcomes to students. However, there are times that school leaders fail to differentiate between what they can control and what they need to control, especially when it comes to the relationship between teachers, students, teaching, and students' success. This causes a lack of trust and creates a toxic work environment. With the inability of teachers and school leaders to cooperate, the students bear the effect of ineffective teaching as teachers find their way out of teaching (Gallant & Riley, 2017).

Lack of Knowledge to Differentiate Assessments

In 2008 the Middle Years of Schooling Association launched its position paper on middle schooling reforms. The paper set out its objectives to improve the learning outcomes of students in the middle schools. The objectives are (1) clear philosophy relevant to the context, (2) a comprehensive range of signature practices, and (3) an evidence-based approach. These objectives meant that for school reforms to occur, there must be a collaborative practice where the teacher is an active agent of school reforms and development (Pendergast, 2006). In the process, it leads to the development of the middle layer of future leadership (Pendergast et al., 2020). It appears that the pedagogical approaches that bring about successful learning outcomes for all students are known to every teacher and school leader. However, this is an error of unprecedented proportions. In fact, the ability to differentiate the curriculum and assessments to provide the best learning outcomes for all students is less understood by most teachers, and school leaders are unable to come to the rescue. This lack

of knowledge is causing difficulty in providing the best options for all learners, even when their diversity is taken into consideration. However, with cooperation between teachers, there can be opportunities for teachers to develop their skills and improve their pedagogical approaches.

CONCLUSION

The study confirms that teaching and learning are becoming difficult and complex because of the varied student abilities and disabilities. It also confirms that there are processes of differentiation, which when followed, may provide better opportunities for students to engage in their own learning. But it is important to note that the inclusion of every child to achieve his or her personal best learning in the classroom is an ethical issue (Reindal, 2016). There is enough evidence which demonstrates that differentiation is an important part of pedagogical approaches for the well-being and success of students in their learning process. The process involves the differentiation of instructions, content, curriculum, and assessments. These approaches allow students to persist in their learning, develop an interest in school, cooperate with teachers and learn, and develop the attitude of wanting to achieve a good understanding of what they learn. For the approaches to make sense to the students, the schools must produce a curriculum that is engaging and relevant for all students and keep them working even when it is tough. The curriculum must be aligned with assessments that are equally differentiated to meet different abilities. When the curriculum and assessments are differentiated, students can succeed and develop a sense of satisfaction.

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