

Assessing the Effectiveness of Differentiated Instruction Strategies in Diverse Classrooms

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Abstract. *The purpose of this research is to evaluate the impact of the differentiation techniques for students with learning disabilities learning in integrated classrooms. In differentiated instruction, the teacher modifies or adapts the delivery of instructions while teaching to fit individual students needs, learning modalities, skills, and aptitudes, to effectively reach all the learners. The study employs formative assessment approaches whereby student learning is assessed during the course of the unit of study thus enabling instructors to make changes to their teaching methods where necessary. Information was gathered by using formative assessments like quizzes, exit slips and observations among others. The study proves that effective differentiation enhances the level of students interest, motivation and achievement. More particularly, strategies like flexibility of group, differentiation in assignments, and arrangement of classroom and its furniture were identified as more concrete which contributed positively to the students self efficacy, self-ability and self performance. Overall, the need to conduct assessments on the effectiveness of these instructional strategies and to make necessary changes is an important feature when implementing teaching and learning strategies in collaborative classroom setups that include students with Special Education Needs.*

Keywords: *Diverse Classrooms, Assessment, Instruction Strategies*

Received: January 21, 2022

Revised: February 17, 2022

Accepted: March 22, 2022

INTRODUCTION

The term “differentiated instruction” entails a system of instruction that is characterized by the variation of lessons taught to meet the learning abilities of every learner that is being taught. This approach considers the fact that each individual student has his/her own characteristics such as talents, deficiencies, preferences and needs for classroom setting. According to Smale-Jacobse et al. (2019) it is worth to mention that during the recent years, the importance of differentiation has emerged more transparent because of the multicultural and multilingual learners, as well as the diverse learner’s profiles, and learning preferences. In current times it is not exceptional to find a student who is a member of different culture and language learning styles, preferences, and requirements (Okaz, 2015). Methods that have to be adopted by the teachers are ought to consider variances that are inherent in learners if the needs of all the learners are to be met.

Teachers can choose from the following methods recognized to be efficient for making differentiation for the students. Flexible grouping is one of them, where students are grouped by their needs and ability as opposed grouping by age or grade (Steenbergen-Hu et al., 2016). In a situation, a teacher would group learners struggling with a particular idea together with learners who seem to understand it well enough so that each learner could be given personal attention and help, according to Brown & Palincsar (2018). Another strategy that teachers in inclusion classrooms have found useful is the tiered assignments approach. This means provide a variety

of assignments difficulty levels to ensure each learner is given one that would challenge him/her to the expected capacity. It would prove very useful for students who may be struggling in a certain area of learning because it allows them to work through the material as and when they want while at the same time getting the help that they need.

Boelens et al. (2018) pointed out that it is also possible to differentiate education in inclusive classroom by making modifications to the environment. This can be done in many methods including offering of many learning resources or designing the space for learning which will suit most of the student's style of learning. In the same respect, the teachers can opt for signing for the hearing impaired pupils or offer coloured visuals for the pupils who learn better that way or create a low stimulus area for those who are easily distracted (Altenmüller-Lewis, 2017; Tola et al. , 2021).

To practice differentiation for learner's needs in inclusive classrooms, the following are marked by the use of multiple pedagogy styles: In the works of Syofyan & Siwi (2018), the author states that both, visual, aural, and hands on methods can be used, although some children may grasp a concept better if it is explained to them in one mode than another. When the educators use many methods of teaching, they enhance the chance that each of the students will be able to understand the given subject matter.

Further, both Suprayogi et al. (2017) and Deunk et al. (2018) highlighted that due to the need to cater for the needs of multiple children, differentiated education has been found helpful in the classroom. It is recommended that the methods of differentiation in education practiced by the teachers should be assessed for their effectiveness from time to time and adjustments done when needed (Bondie et al., 2019; Valiandes & Neophytou, 2018). In this process, you may request and utilise student and teacher feedback and collect information about student's performance to help you as a teacher. Intervention and general education students, including culturally and linguistically diverse, gifted, and students with learning disabilities or EBD, can and should learn in a classroom that has teachers debating and implementing various forms of instruction and, even more often, discussing their effectiveness in Cohen & Henry (2019) and Farinde-Wu et al. (2017).

METHODS

Formative assessment is a continuous evaluation exercise in which a teacher assesses students learning progress throughout a given unit of learning. This method enables the educators to assess the progress of the students consistently and make the required correction on the process. There are several types of formative assessments which include quiz, exit tickets and classroom observations where the teachers can collect information about students learning process. Such information helps them to change the strategy of teaching in the course of the process to make the instruction as appropriate for different students needs as possible. One major objective of formative evaluation is to offer a timely feedback to the teaching practices and make changes to enhance students learning.

RESULTS AND DISCUSSION

Teaching strategies for children with learning disabilities have attracted much attention because they have apparently worked in integrated classrooms. Introduction: Numerous benefits have been associated with differentiated instruction including engaging students, encouraging the students, improving the grades, and enhancing pride and self determinism among the students (Deci & Ryan; Bowden et al., 2021). This research reveals that academic achievement is significantly higher in students who undergo differentiated instructional model rather than regular instruction among teachers providing differentiated instruction students with all abilities ranging from learning disabled to gifted (Kieran & Anderson, 2019; Tomlinson & Allan, 2000).

Another survey also gave findings that differentiated instruction led to an improvement on the students confidence and competency in acquiring knowledge (Tomlinson & McTighe, 2006). Reviewing the literature, the authors of the source under analysis found that ideas of

flexible grouping correlate with higher learning achievement of students, particularly marginalized ones. Of the students who received tiered assignments, levels of interest and motivation were established to be higher than that of students who did not take part in the other study that sought to determine the impact of tiered assignments on student engagement and motivation.

Organizing the class in a way that will fit every student's needs is also credited for enhancing education results. One study found out that assisting students, who are visually aided learning enhanced support for them, the overall improvement in learning summed up overall academic performance (Rosenblum et al., 2018; Stokes, 2002).

These research also take lesson that the implementation of diversified instruction methodologies is well associated with a series of beneficial outcomes such as increased students participation and interests in the course and improved learning achievements in the classroom. To increase the learning outcomes of students, diversified instruction strategies used by teachers should be reviewed frequently to ensure they are effective. In several research, various structures in form of differentiated education practices have been proved to meet the needs of every learner as stipulated below. Reeve (2012) and Alley (2019) assert that motivation, asserted engagement, performance, and feelings of autonomy and competence are some of the positive effects that are associated with differentiation instruction.

It was noted that student achievement increased by a higher degree in students who received differentiated teaching as compared to those who did not, in a study that analysed the impact of varied teaching on students performance in diverse classrooms (Prast et al. , 2018; Tomlinson & Allan, 2000). One other study pointed out that those students who were taught in class were more confident with their academic competence as compared to those given individualized lessons. This article concludes that differentiated instruction may be more successful with achieving a broad spectrum of students for several reasons. One of them is the so called flexible grouping, according to which students are grouped in accordance with the teacher's data on their needs and achievement levels rather than their age or grade level. This can prove to be particularly useful in increase rate of academic achievement through freeing up of time for a teacher to address the hard of understanding students on a specific idea.

Another technique that might also assist in making differentiated instruction more effective in classrooms for all students include the use of tiered assignments. This method has proved to be effective in increasing student's attentiveness and desire to learn because every learner has an option to choose the degree of difficulty of tasks addressed to him or her. There should always be a distinction made in instruction where children are in class and this can be achieved through differentiation of the classroom context. This can be done through offering the students different learning materials such as books and other learning aids and learning environments. Student learning can be fostered for instance by providing graphics for graphic learners or making a quiet environment for learners who need a minimal stimulation environment (Montes León, 2018; Babb et al., 2019).

It is also important to mention that in order to differentiate the instruction in inclusive classrooms implementation of multiple modes of instruction is possible. In particular, individual pupils may find their lesson most effective when the teacher demonstrates how something is done, when he or she discusses the issue and when the teacher allows learners to conduct experiments. Thus, when teachers use a number of approaches, the possibility that all the learners will be able to understand presented information will be higher. Intense much as that differentiated education has been proved to be an effective way of addressing needs of a number of learners. In an attempt to intensify student learning, teachers should find ways of assessing the effectiveness of their diverse instructions strategies and make appropriate adjustments. A teacher can create environment in one's classroom that would be beneficial for every learner regardless of the students cultural or language difference, students learning styles or needs,

academic necessity that every teacher tends to focus on by combining multiplicity of strategies and assessing student’s performance data constantly

The Metoo movement started in the United States in 2017 and brought out the issues of sexual harassment in the workplace to the limelight, but laws protecting the employees from such behaviors were already in place some years before the occurrence of the metoo movement.

Strategy	Description	Expected Outcomes
Flexible Grouping	Grouping students based on individual needs and abilities.	Improved personalized learning and academic success.
Tiered Assignments	Offering assignments with varying levels of difficulty.	Enhanced student engagement, motivation, and comprehension.
Environmental Modifications	Adjusting the learning environment to cater to different learning styles.	Increased student comfort, focus, and overall performance.
Multiple Pedagogical Approaches	Utilizing various teaching methods (visual, auditory, kinesthetic)	Better material retention and inclusive learning for all students.

From the table, it is clear that four major differentiated instruction strategies, flexible grouping, tiered assignments, environmental modifications, as well as multiple paths approaches for teaching each of them intended to meet the learning needs of the students in an inclusive classroom. Due to such grouping, children can be grouped according to their capabilities and the result will be more students being able to learn effectively and perform well academically. Heterogeneous tasks mean different levels of complexity that make learning to be interesting and encouraging to students understanding. In class modifications include making changes in the physical learning environment like using graphic displays for the benefit of the visual learner, use low arousing stimulus, for example, reducing noise or brightly colored objects. Finally, incorporating numerous teaching and learning methods visual, auditory, and kinesthetic, can facilitate learning for every child to capture, therefore enhance comprehension and reduce learning gaps. Altogether one achieves a more flexible and viable learning climate that fosters increased academic performance and student’s interest.

CONCLUSION

Differentiated instruction is a concept of teaching which involves the approach of delivering lessons in a manner that complements the learning style of the learner. It includes its ability to cater to the understanding that each each student is a unique learner who comes with his or her own strengths, weaknesses, interests and needs regarding learning environment. These, among others, include flexible grouping, tiered assignments, altering the classroom arrangement and the use of a variety of teaching approaches, which are some of the ways through which educators can differentiate instruction in inclusive classrooms. Thus, it is possible to conclude that differentiated instruction has been proved to be an effective model of addressing the needs of many learners. Research has associated it with positive changes in student’s interest and motivation, time on task and sense of responsibility and self efficacy. It is crucial for teachers to check the effectiveness of their teaching practices concerning differentiation for learners in inclusive context and change if required. With the particular strategies and frequent monitoring of the summary of students accomplishments, a teacher can construct a learning environment favorable for all students without regard to their cultural or language background or learning or learning needs.

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