

Differentiated instruction in the context of college learning: A case study of St. Dominic students

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Abstract – *The ultimate goal of teachers in classroom is students' learning. Teachers are considered successful if they are able to make students effectively learn what are taught inside the classroom. Without students' learning, it is time that teachers look for alternative ways or approaches to ensure classroom learning. One of the important reasons why students do not effectively learn inside the classroom is their inability to follow or catch up with teaching instruction. Some teachers forget the fact that students are different in many aspects such as in their learning skills, previously acquired knowledge, interests, motivation as well as needs in the classroom. Students particularly when they are grouped inside the classroom, have their own distinctiveness, specificities, or peculiarities. It is then the duty of teachers to recognize and identify these distinctiveness, specificities, or peculiarities and adjust their teachings according to students' different or distinctive levels of skills, previously acquired knowledge, behavior, interests, motivation and needs. Differentiated instruction (DI) is essentially what this is all about. It is a pedagogical approach whereby teaching is adapted to each of the specific characteristics students have inside the classroom. Differentiated learning is tailoring the way teaching is delivered to students. It is applied particularly to instructional contents, process, and product, used by teachers, so that educational services are effectively delivered to meet the diverse needs of students (Tomlinson, August, 2000). Differentiated instruction, which in turn allows differentiated learning, hence is about recognizing differences among students. Since teachers' ultimate goal in classroom is learning, DI is one way of making sure that students would catch up, adapt, be interested and hence learn what they are taught, given their own individual specific characteristics.*

Keywords – *Differentiated instruction, contents, process, product, skills, knowledge, behavior, motivation, needs*

Introduction

No two students are perfectly alike. Some are fast-learners, some are slow-learners. Each student has his or her own specific skills, knowledge, and behavior inside the classroom. And teachers should be able to identify and recognize these distinctiveness and specificities to be able to adjust their teaching accordingly. The international practice teaching program allows educators from all over to learn more about the life, history, culture, traditions, beliefs, practices, customs, and characteristics of people from foreign countries. Through this program, they can acquire a broader world view, richer

What is differentiated instruction (DI)? Teachers' ultimate goal in classroom is students' learning. Teachers are successful if they are able to make students learn what they are taught in the classroom. Without learning, it is time that teachers would search for other ways by which they could effectively teach students. One of the ways by which teachers can teach well their students is through so-called Differentiated Instruction (DI).

This is what so-called Differentiated Instruction (DI) is all about. It is a pedagogical approach whereby teaching is being adapted to each of the specific characteristics students possess while inside the classroom. Differentiated teaching is tailoring instruction with regard to contents, process, and product, so that educational services are effectively delivered to meet the diverse needs of students (Tomlinson, August, 2000).

In both the primary and secondary levels of education, since teachers' ultimate goal in classroom is learning, DI also allows differentiated learning. DI makes sure that students would learn what they are taught, given their own individual specific characteristics. This is why DI is indeed opposed to 'one-size-fits-all' approach to teaching, whereby teachers use the same method of delivering classroom materials and assessing students inside the classroom, as they treat all such students one and the same (Sifakis, 2013).

Since teachers are able to recognize differences among students through DI, they use methods or assessments that meet the specific needs of students. The result is greater motivation, interest or satisfaction among students, knowing that they are not left alone in learning. Likewise, DI ultimately creates the best experience for lifelong learning inside classroom not only on the part of the teachers but also on the part of the students as well (Sifakis, 2013). Through DI hence, teachers are able to effectively deliver teaching instruction while the students get to absorb them fully.

In what instructional levels is DI conducted? Differentiated Instruction is usually done by differentiating teaching approaches according to the different levels of skills and knowledge of students in the context of content, process and product (Nordlund, 2006; Sifakis, 2013). In the case of content, teachers can adjust their lesson plan or teaching materials to the level of skills of each of the students. To do this, teachers can classify their students according to skill levels.

For teaching process, teachers can adjust the activity or process by which they deliver teaching materials to their students. This for instance can be done by adapting the method of teaching to the particular needs of the students. Thus teachers can use externally motivating instructional facilities to enhance teaching and fit these to the specific needs or situational learning of each of the students (Zwiers, 2008; Snowman, McCown and Biehler 2012; Sergio, Licaucó & Garcia, 2015). Teachers in turn can use motivating instructional method, i.e., memorable images or sceneries that would readily be interesting for each of the students.

In the case of teaching product, which essentially is the expected outcome/s of instruction, teachers can distinguish different learning outcomes for each kind or group of students. Through product differentiation, teachers can adjust their assessment depending on the students' level of skill or knowledge to achieve specific learning outcomes. Incidentally, assessment can refer to tools or mechanisms used to systematically gather information about students' learning progress so as to create informed decision about students' learning (Walvoord, 2017).

How are students differentiated to adjust teaching? To adjust accordingly instructional contents, process and products, students can be classified as a way of differentiating them. There are many ways that students may be classified, some of which are on the basis of: 1) their age; 2) racial or family background; and 3) learning styles (Nordlund, 2006). Hence by knowing the age of the students, teachers would be able to determine the psycho-motor skills and capacity of each of the students subject to learning.

Also, by understanding racial or family background of students, teachers would also be able to know recognize their behavioral characteristics. Likewise, by identifying the learning styles of the students, teachers would be able to know each of the students' peculiarities, i.e. personal attitude and behavior, level of motivation, preference for studying, materials they use to study, etc. As a result teachers can appropriately adjust their instructional materials, methodology or assessment.

Thus, as an example in real situation, there are students who are considered more introvert or those that do not usually mingle with their classmates during the conduct of classroom activities. In most cases, it will be observed that the more appropriate approach relevant for introverted learners, is student-centered classroom learning (greater 'scaffolding') rather than the teacher-led classroom teaching (less 'scaffolding') because most of the time, they are not likely or they are hesitant to ask questions or participate in active discussions (Lawrence, 2015). Likewise, for extroverts, who mingle more with their classmates when classroom activities are being conducted, a more teacher-led classroom teaching is observed to be more appropriate since such students would naturally participate in class and are inclined to prefer a more active, dynamic and more participative class discussion (Lawrence, 2015).

But students are more commonly classified into three levels of knowledge such as Exemplary, Competent and Developing (Brown University, 2017). Depending on the phase of learning, exemplary students are considered 'fast learner', average students are 'average learner' while developing students are 'slow learner'. To apply differentiated learning, teachers should be able to differentiate their teaching either in the context of content, process or product.

In this study, students are differentiated according to whether they are exemplary, competent and developing. Such classification was derived by grouping of students according to their past performances. Differentiated instruction in turn is applied within the context product or mainly on the assessment of these students.

Main questions. The main question for this research is: How does DI in terms of differentiated assessment affect the classroom performance of students?

The sub-questions are:

- a) Using undifferentiated assessment, does the general performance of students improve or worsen?
- b) Using differentiated assessment, does the general performance of students improve or worsen?

Methodology

Triangulation of research methods. In this study, triangulation is used to combine two methodological approaches, namely, case study approach and grounded theory approach. Typically, triangulation involves the use of two research approaches to strengthen the validity of findings in the study (Laws, 2004; Yin, 1984).

On the one hand, conducting a case study is like conducting investigation on a specific phenomenon in 'a real-life' situation (Yin, 1984). On the other hand grounded theory is intended to strengthen findings from case study, by deriving essential information from experiences of participants in the study (Tobin & Begley, 2002.). Through the use of case study, the researchers have gone through the experiences of student-participants. Through the use of grounded theory,

the researchers generated an explanation (theoretical) on the process, action or interaction in the experiences of the students on whether DI has indeed helped in improving learning of college student.

Sampling method and collection of data. Using stratified sampling, two sets of sample-students were subject to a case study. The two sets of sample-students belong to two corresponding classes, being taught by one of the authors in the study. The sample students in each of the two classes are classified into Exemplary, Competent and Developing.

Undifferentiated assessment. An assessment of learning was conducted using test papers, which were distributed to the students in both classes. For both classes, the test papers were all one and the same and that no classification was made whether tests are difficult, standard or easy. The resulting scores and average of such scores for all students, regardless of whether they are exemplary, competent and developing, were then computed and taken for each class. An interview was also conducted in relation to the results. Salient points of the interview were then taken and compiled.

Differentiated assessment. Another assessment of learning through corresponding test was again administered to students in both classes. This time, for one class, the test papers were divided into three sets, difficult, standard and easy, which were distributed respectively to exemplary, competent and developing students. For the other class, the papers were all one and the same and that no classification was made whether students are difficult, standard and easy. The resulting scores and average of such scores for the exemplary, competent and developing students were then computed and taken for each class. An interview was also conducted in relation to the results. Salient points of the interview were then taken and compiled.

Results

Based on the (final) findings, it was proven that:

Using undifferentiated assessment in the two classes, it appeared that in contrast to the initial findings, the resulting scores of the students in both classes exhibited the same pattern of highly polarized values. It will be seen that the scores (from 1 to 10) of exemplary, competent and developing students for both classes gravitated toward three different directions. In both classes, it was observed that:

- a) Exemplary students' scores grouped around the value of 6;
- b) Competent students' scores flocked around the value of 5, and;
- c) Developing students' scores piled up toward the value of 4.

Using differentiated assessment in one class and undifferentiated assessment on the other class however, it appeared that in contrast to the initial findings, the resulting scores (from 1 to 10) of students in the two classes were found to have exhibited significantly different pattern. On the one hand, the resulting scores in the class where undifferentiated assessment was used, showed the same highly polarized pattern of values; which gravitated toward the value of 6 for exemplary students, 5 for competent students, and 4 for developing students. On the other hand, in the class where differentiated instruction was conducted, it was observed that students' scores for all classifications of students, i.e. exemplary, competent, and developing grouped around points 7 and 8.

Likewise, compared to the results of initial interview with 10 students from each class, which were the following:

“We do not like to be included in the lowest classification”

“All the exams were hard”

“We were not able to study our lessons”

“We have school activities, which prevented us from studying our lessons yesterday;”

The authors gathered new specific results of interview, worth highlighting from students, related to DI:

“We like the fact that we do better in our exams, based on our own capabilities.”

“We feel that exams were relatively easier.”

“It is good that we were able to explore our own interest in learning.”

Conclusions

The results of findings in items 1 and 2 above appeared to indicate that the use of differentiated assessment can really improve performance of the students inside the classroom. Based on the results as shown in item 1 pedagogical approach without the use differentiated instruction can lead to highly polarized learning, keeping developing or even competent students at low scores, and in turn creating a low motivation for learning. On the other hand as shown in item 2, the use of DI can help improve performance of students, which in turn can create a sort of lifting of motivation of students.

Again, it is worth highlighting that there are still other factors to focus on, other than DI, to help improve the learning of students. One is to look for other methods to effectively improve the delivery of teaching materials to students, i.e., to enhance the use of computer-based instruction or CBI (Sergio, Licaucó & Garcia, 2015). Likewise, it is important to constantly review materials being given to students. Instructional material development initiatives regularly done can boost further pedagogical capabilities of teachers.

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