PERCEPTION AND IMPLEMENTATION OF DIFFERENTIATED INSTRUCTION IN THAI UNIVERSITY

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Abstract. The COVID-19 pandemic halted education all around the world. As a response to the challenges in meeting university students' needs, modeling Differentiated Instruction is offered as one way to demonstrate how educators can incorporate instructional strategies to address students' needs, interests, and learning styles. Differentiated Instruction is an excellent approach for repairing interrupted learning and teaching new knowledge, according to research. As a result, the perception and implementation of differentiated instruction by university lecturers were investigated. The study utilized a quantitative, descriptive survey research methodology in collecting data. The purpose of this research is to explore English university lecturers' perception and implementation on Differentiated Instruction based on content, process and product. The study answered two questions as basis for curriculum development: 1) To what extent do university lecturers perceived Differentiated Instruction? and; 2) To what extent do university lecturers implement Differentiated Instruction?

Keywords**:** Differentiated instruction; learning styles; student cantered

I. INTRODUCTION

A marketplace is comparable to a classroom setting. The teacher serves as the merchant, and the pupils serve as the buyers. Customers choose and purchase what they desire or need from the marketplace. Similarly, students arrive at class and select what they want or need. Some customers prefer the same things, the everyday necessities, yet no two clients buy the same thing, from the same brand, and in the same market. Students have a lot in common. As a result, teachers must differentiate their instruction because not all pupils learn in the same way. Within a single class group, no two students have the same talents, abilities, experiences, or needs. Learning styles, language competency, background knowledge, readiness to learn, and other characteristics can all differ significantly (Willoughby, 2005).

Teachers have always had to keep track of and pay attention to different groups of students. Now, amid COVID-19 pandemic, digital technologies have been used to enforce remote learning. Most if not all teachers adopted virtual teaching, in which they had to employ digital technology for the first time to aid their students' learning. Later, asynchronous and/or synchronous learning are being considered by schools. These are only a few more difficulties added in the list of worries schools and educators currently have.

Following last year's tremendous disruption in learning, most teachers are likely starting to acquire a solid hold on their students' strengths and weaknesses at this time of year. However, we must determine how each student learns best and tailor our training accordingly. Many traditional instructors may find it challenging to adapt their teaching approaches, but it is necessary to ensure that all students have equal access to learning opportunities (Cook, 2012). To deal with the varying learning styles of students, teachers must employ a variety of teaching strategies and methodologies. As educators, we must determine what our students' needs are; if we do not understand how our kids learn, we will be unable to figure out how to teach them.

Individual differences among students and the role they play in learning are discussed by Hannum (2005):1) Ausubel believes that individual learning is based on what the individual already knows; the key individual difference variable is one's cognitive structure or mental map of existing knowledge. 2) Instruction, according to Bandura, should be focused on modelling, self-regulation, and self-efficacy. Individual characteristics should be considered when teaching, he believed. Instructors should establish conditions that foster self-efficacy in individual students, which can be done most successfully by encouraging students directly and giving opportunities for them to practice. 3) According to Gagne, students' levels of pre-requisite skills may vary, so education must be tailored to the needs of each individual learner. 4) According to Skinner, individual differences among students stem from the fact that each student comes from a different context in which their learning behavior has been shaped and reinforced in diverse ways. As a result, what is a good reinforcer for one student (or group of students) may not be a positive reinforcer for another. 5) According to Vygotsky, the Zone of Proximal Development (ZPD) is the most important driver of student differences and development. He defines the Zone of Proximal Development as the gap between a child's ability to solve problems on their own and their ability to solve problems with help.

Many traditional instructors may find it challenging to adapt their teaching approaches, but it is necessary to ensure that all students have equal access to learning opportunities. As educators, we must determine what our students' needs are; if we do not understand how our kids learn, we will not be able to educate them effectively.

In the past, instruction was frequently delivered in a "one size fits all" manner. Differentiation, on the other hand, is based on the individual student, with an emphasis on using suitable instructional and evaluation tools that are fair, flexible, demanding, and meaningfully engage students in the curriculum. Teacher centeredness, according to Phungphol (2005), is a senseless educational practice that has been harming Thai educational for decades and must be halted, as specified by the National Act of 1999. Phungphol continued explaining that the extremely teacher-centered teaching styles used by most Thai instructors reflect Thai society's ingrained "power culture." In the classroom, teacher-centered teachers wield a considerable deal of authority and influence. Students are not meant to question or dispute their teachers' ideas or thinking because the teachers are specialists in what they are teaching and the students are complete novices or empty vessels. Ideal pupils are expected to be docile, moldable, teachable, manageable, and entirely obedient to their teachers' authority and control. Teachers in primary (Prathom) and secondary (Mathayom) schools, as well as university lecturers, are required to use a student-centered approach. Modeling differentiated instruction, according to Taylor (2015), is one way for educators to show how they might use instructional tactics to accommodate students' needs, interests, and learning styles. Richards (2013) further claims that in many classes, the lack of varied instruction stifles achievement for students who do not learn in the same way as their peers. Therefore, understanding how university lecturers think about and use Differentiated Instruction could be a good place to start when it comes to changing the curriculum.

One point to consider is the approach to use. In teacher-centered learning, which is the more traditional or conventional approach, the teacher takes on the role of a classroom lecturer, giving material to learners who are expected to passively absorb the information. Phungphol (2005) explained that teacher-centered teachers wield a considerable deal of authority and influence, they see themselves as a knowledge repository, and their students as empty vessels waiting to be filled with knowledge from teachers. Learners are not meant to question or dispute their teachers' ideas or thinking because the teachers are specialists in what they are teaching and the students are complete novices or empty vessels. Ideal students are expected to be docile, moldable, teachable, manageable, and entirely obedient to their teachers' authority and control. Questioning authority is considered as disrespectful in Thai society, thus, encouraging students to ask their lecturers questions could be interpreted as pushing them to be impolite (Cubalit, 2016).

To adopt student-centered teaching and learning, we must first understand how our kids learn, which necessitates pre-evaluation and continuing assessment. This gives feedback for both teachers and students to help them improve their learning. According to Mascolo (2009), student-centered pedagogy has posed severe challenges to traditional lecture-and-test modalities of instruction at colleges and universities in recent decades. Advocates of student-centered education typically start from a constructivist perspective, which holds that students build their understandings via their actions and experiences in the world. The employment of a range of different active learning approaches in and out of the classroom has sparked a blossoming interest in student-centered thinking. Collaboration, experiential learning, problem-based learning, and a number of other educational strategies are among them. Some approaches methods and strategies such as collaborative teaching (CLT), problem-based learning, project-based learning (PBL), brain-based teaching, Flip Learning Approach (FLA), Total Physical Response (TPR), Regio Emilia Approach, and so on, are being suggested to replace traditional lecture-and-test approaches of instruction in colleges and universities.

Teacher Centered Approach is compared to traditional wet market, a topsy-turvy market, where products are found everywhere. Students in this class simply take whatever they can from the teacher, who is the center of learning. On the one hand, differentiation is similar to a high-end supermarket; it, too, follows the "one size fits all" approach, but everything is in order and well-organized. Differentiation emphasizes the use of fair, flexible, demanding, engaging, and appropriate instructional and evaluation instruments to foster student-centeredness (Cook, 2012).

Everyone is unique. Each learner is unique, and they do not all learn in the same way. Furthermore, not all students are at the same intellectual level. In contrast, multiple groups of pupils are housed in a single classroom. To be an effective implementer of diversified teaching, teachers must be adaptable. Teachers must be willing to adapt their curriculum to meet the individual requirements of their students. This may imply adding obstacles to their curriculum or reducing some topics for other students. We must assess our students to understand how they learn. The assessment findings give teachers and students with suggestions for improvement.

Tomlinson, (2001) defined Differentiated Instruction as a philosophy of teaching purporting that students learn best when their teachers effectively address variance in students' readiness levels, interests, and learning profile references. A key goal of differentiated instruction is maximizing the learning potential of each student.

Hall, et.al (2011) also defined Differentiated Instruction as a theory based on the idea that the needs of all students in all classrooms can be met, regardless of the diversity in that classroom.

Anderson (2007) discussed that Differentiating

Instruction is not changing the learning objectives of a lesson; it is, instead, adjusting the content (i.e. using a variety of reading material, with the same information), the process, and the output, which, in turn allows students to make their own connections through a learning style that suits their needs, while simultaneously maintaining the integrity of the learning target.

Differentiation pertains more to addressing students' diverse phases of learning from beginner to capable to competent rather than merely giving different activities to different (groups of) students (Hattie, 2008).

Differentiated Instruction is a teaching style that focuses on purposeful practice of the abilities that students need to improve which may be different for various students or group of students. It is a systematic and purposeful approach to learning that identifies and incrementally improves targeted aspects of performance through expert guidance, feedback, and tasks that are just outside the learner's current capacity, also known as the zone of proximal development, to help them achieve their specific goals. Differentiating instruction for each student's abilities, needs, and interests is a bit of a juggling act because purposeful practice is adjusted to the needs of the individual student or groups of students with comparable needs.

The implementation of differentiated strategies proved to be engaging, stimulating student interest, and giving. The study found that using differentiated strategies was engaging, piqued student attention, and provided undergraduate teachers with a rewarding experience. a rewarding experience for undergraduate teachers, according to the study (Johnsen, 2003).

As differentiation is the heart in the interaction between teachers and students, connecting content, procedure, and product is the teacher's role. Students react to learning in diverse ways depending on their preparation, interests, and learning profile. Content refers to the skills or knowledge that are the subject of instruction, as well as the method by which that content is accessed. The way students interact with the content is referred to as the process. The product is the manner through which pupils display their knowledge and abilities.

II. METHODOLOGY

According to research, DI is an effective strategy to remedy interrupted learning and teach new content. To explore English lecturers' perception and implementation on Differentiated Instruction (DI) based on content, process and product as a basis for New Normal Curriculum Development is the first step. Hence, the university lecturers' perception and implementation of differentiated instruction was studied.

The goal of this study is to learn more about how university lecturers perceive and implement differentiated instruction at the tertiary level. The researcher wanted to discover if lecturers were differentiating instructions when

educating undergraduate level students during COVID19 pandemic. Two questions will be addressed by the research: 1) To what extent do English university lecturers perceived Differentiated Instruction? and 2) To what extent do English university lecturers implement Differentiated Instruction?

The participants were university lecturers who were working in Bangkok when they completed the questionnaire. The researcher sent survey questionnaires to participants with more than four years of teaching experience. A total of 185 survey questionnaires were returned to the researcher. There were 82 males and 103 females from ages 26 to 50, a total of 185 lecturer-participants. Participants have a minimum four years of teaching experience, 35% had a master's degree, 55% had a doctoral degree, and 10% had an ongoing master's degree.

The survey questionnaire for this study was adopted from Willoughby's Strategies for Differentiating Instruction Chart. The survey questions corresponded with the essential elements of differentiated instruction based on content, process and product. The survey questionnaires were distributed and collected. The researcher intentionally avoided conducting personal interviews to give participants the freedom to answer the questions and express themselves without any interference from the researcher (Malkawi, 2010).

III. RESULTS AND DISCUSSION

All This study shows comparison to what extent do English university lecturers perceive and implement differentiated instruction in their classrooms. It uses the 5 Point Likert Scale of which 5 is the highest and 1 is the lowest. The result of the study will be presented in three main parts:

A. Lecturers' Perceptions and Implementation of DI based on Content

B. Lecturers' Perceptions and Implementation of DI based on Process

C. Lecturers' Perceptions and Implementation of DI based on Product

A. Lecturers' Perceptions and Implementation of DI based on Content

Results show that the overall average of lecturer's perception (3.45) of Differentiating Instruction based on content is higher than the implementation (3.06). There are five strategies in this category.

1. Lecturers' perception (3.24) on giving pre-test to determine where each student should begin their study of a certain topic or unit is higher than the implementation (3.20).

2. Lecturers' perception (3.34) on encouraging

students to think at distinct levels of Bloom's taxonomy is higher than the implementation (3.20).

3. Lecturers' perception (3.62) on addressing diverse learning styles with a variety of instructional delivery techniques is higher the implementation (2.69).

4. Lecturers' perception (3.83) on breaking assignments into smaller, more manageable chunks with clear instructions for each step is higher than the implementation (3.10).

5. Lecturers' perception (324) on selecting broad teaching concepts and skills that are easy to grasp at different levels of complexity is higher than the implementation (3.10)

By using unpaired t test to compare the lecturers' perception and implementation of Differentiated Instruction based on content, the two-tailed P value equals 0.0298. By conventional criteria, this difference is considered to be statistically significant.

In differentiating instruction based on content, employ a range of resources and be concept-driven. The content of lessons may be differentiated based on the students' background knowledge. Most students have the basic concepts as lessons in the elementary and high school cover the standards of learning set by the ministry of education, some students were completely unfamiliar with the basic concept, some display mistaken ideas about the content but somehow, some display partial mastery of the content. Lecturers' may differentiate the content by designing activities using Bloom's Taxonomy, students who may have misconceptions, may have difficulty in coping up hence dragging the class to a slower pace. However, when teachers differentiate content, they may adapt what they want students to learn or how students access the knowledge, understanding, and skills, (Anderson, 2007). In this way, lecturers are not varying student objectives or lowering performance standards for students but providing different avenues appropriate for each student (Taylor, 2015).

B. Lecturers' Perceptions and Implementation of DI based on Process

Results show that the overall average of lecturer's perception (3.35) of Differentiating Instruction based on process is higher than the implementation (2.91). There are five strategies in this category.

1. Lecturers' perception (3.45) on providing access to a variety of materials which target different learning preferences and reading abilities is higher than the implementation (2.90).

2. Lecturers' perception (3.65) on developing activities that target auditory, visual, and kinesthetic learners is higher than the implementation (2.59).

3. Lecturers' perception (3.45) on establishing stations for inquiry-based, independent learning activities is higher than the implementation (3.03).

4. Lecturers' perception (3.10) creating activities that vary in level of complexity and degree of abstract thinking required (3.0) is higher than the implementation.

5. Lecturers' perception (3.72) on using flexible grouping to group and regroup students base on factors including content, ability, and assessment results is higher than the implementation (3.0).

By using unpaired t test to compare the participants' perception and implementation of Differentiated Instruction based on content, the two-tailed P value equals 0.0037. By conventional criteria, this difference is considered to be very statistically significant.

In differentiating instruction based on process, student grouping should be flexible, students should be grouped according to their learning styles, and activities should be used to reach all types of learners. Process differentiation refers to how a learner learns and assimilates facts, concepts, and abilities (Anderson, 2007). The method of how resources in a class are differentiated may be based on the learning styles of pupils. Consider the performance expectations for kids of different ages. Using many intelligences improves learning opportunities as well. Furthermore, Taylor (2015) explained that the differentiating process allows teachers to modify learning activities based on the interests or learning styles of their pupils. Students could, for example, perform Internet research, interview community people, draw maps, or build models in a history lesson. While all students have the same subject to cover, they can choose from a variety of activities or procedures that interest them or cater to their different learning styles.

C. Lecturers' Perceptions and Implementation of DI based on Product

Results show that the overall average of lecturer's perception (3.23) of Differentiating Instruction based on product is higher than the implementation (3.08). There are four strategies in this category.

1. Lecturers' Perception (4.15) on using a variety of assessment strategies, including performance-based and open-ended assessment is higher than the implementation (3.94).

2. Lecturer's Perception (3.93) having a balance teacher-assigned and student-selected projects is

slightly higher than the implementation 3.90).

3. Lecturer's Perception (2.16) on offering students a choice of projects that reflect a variety of learning styles and interests is higher than the implementation (2.14).

4. Lecturer's Perception (3.10) on making assessment an ongoing, interactive process is slightly lower than the implementation (3.12)

By using unpaired t test to compare the participants' perception and implementation of Differentiated Instruction based on content, the two-tailed P value equals 0.9849. By conventional criteria, this difference is considered to be not statistically significant.

In differentiating instruction based on Product, products should vary depending on the level of the student, provide options for the student, and assess students formatively on a regular basis. When a teacher differentiates by product or performance, they give pupils a variety of opportunities to show what they've learned in a lesson or unit (Anderson, 2007; Taylor 2015). Tests, assessments, projects, reports, or other activities are examples of products that students make at the end of a class to demonstrate mastery of the topic. Teachers diversify instruction by responding to students' readiness, instructional requirements, interests, and learning preferences, and allowing them to work in a variety of instructional styles.

Differentiating instruction is recognizing students' various baseline knowledge, readiness, language, learning preferences, and interests, and responding appropriately. Differentiated instruction is a method of teaching and learning for students in the same class who have different skills. Differentiating instruction is designed to enhance each student's progress and achievement by meeting them where they are and aiding them in the learning process.

The purpose of differentiated teaching is to meet each student where he or she is in the learning process in order to assist that student progress (Greene, 2013). What are the chances of this happening? Teachers must get to know their pupils to prepare a variety of classroom activities and tactics based on their abilities. Students should be challenged by the teacher as well. Above everything, plan ahead and be inventive. According to research, responsive, individualized instruction that meets kids where they are and adapts to their needs is well worth the effort, according to research. Differentiated instruction has a good impact because it allows teachers to tailor their lessons to students' past knowledge and set appropriate degrees of difficulty. Furthermore, not every instruction should be differentiated in order to be efficient. Teachers can meet both common and specific needs of their students in a flexible fashion by

combining whole-class, small-group, and personalized training. Alternative activities for asynchronous options include new content instruction, content review or preview, questions and answers, book reading, show and share, and quiz or game; asynchronous options include videos with worksheets, interactive slides, discussion boards, videos by students, photos or pictures with text, adaptive q uizzes, art projects, and more, assuggested by Schechter (2 020).

IV. CONCLUSION AND RECOMMENDATION

DI is advantageous because it allows each learner to learn in the way that best suits them. Students have a choice, which makes the classroom run more smoothly and allows for more fun in the classroom. Differentiated Instruction allows teachers to challenge gifted children while also assisting outstanding individuals in succeeding.

Modeling differentiated instruction is presented as one way to demonstrate how educators might include instructional strategies to suit students' needs, interests, and learning styles in response to the problems of meeting university students' demands. Differentiated Instruction gives teachers the knowledge and skills they need to differentiate in their classrooms, which can help low-achieving kids succeed while still allowing gifted and talented children to progress in their learning.

Although some lecturers have implemented Differentiated Instruction, as revealed in this study, lecturers have a good grasp on how to differentiate their classrooms, however the implementation is still limited by a number of factors which are not addressed in this study. Teachers who use differentiated instruction, according to Blozowich (2001), require ongoing and consistent professional development, as well as extensive debate and collaboration about how these strategies are used in the classroom.

Future research could focus on how administrators help teachers implement differentiated education in the classroom. For lecturers who are willing to use differentiated instruction, seminars and training with an integration of technological tools would be ideal.

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