

# Educator's Preparation for Differentiated Instruction in Higher Education

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**Abstract:** Each student has his characteristics during the learning process. This matter leads to the teachers' understanding of her well-preparedness for the classroom activity. Since the Ministry of Education of Indonesia recommends teaching students based on their needs or well known as differentiated instruction, an educator can implement it. In this study, educator's preparation for differentiation classes was investigated. 22 educators were teaching in several universities in Aceh province and contributed their thoughts about the issue in this study. The data was collected via Google Form including open-ended questions. The results indicated that the majority of the educators do some preparation before the class starts. Almost 60% of the educators understand the learning differentiation.

**Keywords:** *differentiated instruction, educators' preparation, students' need*

## 1.0 Introduction

Teaching students for higher education requires not only general instruction but also specific techniques. Nowadays, university students learn varied knowledge and skills during the active semester without differentiated instruction from educators. It is an issue among students as they have divergent capabilities to deal with it in those subjects. Therefore, a differentiated learning process can be the best solution. According to Parsons et al. (2018), modifying teaching is "a cornerstone of effective instruction" (p. 206) and "regarded as the benchmark that educators should aim for."

Geel et. al (2019) claimed that a distinctive summary of the component abilities necessary for delivering differentiated education is a consequence of cognitive task analysis. Moreover, the fundamental information as well as the variables affecting differentiation complexity were determined. Ismajli & Morina (2018) mentioned that implementing differentiated instruction is hampered by the old non-differentiated method, which does not accommodate learners with varying skills. The effects of diversified learning are not well represented in syllabi. Textbooks are often challenging and packed with a lot of theoretical information compared to the capacities of learners. Because of this, they are more capable of absorbing knowledge than learners their age, which makes it more difficult to apply differentiated training. The curriculum and the characteristics of the students must be acknowledged by the educator to provide differentiated education.

The existing educational system frequently supports maintaining old values and a one-size-fits-all approach to teaching rather than learner-centred alternatives. A high rate of repeating academic courses among college students is a sign that the curriculum and the

requirements of the students are not being satisfied by traditional teaching techniques (Dosch & Zidon, 2014). Turner et al., (2017) stated instructors are in a unique position to transform big class instruction and evaluation by refocusing as student enrolment rises nationwide on variations in learners. Instructors may also revitalise the teaching and learning atmosphere in big courses by implementing diverse instructional tactics. Andayani & Iasha (2023) found research on differentiated learning has grown in importance as a means of raising educational standards. Differentiated learning has been emphasised in several recent research as a useful strategy for overcoming learning difficulties, minimising learning loss, and raising student academic success.

Since the development of such instruments necessitates the explicit operationalization of educator behaviour, the literature has been reviewed for instruments that researchers have used to identify the understanding and quality or degree of differentiation to gain insights into the practice and quality of differentiated instruction as well as to ascertain how providing differentiated instruction could be trained and assessed in practice. In other words, we can say whether the one-size-fits-all approach to differentiated instruction has been abandoned by lecturers.

Regarding the background of this study, several issues were investigated. Those were how the lecturers prepared for classroom management. In addition, the lecturers' understanding of differentiated instruction particularly in higher education was explored. Finally, their strategies for dealing with the differentiation applied in the classroom were also questioned in this study.

## **2.0 Methodology**

To explore the educators' preparation for differentiated classes, their thoughts towards the relevance issue were inquired. The participants were university educators including 17 females and five males. The demographic data indicated that 90.9% of them completed master's degrees while 9.1% finished doctoral programmes. In this study, a qualitative descriptive design was employed. As Mojahan (2018) stated, the method of qualitative study enables the researcher to investigate and gain a deeper comprehension of a phenomenon's intricacy. There were 21 open-ended questions containing six data points for demography and 15 questions for investigation of the participants' attitude and experience of differentiated instruction. The data were distributed via Google Forms, and then the link was shared randomly with the educators. The lecturers' responses via the form were collected, grouped and

presented. The short responses such as ‘yes’ or ‘no’ were calculated and interpreted in simple percentages. Meanwhile, the longer responses were explained and discussed in detail.

### 3.0 Data Analysis and Findings

Table 1 illustrates the educators’ opinions on their experiences with teaching preparation. Each of the items in the questionnaire emphasises their comprehension, experience and habit of receiving differentiated instruction.

Table 1: Educators’ Responses to the Questionnaire

<i>No</i>	<i>Statements</i>	<i>Answer</i>	<i>Total</i>	<i>Percentage</i>
1	Educator prepares before starting class	Always	14	63.6%
		Often	5	22.7%
		Sometimes	2	9.1%
2	Educator writes down the steps or a lesson plan before starting class	Yes	17	77.3%
		No	5	22.7%
3	Educator provides the same material and assignments for all students in one class	Yes	17	77.3%
		No	4	18.2%
		Maybe	1	4.5%
4	Educator believes that every student has different learning needs	Yes	19	86.4%
		Maybe	3	13.6%
5	Educator evaluates learning directly	Yes	15	68.2%
		No	7	31.8%
6	Educator maps and groups for students’ learning needs based on the evaluation results	Yes	9	40.9%
		No	13	59.1%
7	Educator understands differentiated instruction	Yes	12	54.5%
		No	10	45.5%

8	It needs to implement differentiated instruction at the tertiary level	Yes	17	77.3%
		No	5	22.7%
9	Educator's differentiation strategies (content, process, and product) are frequently applied in the classroom	Content	3	13.6%
		Process	10	45.5%
		Product	3	13.6%
		No idea	6	27.3%

According to the findings, there is a huge number for statement four which is educator believes that every student has different learning needs (86.4%). Moreover, their agreement lies in the importance of practising differentiated instruction in higher education (77.3%). Concerning it, the results indicate that 54.5% of educators understand differentiation instruction while 45.5% have no cognition for it. It is also concurred by most of them (77.3%) that differentiated instruction is needed in higher education.

The results indicated that most educators (63.6%) always prepared several points before starting class. There was 22.7% of them responded 'often' and 9.1% for 'sometimes'. The educator's preparation of their plans and steps during the class was also questioned. It was presented that 17 (77.3%) educators prepared and the others (22.7%) had no preparation. On the other hand, a high number of educators confessed that the same teaching material and assignments were provided for all students in one class. 77.3% answered yes, 18.2% commented no, and 4.5% said maybe. Although 68.2% of them evaluate their students' learning directly, there were 59.1% mapping and grouping for the students' learning needs based on the evaluation.

Various approaches are used by educators to assess their students. Regarding to the students' learning evaluation, those replies fluctuated. Most acknowledge that they administer tests, both oral and written. There were two, and they used rubric assessment. By giving the quiz, one educator coaching writing courses was able to help his students become more critical thinkers. Based on the data, he/she wrote *"For essay writing courses, students usually learn to manage ideas in writing (the brainstorming process). In this process, each student's way and thinking process will be seen. I can assess their critical thinking in this process. From the number of ideas and how they group them"*.

Additionally, the educators' strategies for higher and average intelligence students were investigated. Grouping the students was plentiful a plenitude of answers. Coaching, personal counselling, and particular approach were several alternatives for them to be motivated. Reversely, students with over average competency were not only given rewards but also elected as peer mentors.

A term of differentiation in teaching instruction was also inquired in this study. The results indicated that eight of them (36.4%) do not conceive of it. One is described specifically as *"Due to the individual differences in each student and the way they learn, the lecturer takes different approaches to explore their potential with various teaching approaches/methods/strategies ranging from visual, audio or kinaesthetic."* Generally, it was explained as "a teaching-learning instruction based on students' needs." Therefore, a large number of the educators have an incredible comprehension on this term.

There are three differentiation strategies for teaching practice. The content, process and product were precisely queried. Based on the data findings, it is demonstrated that 45.5% determined 'process', 13.6% for content and product, and 27.3% had no idea about this subject. The educators' thoughts towards the differentiation strategy that needs to be implemented in their classes were also explored. The following excerpts (E) were some of the answers of the educators regarding to their reasons for the differentiation strategies.

E1 [Because every student has different abilities, ways and learning styles.]

E2 [Because every student is unique]

E3 [So that students get their right to be educated in accordance with the needs and nature of the circumstances concerned. It takes extra energy to do this. Therefore, its implementation needs to be guided by the rules set by the institution.]

E4 [It is necessary because my students come from different areas and schools, of course the previous learning is also different, so those from outside adequate schools certainly need special attention, especially from the rural areas.]

#### 4.0 Discussion and Conclusions

Commonly, teacher's or educator's preparation for classroom management was crucial. Not only to develop engaging lesson plans, but also to understand the students' needs. In other words, differentiated instruction (DI) is encouraged be practiced in the classroom. In contrast

to schools where DI becomes familiar, currently, universities lack an adequate understanding of DI. This study indicated that 86.4% of the lecturers mostly those with over 10 years of teaching experiences agreed that every student has different learning needs which was the concept of teaching for differentiation. Wahyudi, Hapsari & Sugiono (2022) studied the literature on differentiated instruction. In their study, it is revealed that implementing DI is challenging globally. This difficulty is linked to a number of problems that impact schools at all educational levels, including the need for extensive preparation, a wide range of student activities, a shortage of preparation time, and teachers' feelings of unpreparedness.

The findings also indicated that several DI strategies were practiced by the educators such as considering learning style, learning profile, and previous knowledge. Mirawati et.al., (2022) have revealed that DI can improve teachers-students' relationships, increase participation, and motivate low achieving students. However, they added that it also comes with drawbacks, such as time commitment, misconceptions, and class size, which call for more careful planning. According to Stavrou & Koutselini (2016), there are several obstacles that educators must overcome in order to effectively define, assess, and rank student's skills (in his study was reading comprehension). Other difficulties include elucidating student preparedness, creating engaging lessons, instituting adaptable classroom arrangements, and dispelling myths regarding their function in education. Undoubtedly, Saleh (2021) added that DI strategies were found to greatly increase students' EFL reading comprehension skills, and using a variety of materials that were customised to each student's requirements and ability further boosted proficiency. Meanwhile the results indicated the strategies on content of DI mostly, Saban & Atay (2023) discovered that the teacher would rather deal with students' readiness than their interest and learning profile. They prefer differentiating the learning environment to the content, process, and product. Additionally, they found that extra material, grouping students and offering a variety of work types were strategies to practice in the classroom.

Although the majority of educators recognize that the implementation of DI was effective, Onyishi & Sefotho (2020) discovered that teachers used DI infrequently and that their use of it was constrained by time. Furthermore, they required more information on rubric development, student-directed assessments, classroom management of differentiated instruction. Therefore, to present effective DI in the classroom, the educators are suggested to manage the classroom by well- prepared in advance.

Overall, differentiated learning is a stimulating task for educators. There were a few educators who understand about DI and they had a great number for class preparation so

educators believed that every student had different learning needs. However, most educators provide the same material and assignments for all students in one class. It is conceivable, therefore, that individuals are unaware of the underlying ideas or philosophies of such an undertaking. It was also said that educators are capable of assisting university students who struggle to learn in class. Reaching DI goals is therefore made simple. Additionally, educators allocated students in various ways according to the types of students in the class. Programmes for instructor development may be created to provide educators with the latest DI theory and instructional strategies.

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