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ANALYSIS OF DIFFERENTIATED TEACHING MODULES FOR PGMI STUDENTS IN MICRO TEACHING LEARNING

Putri Agustia Marwah*

*Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia

210209087@student.ar-raniry.ac.id

Misbahul Jannah

Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia

misbahulj@ar-raniry.ac.id

Wati Oviana

Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia

wati.oviana@ar-raniry.ac.id

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Abstract

Students are required to master the subject matter and also create teaching modules that follow differentiated learning guidelines. This aligns with the objectives of the Merdeka Curriculum, which prioritizes student-centered learning. The purpose of this study was to analyze students' abilities in developing differentiated teaching modules. The method used in this research is a quantitative descriptive method. The subjects were 16 student teachers in the even semester of the 2024/2025 academic year. The research instrument was a differentiated teaching module assessment instrument sheet. The teaching module documents were collected and then analyzed using descriptive statistics with percentage techniques, which were interpreted into scores. Based on the analysis results, students' abilities in designing differentiated teaching modules at PGMI are classified as good and lacking, with a score of 37% for differentiated learning mapping, 73% for general information, 72% for core competencies, and 33% for attachments. This

demonstrates the need for the PGMI study program to develop specific training related to differentiated learning mapping and the development of teaching modules, as well as to strengthen lecturer support for students' teaching module design assignments. The results of this study can serve as a basis for curriculum evaluation and the development of learning tools to enhance the competency of PGMI students.

Keywords: Differentiated Learning, Teaching Module, Independent Curriculum

Abstrak

Mahasiswa dituntut menguasai materi pelajaran dan juga membuat modul ajar yang mengikuti pedoman pembelajaran berdiferensiasi. Hal ini sesuai dengan tujuan Kurikulum Merdeka, yang memprioritaskan pembelajaran yang berfokus pada setiap peserta didik. Tujuan penelitian ini adalah untuk menganalisis kemampuan mahasiswa dalam menyusun modul ajar berdiferensiasi. Metode yang digunakan dalam penelitian ini adalah metode deskriptif kuantitatif. Subjek penelitian adalah 16 mahasiswa calon guru pada semester genap tahun akademik 2024/2025. Instrumen penelitian berupa lembar instrumen penilaian modul ajar berdiferensiasi. Dokumen modul ajar dikumpulkan kemudian dianalisis menggunakan statistik deskriptif dengan teknik persentase, yang diinterpretasi ke skor. Berdasarkan hasil analisis kemampuan mahasiswa dalam merancang modul ajar berdiferensiasi di PGMI tergolong baik dan kurang, dengan skor pemetaan pembelajaran berdiferensiasi sebesar 37%, informasi umum sebesar 73%, kompetensi inti sebesar 72% dan lampiran sebesar 33%. Hal ini menunjukkan perlunya program studi PGMI menyusun pelatihan khusus terkait pemetaan pembelajaran berdiferensiasi dan penyusunan modul ajar, serta memperkuat pendampingan dosen terhadap tugas perancangan modul ajar mahasiswa. Hasil penelitian ini dapat menjadi dasar evaluasi kurikulum dan mengembangkan perangkat pembelajaran untuk meningkatkan kompetensi mahasiswa PGMI.

Kata kunci: Pembelajaran Berdiferensiasi, Modul Ajar, Kurikulum Merdeka

INTRODUCTION

The Ministry of Education and Culture of the Republic of Indonesia has created an merdeka curriculum for the 2022/2023 academic year (Mulyana, 2022). The curriculum is arranged according to its essence so that students can master knowledge and make the best use of technology (Anggraini et al., 2022). The merdeka Curriculum provides opportunities for students to develop character and competencies while exploring interests according to learning needs (Mulyasa, 2023). The merdeka curriculum learning plan emphasizes what students like and what they are good at (Khoirurrijal et al, 2022). It is hoped that the use of the merdeka

curriculum learning plan and strengthening the Pancasila student profile will help address the educational problems we face now and in the future (Alimuddin, 2023).

In the merdeka curriculum, learning planning is called modul ajar (Nuryanti, Mulyana & Loita, 2023). Modul ajar play a crucial role in assisting teachers in organizing learning. Therefore, creating modul ajar is a pedagogical skill that teachers must improve to make classroom learning methods more effective and efficient. (Triana, Yanti & Hervita, 2023). An merdeka curriculum offers teachers the freedom to choose, design, use and develop modul ajar in a more flexible way (Mauliad, 2022). A teaching module consists of three main components: general information, core competencies, and appendices, which are interrelated and support the learning process. General information provides teachers with an initial overview as a basis for understanding the context and direction of the teaching module's use. Core competencies represent the knowledge, skills, and achievements that students need to master as a foundation for implementing learning. Meanwhile, appendices serve as supporting components that complement the teaching module by providing materials, instruments, or other learning tools. Therefore, the quality of a teaching module is determined not only by the presence of each component, but also by the function of each component in supporting the learning process (Nengsih et al, 2024).

Differentiated learning is one of the approaches used to develop the concept of independent learning in the current national education system (Fitra & Kurnia, 2022). This shows that modul ajar that are adapted to students' needs are a learning approach that focuses on students' abilities and needs (Ndiung et al, 2023). Through methods tailored to the needs of each student, differentiated learning utilizes independent learning which increases students' opportunities to learn (Gusteti and Neviyarni, 2022). According to Tomlinson C.A. In differentiated learning, the learning method adapts to the various skills and needs of each student, ensuring that each student feels successful and involved in their learning (Amalia et al, 2023).

Differentiated learning gives students the freedom to improve their skills based on their different levels of learning readiness, things they find interesting, and different new methods of understanding (Ahmad Teguh, 2023). Student readiness to learn is a condition that enables students to learn. It will be difficult for students to complete tasks effectively if they are not sufficiently prepared to learn. Student readiness to learn encompasses various elements such as physical development, past experiences, academic achievement, and motivation (Rifqiyah & Nugrahen, 2023). Students' learning interests significantly influence their learning activities. Stephen P. Robbins argues that interest is essentially a feeling of attraction to something, whether it's a tangible object or a personal desire. On the other hand, Sardiman argues that the learning process can be considered successful when students have a genuine interest in their learning (Ferinda, Anggara & Rozali, 2024). In the student learning profile, Widayanti stated that learning can occur in three main ways: visual, auditory, or kinesthetic. Educators have the ability to assist students by considering their learning styles, leading to maximum learning success (Himmah & Nugraheni, 2023).

It is crucial for students training to become educators to master the skills of designing modul ajar. This ensures that once they are employed as teachers, they have the competence to formulate and produce learning experiences that are not only novel but also imaginatively and effectively designed (Ramadhani. et al., 2020). Modul ajar carefully prepared by a teacher have the potential to make the learning process easier for students, in line with their developmental stage and understanding (Lukman, 2023). The teacher's ability to compile modul ajar is that the teacher observes school facilities and students to determine their learning profiles and the teacher is able to determine the composition of modul ajar based on the available components (Rismawanda and Mustika, 2024). Based on this, microteaching is designed as a means for students to apply and demonstrate their ability to develop teaching modules through direct teaching practice. Through microteaching, the quality of the teaching module development is not only assessed based on the planning process but also tested through the suitability of its application in learning practice. Thus, microteaching aims to provide students with the opportunity to develop their teaching insights and skills, while ensuring that the training of prospective elementary school teachers is carried out effectively and efficiently (Rachmadyanti, 2021).

Based on the results of initial observations conducted on students in the pendidikan guru madrasah ibtidaiyah study program, it was seen that in micro teaching learning, students had not designed modul ajar well. There were still components of modul ajar that had not been included, components that were not sequential, and did not apply differentiated learning. Differentiated learning mapping involves assessing student readiness, learning interests, and learning profiles. Students who will become teachers are expected to be able to design differentiated modul ajar, but in reality, many still struggle to develop appropriate modul ajar.

The problem identification in this study focuses on the ability of PGMI students to design differentiated modul ajar in microteaching learning. The merdeka curriculum has been implemented, although there is still a gap between understanding the theoretical aspects and the actual practices involved in creating modul ajar. Therefore, it is necessary to analyze the modul ajar created by students. The purpose of this study is to analyze the ability of PGMI students to design differentiated modul ajar in microteaching learning.

METHODS

The method used in this research is a quantitative descriptive method. This research uses a descriptive qualitative approach that aims to describe and understand phenomena in depth based on data obtained from interviews, observations, and documents. This approach was chosen to provide an overview of students' abilities in designing differentiated modul ajar in the context of microteaching.

The data collection steps used in this study included collecting modul ajar designed by PGMI students for microteaching. Microteaching itself serves as a preparatory training program designed to develop various teaching skills, with the goal of equipping prospective educators to carry out their duties with expertise and reliability in the field (Novianti and Khaulah, 2022).

The sampling technique refers to Sugiyono's opinion, which is to use simple random sampling. The sample size in this study was 10% of the total population of 164 teaching modules designed by students, namely 16 teaching modules. As Arikunto argues, if the subjects are less than 100, it is better to take all of them, but if the number is large, then 10% - 15% or 20% - 25% can be taken.

This study used modul ajar documents as an instrument. These documents were used to obtain data on students' ability to design differentiated modul ajar. The modul ajar designed by the students were analyzed according to predetermined criteria.

The data analysis technique used in this study involved analyzing 16 differentiated modul ajar created by students. The data was processed and explained in accordance with the stated focus of the study. Descriptive statistics aimed to obtain data in the form of average scores related to the ability to construct differentiated learning maps and the ability to construct merdeka curriculum modul ajar.

Table 1. Score Interpretation Criteria according to Arikunto

Score	Interpretasi
81-100	Very good
61-80	Good
41-60	Enough
21-40	Less
0-20	Very Less

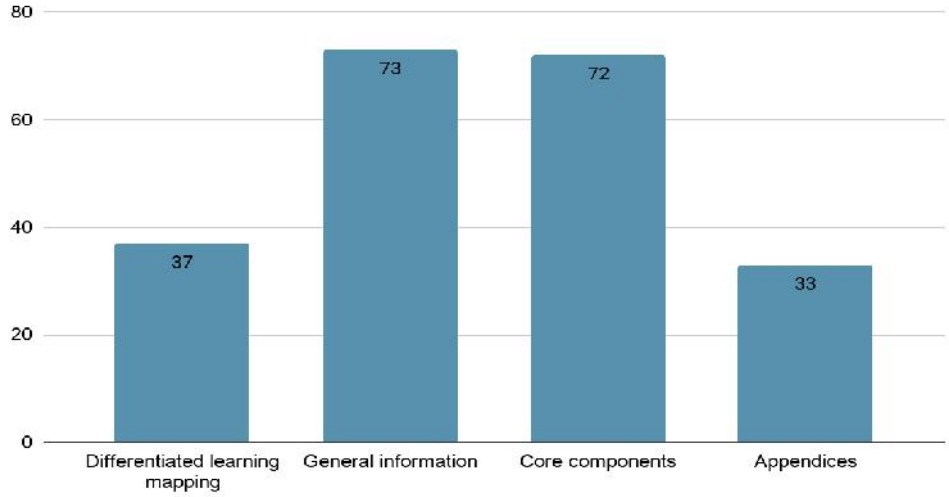
RESULTS AND DISCUSSION

The ability of prospective PGMI teachers in designing differentiated modul ajar can be seen by analyzing the modul ajar they designed. There are four main components analyzed, including: (1) differentiated learning mapping, (2) general information, (3) core components and (4) appendices. The students' abilities in these four categories can be seen in Table 2 below:

Table 2. Total Score and Ability Criteria for Prospective Elementary School Teachers In Designing Differentiated Modul Ajar

No	assessed components	percenta	Category
	Differentiated learning mapping		
1.	Student learning readiness	37	Less
2.	Student learning interests	37	Less
3.	Student learning profiles	37	Less
	Average score	37	Less

	General information		
1.	Module Identity		
	a. Author's Name	100	Very good
	b. Institution	87	Baru good
	c. Year Compiled	62	Good
	d. School Level	50	Enough
	e. Phase/Grade	62	Good
	f. Time Allocation	87	Baru good
2.	Core Competencies	68	Good
3.	Pancasila Student Profile	87	Baru good
4.	Facilities and Infrastructure	62	Good
5.	Target Students	62	Good
6.	Learning Model	75	Good
	Average score	73	Good
	Core components		
1.	Learning Outcomes (CP)	43	Enough
2.	Learning Objectives	75	Good
3.	Learning Objective Flow (ATP)	31	Less
4.	Meaningful Understanding	93	Very good
5.	Prompting Questions	93	Very good
6.	Learning Activities	75	Good
7.	Assessment	75	Good
8.	Enrichment and Remedial	93	Very good
	Average score	72	Good
	A**ppendices**		
1.	Student worksheets	31	Less
2.	Work instructions	31	Less
3.	Teacher and student reading materials	50	Enough
4.	Reflection	18	Very less
5.	Glossary	31	Less
6.	Bibliography	37	Less
	Average score	33	Less



Graph 1. The Ability of Prospective Elementary School Teachers in Designing Differentiated Modul Ajar

Table 2 above shows that, in general, the abilities of prospective PGMI teachers, as assessed based on the components of the differentiated modul ajar, fall into the good and less categories. The average percentage in the good category is general information (73%) and core components (72%). Meanwhile, in the less category, the mapping of differentiated learning (37%) and appendices (33%) are included.

The results of the differentiated learning mapping are categorized as Less, with scores of 37% for student learning readiness, 37% for student learning interest, and 37% for student learning profile. These aspects indicate that students' ability to understand and apply differentiated learning is still low. What distinguishes differentiated learning from other learning methods can be seen in the learning activities and student worksheets. There are six learning modules that address aspects of differentiated learning. The modul ajar creates a differentiated learning map, in its learning activities adjusting to the different abilities of students and providing problems at different levels according to the students' abilities. There are six teaching modules that also make this in learning activities and student worksheets but do not create a differentiated learning map, even though the differentiated learning map helps teachers in the learning process, where this map includes learning readiness, learning interests and learning profiles of students. Where the lack of ability or knowledge of students in determining aspects of learning readiness, learning interests and student learning profiles. Due to limited knowledge, students rarely design differentiated teaching modules in micro teaching learning. In fact, the Ministry of Education and Culture stipulates differentiated learning as part of the Learning Process Standards (No. 22 of 2016), Student-Centered Learning (Merdeka Belajar), and New Paradigm Learning (Kurikulum Merdeka). According to Sari and Wulandari (2022), Modul ajar that incorporate differentiation strategies can accommodate differences in student abilities and learning styles more effectively. The Ministry of Education and Culture stipulates

that before teaching, teachers must consider students' readiness to learn, learning interests, and learning profiles. Nurhadi (2021) also emphasized that differentiated learning provides equitable learning opportunities for each student and needs to be designed from the learning planning stage. Differentiated learning has a positive impact on the quality of classroom learning by increasing student engagement, the effectiveness of the learning process, and learning outcomes. Furthermore, the implementation of differentiated learning encourages the creation of a comfortable learning environment and improves the quality of teacher-designed lesson planning and implementation, thereby making the learning process more focused on student needs.

In the general information component, there are five aspects in the very good category with a score, module identity containing the name of the compiler of 100%, institution of 87%, time allocation of 87% and Pancasila student profile of 87%. There are seven aspects in the good category with a score of year compiled of 62%, phase/class of 62%, initial competency of 68%, facilities and infrastructure of 62%, target students of 62% and learning model of 75%. And the school level is in the sufficient category with a score of 50%. The score of the school level aspect is the smallest where students do not create a school level in the teaching module they designed. Even though the school level is very important to be made to indicate the teaching module will be taught at what school level. Prastowo (2021) discusses that modul ajar must be adapted to school levels so that learning strategies, language, and learning activities are appropriate to the developmental stage of students. In accordance with the Regulation of the Minister of Education and Culture Number 22 of 2016 concerning Process Standards, certain basic details are required, including general information on educational institutions, initial competencies, Pancasila student profiles, resources and equipment, target students, and teaching strategies. All of these aspects are compiled before the start of learning activities.

Furthermore, in the core competencies, there are three aspects in the very good category with scores: meaningful understanding of 93%, trigger questions of 93%, enrichment and remedial of 93%. Learning objectives with a score of 75%, learning activities of 75% and assessment of 75% are in the good category, learning outcomes with a score of 43% are in the sufficient category and the Learning Objective Flow (ATP) is in the less category with a score of 31%. ATP itself explains the sequence of competencies that must be mastered by students, starting from simple to complex skills in one learning phase. Where students' abilities are lacking in determining the competency aspects that must be created. This is in line with the theory of Nurhaliza et al. (2023) who emphasized that ATP functions as the main framework in modul ajar so that learning is systematic, tiered, and aligned with learning outcomes (CP). According to the Learning and Assessment Guidelines (2021-2023), ATP must be compiled with direct reference to Learning Outcomes (CP), arranged in a tiered and systematic manner according to the learning development path, and include a series of Learning Objectives (TP) that describe the progress of student abilities from simple to complex. Handayani and Iqbal (2024) also explained that ATP is very important to ensure that modul ajar not only contain material, but also a logical and measurable competency flow.

In the appendix component, of the six observed aspects, four aspects were categorized as lacking with a score of 31%: Student Worksheets (LKPD), work instructions (31%), glossaries (31%), and bibliographies (37%). Teacher and student reading materials were categorized as sufficient with a score of 50%. Reflection was categorized as very lacking with a score of 18%. The low score on reflection was due to students' lack of knowledge. Puspitasari et al. (2023) emphasized that reflection in modul ajar helps teachers and students identify learning difficulties, competency achievements, and future learning improvements. Because, after observing, most students place reflections on core competencies, when they should be in the appendix. Similarly, with student worksheets (LKPD), students create student worksheets at the end of the appendix, when the LKPD should be first. Fitriani & Haryanto (2021) stated that LKPDs play a crucial role as independent learning aids because they help students understand the material without relying entirely on the teacher.

The data analysis above indicates that PGMI students are not yet fully capable of developing differentiated modul ajar. This is due to their lack of ability to design differentiated Modul ajar. Based on Ndiung's (2023) theory, differentiated learning is created by emphasizing the abilities and needs of students. The Ministry of Education and Culture stipulates that education must be student-centered, enabling educators to identify problems faced by students during the learning process. And differentiated learning can achieve student-centered learning. This aligns with Amalia (2023) and Gusteti (2022) who stated that differentiated learning adapts learning activities to the diverse abilities of each student, with the goal of ensuring that students maintain their academic achievement and progress in their learning.

In the modul ajar designed by students, components were found to be out of sequence, such as learning outcomes being placed in general information, reflections in core competencies, and even student worksheets (LKPD) being placed at the very end when they should be placed at the beginning of the appendix. This inability is caused by PGMI students as prospective teachers not yet being fully capable of designing differentiated modul ajar. Because if the learning design is well-designed, the learning implementation will also be good. Conversely, if the learning design is well-designed but not implemented effectively, the expected results will be unsatisfactory. To improve students' ability to design differentiated learning modules, lecturers in charge of micro-tech learning can train students how to create differentiated learning modules effectively and correctly for the learning process.

CONCLUSION

After analyzing the modul ajar and discussing the findings, this study concluded that the ability of PGMI students in designing differentiated teaching modules in two components, namely general information and core competencies, fell into the good category. Conversely, the mapping of differentiated learning and attachments fell into the less category.

Based on the research results, general information (73%) and core competencies (72%) achieved the highest percentages. This indicates that general information and core competencies are considered good and more ready to be implemented. Meanwhile, the

differentiated learning mapping score of 37% indicates that the implementation or planning of differentiated learning is still low and suboptimal. Furthermore, the attachments score of 33% is the lowest percentage, indicating that the completeness of supporting documents, such as instruments, media, or additional devices, is still very lacking.

This indicates an average score of 53% for the differentiated teaching modules designed by students, which is considered adequate. Overall, this data indicates that the general information and core competencies are relatively good, but the mapping of differentiated learning and the completeness of the appendices remain major weaknesses that need improvement.

Therefore, it is crucial for PGMI study programs to provide sufficient opportunities for PGMI students to design differentiated teaching modules. This will enable prospective teachers to design modul ajar that meet standards and use them in the teaching and learning process. Therefore, further attention is needed to ensure that prospective teachers are given the opportunity to design modul ajar. This way, problems encountered by prospective teachers can be detected and addressed.

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