



# Exploring Obstacles to Differentiated Curriculum Implementation: Insights from Curriculum Developers

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## ABSTRAK

Masalah utama yang dihadapi adalah kurangnya penyediaan sumber daya dan pelatihan yang memadai untuk para guru, yang berdampak pada ketidakmampuan tim pengembang kurikulum untuk menyusun strategi yang efektif bagi guru dan peserta didik. Tujuan penelitian ini adalah untuk menelaah perspektif pengembang kurikulum mengenai kendala yang dihadapi dalam penerapan kurikulum pembelajaran berdiferensiasi. Penelitian ini menggunakan metode fenomenologi untuk menggali informasi berdasarkan pengalaman langsung dari pengembang kurikulum. Pengumpulan data dilakukan melalui wawancara mendalam dengan 6 guru Sekolah Dasar Penggerak sebagai informan. Data yang terkumpul dianalisis dengan teknik analisis tematik untuk mengidentifikasi pola-pola utama yang muncul dari pengalaman mereka. Hasil penelitian menunjukkan bahwa pengintegrasian kurikulum pembelajaran berdiferensiasi dapat dilakukan melalui asesmen diagnostik, modul ajar, atau penyesuaian teknik pengajaran oleh guru. Penelitian ini juga menemukan bahwa pembelajaran berdiferensiasi saat ini lebih dipahami sebagai hidden curriculum, yakni elemen yang tidak tercantum dalam kurikulum resmi namun tetap diterapkan dalam praktik pembelajaran. Perubahan pada kurikulum yang terjadi meliputi penyederhanaan dan pendekatan yang lebih praktis, serta peralihan dari pendekatan teacher-centered ke student-centered. Simpulan dari penelitian ini adalah pentingnya evaluasi komprehensif terhadap penyelenggaraan pembelajaran berdiferensiasi di semua jenjang pendidikan untuk meningkatkan efektivitasnya.

## ABSTRACT

The main issue is the lack of adequate resources and training for teachers, which affects the ability of curriculum developers to design effective strategies for both teachers and students. This study aims to examine the perspectives of curriculum developers on the obstacles encountered in the implementation of differentiated learning curriculum. The research uses a phenomenological method to explore information based on the direct experiences of curriculum developers. Data collection was conducted through in-depth interviews with 6 primary school teachers from the Penggerak School program. The collected data were analyzed using thematic analysis to identify key patterns emerging from their experiences. The results show that the integration of differentiated learning curriculum can be achieved through diagnostic assessment, teaching modules, or adjustments in teaching techniques by the teachers. The study also finds that differentiated learning is currently understood as a hidden curriculum, referring to elements not included in the official curriculum but still applied in teaching practices. Changes in the curriculum include simplification and more practical approaches, as well as a shift from a teacher-centered to a student-centered approach. The conclusion of this study highlights the importance of a comprehensive evaluation of differentiated learning implementation at all education levels to improve its effectiveness.

## 1. INTRODUCTION

Education at the elementary school level plays an important role in forming the foundation of students' knowledge, skills, and character. However, in its implementation, there are various obstacles that often hinder the achievement of effective and inclusive learning (Budiarti & Sugito, 2018; DeMatthews et al., 2020). One of the main challenges is the diversity of student characteristics in one class. Each student

has different abilities, interests, learning styles, and backgrounds, but traditional learning approaches are often unable to accommodate these variations (Aquilani et al., 2020; Gupta et al., 2022). This results in some students feeling left behind, less motivated, or even not involved in the learning process. In addition, the high student-to-teacher ratio in many elementary schools is another significant obstacle. Teachers often struggle to provide adequate attention to each student, especially those who require additional support or specialized approaches (Apriliana, 2021; Wakil et al., 2019). In such situations, students with unique learning needs, including those with learning disabilities or gifted students, are at risk of not receiving appropriate support. The mismatch between the teaching approaches used and the needs of students can lead to an even greater learning gap (Sarid et al., 2020; Thapliyal et al., 2022). Another factor that exacerbates these challenges is the limited educational resources, such as less varied teaching materials and teachers' skills in adapting learning methods. Teachers often face difficulties in designing flexible strategies to meet the needs of all students, especially in the context of a tight curriculum and limited time (Chen et al., 2022; Yildirim, 2017). As a result, learning in primary schools tends to be homogenous and less responsive to individual differences.

These conditions highlight the importance of adopting a more inclusive and adaptive learning approach, such as differentiated learning. This approach offers a solution to overcome learning barriers by allowing teachers to design and implement strategies that are tailored to the unique needs of each student. With differentiated learning, students can learn in the way that is most effective for them, thereby increasing engagement, motivation, and overall learning outcomes (Dirgantari & Cahyani, 2023; Hakiman et al., 2021). Therefore, the implementation of differentiated learning is a strategic step to create a more equitable and quality education at the elementary school level. Differentiated learning is an educational approach that is gaining significant attention, particularly in the context of elementary school education. This method emphasizes tailoring instructional strategies to meet the diverse needs, abilities, and learning styles of students within a classroom (Gheysens et al., 2020; Muh. Asriadi et al., 2023). By acknowledging that each child learns at their own pace and in their own way, differentiated learning seeks to provide personalized support that can help every student achieve their full potential. Whether through varied teaching methods, flexible grouping, or individualized assignments, this approach is designed to foster an inclusive learning environment where all students feel valued and engaged (Astuti & Afendi, 2022; Hidayati & Sujarwati, 2023). As education continues to evolve, differentiated learning stands out as a promising strategy to address the challenges of a diverse student population. In Sleman Regency, the Empowering Elementary Schools curriculum developer is trying to implement this concept to improve the quality of learning. This approach is designed to accommodate the various needs and characteristics of students (Salar & Turgut, 2021; Saputro et al., 2024), so that it is expected to create a more inclusive and effective learning experience.

Relevant curriculum plays an important role as input in differentiated learning (Maisyaroh et al., 2024; Novianti et al., 2023). Differentiated learning planning is needed in schools. This includes analyzing the curriculum to determine students' strengths and weaknesses (Wulandari et al., 2024; Yani & Susanti, 2023). The perspective of curriculum developers on differentiated learning in Sleman is very important to understand because it can influence how the curriculum is designed and implemented in the field. They see differentiated learning as a solution to dealing with the diversity of student abilities, which is often a challenge in the teaching process (Gheysens et al., 2020; Taş & Minaz, 2024). Students must receive adult support to identify the relationship between the curriculum their personal interests life experiences, and their needs while in a classroom where they feel safe and valued (Gheysens et al., 2020; Tapper & Horsley, 2017). By understanding the differences in students' backgrounds, interests, and learning styles, curriculum developers strive to develop appropriate strategies to achieve more optimal educational goals. On the other hand, the implementation of differentiated learning also faces various challenges. Some curriculum developers have difficulty implementing this concept consistently. This is due to the lack of provision of resources and training for teachers (Geletua & Mihirete, 2022; Rahmawati, 2023; Sulistyosari et al., 2022; Westbrook et al., 2020). Their perspectives on the success or difficulty of implementing differentiated learning greatly influence their attitudes and commitment to the curriculum innovations being proposed. Previous studies have examined a lot about differentiated learning but only focused on the impact or effectiveness (Aljaser, 2019; Amini et al., 2023; Astria & Kusuma, 2023; Rovita, 2023), process (Mellroth et al., 2021), teaching materials (Ardiawan et al., 2024; Widiastuti et al., 2023), model development (Kusuma et al., 2023), student perspectives (Almujab, 2023; Fauzia & Hadikusuma Ramadan, 2023), teachers (Mastuti et al., 2022; Putri Febrianti et al., 2023), principals (Chandra Handa, 2019; Whitley et al., 2021), and inclusive education (Thapliyal et al., 2022).

Based on the explanation above regarding the obstacles faced by curriculum developers to integrate differentiated learning into the curriculum, it becomes a challenge for researchers to be able to explore more comprehensively. In addition, differentiated learning is very important in facilitating student diversity to meet their educational goals. Thus, this study aims to analyze the perspective of curriculum

developers of Empowering Elementary School throughout the Sleman Regency on differentiated learning. The novelty of this study offer understanding from their perspective, it is hoped that researchers can provide more appropriate recommendations in developing a curriculum that can support differentiated learning responsively and effectively for all students.

## 2. METHOD

The research method chosen in this study is qualitative research. The type of qualitative research used in this study is phenomenology. This is because this study focuses on the perspective of curriculum development experts owned by Empowering Elementary Schools throughout Sleman Regency. Phenomenology is the study of human experience (Çimen et al., 2020; Flynn & Korcuska, 2018). The general focus of this approach is to examine the essence and meaning of human experiences and awareness that emerge (Tuffour, 2017; Wita & Mursal, 2022). The setting of the place was carried out at 6 Empowering Elementary Schools in Sleman Regency. The research subjects were the Deputy Principal for the Curriculum/Curriculum Development Team with a total of 6 research subjects. The following is a list of schools that will be displayed in Table 1.

**Table 1.** List of Empowering Elementary Schools in Sleman Regency

No	School	Subdistrict	Amount
1	Gayamharjo Elementary School	Prambanan	One Teacher
2	Model Sleman Elementary School	Ngemplak	One Teacher
3	Malangrejo Elementary School	Ngemplak	One Teacher
4	Kadisobo 2 Elementary School	Turi	One Teacher
5	Glagah Harjo Elementary School	Cangkringan	One Teacher
6	Merdikorejo Elementary School	Tempel	One Teacher

The main data collection technique is in-depth interviews through first-person stories in informal and formal conversations and interviews (Wita & Mursal, 2022). While the research instrument is the researcher himself. Human instruments or researchers as key instruments play a major role in obtaining carrying out planning and implementing data collection. So it is necessary to determine the focus, choose instruments, analyze data, and draw conclusions from the findings. In addition, in determining the focus to be obtained, researchers use a guideline, namely an interview protocol in the form of a form prepared by the researcher containing interview process instructions, questions, and informant response note space (Creswell, 2015; Flynn & Korcuska, 2018). The grid is show in Table 2.

**Table 2.** Instrument Grid

No	Topic
1	Integration of differentiated learning curriculum
2	Differentiated learning process
3	Obstacles

Instrument validation is carried out to ensure that the research instrument meets the validity criteria, namely that it is easy to understand so that it can obtain good research results (Jay et al., 2024; Sahir, 2021). This validation is carried out by experts (expert judgment) using a Likert scale of 1-4 (1 = Very Irrelevant, 2 = Irrelevant, 3 = Relevant, 4 = Very Relevant). The validation results are processed using the Aiken validity index (Aiken's V) to assess the validity of each instrument item. Validity Criteria (Aiken's V):  $V \geq 0.80$ : Valid and  $V < 0.80$ : Not Valid (Saifuddin, 2019; Santoso & Widiana, 2022).

**Table 3.** Instrument Validation Results

No	Statement Items	Expert 1	Expert 2	Average Score	Aiken's V	Information
1	Statement 1	4	3	3.5	0.83	Valid
2	Statement 2	3	2	2.5	0.5	Invalid
3	Statement 3	3	4	3.5	0.83	Valid
4	Statement 4	3	4	3.5	0.83	Valid

Based on Table 3, the results of the expert validation test, out of four statements, one was declared invalid, namely statement two. So that the instrument item was removed. Regarding the results of the average score and Aiken's V, it is low because statement two according to the expert is already represented

by statement one. The data analysis technique in this study does not test hypotheses or relationships between variables but describes or describes the experiences and awareness experienced by students (Creswell, 2015; Flynn & Korcuska, 2018). Qualitative data analysis in general includes data reduction, categorization, synthesis, and working hypothesis (Moleong, 2017). The stages carried out by researchers in conducting research, namely: (1) compiling interview grids and protocols and interview questions. (2) Validating interview instruments/protocols with curriculum development experts and differentiated learning experts. (3) Obtaining permits. (4) Researchers coordinating with the school regarding permits and determining the interview schedule. (5) Conducting interviews guided by key informants/gatekeepers from the school to help determine the informants to be interviewed. (6) Transcribing interview results and compiling research reports.

### 3. RESULT AND DISCUSSION

#### Result

The purpose of this study is to determine the perspective of the developer of the differentiated learning curriculum at Empowering Elementary Schools in Sleman Regency. Through a phenomenological approach, the results of the analysis reveal three basic or main themes, namely curriculum integration, curriculum change, and obstacles. The result then categorize base on theme as show in Table 4.

**Table 4.** Theme Categorization

No	Categorization of Meaning Units		Examples of Verbatim Statements
	Theme	Sub Themes	
1	Curriculum Integration	Diagnostic Assessment	Conduct a diagnostic assessment first, from the results of the assessment we process it with the child's learning type so that it can achieve the goal (Mrs. AI).
		Tailored to Class Teacher	It is left to each class teacher because in this case, it is the class teacher who has the responsibility for educational transformation through differentiated learning based on theory (Mrs. AM). Clearly and in detail, how differentiated learning is implemented is more for class teachers who want to teach, because those who modify and create teaching modules are class teachers and subject teachers (Mr. HR).
		Teaching Module	Differentiated learning has been included in the teaching module (Mrs. PBA). The inclusion of differentiated learning in the independent curriculum is not clearly stated in the document, but the differentiated learning section is explained in the teaching module attachment for each class teacher (Mrs. HN). The integration of the differentiated learning curriculum is written in the appendix, more precisely in the teaching module appendix (Mr. HR).
2	Curriculum Changes	Hidden Curriculum	The integration of differentiated learning in the Independent Curriculum is not written down either in terms of structure. Because, what is written in the curriculum is only the material, JPL, extracurricular activities, and what programs are carried out at the school, differentiated learning is more about the learning process, so it is not written in the curriculum (Mrs. RN).
		Simpler and More Practical	The current curriculum is simpler, whereas in the past it was thick (Mrs. AI). Curriculum development is more practical and there is not much explanation (Mrs. RS). The current curriculum is shorter than the previous one which was thick (Mrs. PBA).

No	Categorization of Meaning Units		Examples of Verbatim Statements
	Theme	Sub Themes	
3	Constraint	Change of Approach from Teacher Center to Student Center	There is, for example, if in the past teachers only explained using books, now they use other cycles, such as watching movies, listening to audio, turning on the sound, studying in groups, and so on. So it's not always just listening to lectures from the teacher (Mrs. PBA). From the side of the learning process in the classroom on the subjects from thematic to gems of the lesson itself. Then, in teaching the teacher is more dominant but now the teacher facilitates the child more (Mr. HR).
		Diversity of Students	The problem is that it is difficult to embrace everyone, because of the diverse characters of the students (Mrs. PBA)
		Requires a Lot of Preparation	It is clear that teachers need a lot of preparation, preparation for learning is higher than normal learning (Mrs. AI).
		Teacher Understanding School Adaptation to Independent Curriculum	Requires adjustments and changing the mindset again from teacher-centered to student-centered (Mr. HR). In addition, this school is trying to adapt to the independent curriculum as much as possible to facilitate students, so it is still homework for us (Mrs. HN).
		Government policy Infrastructure	The government's policies should not just let schools go (Mrs. AM). What is still an obstacle is that facilities and infrastructure require additional (Mrs. HN).

From the perspective of curriculum developers, integrating differentiated learning curriculum is a strategic step to ensure that every student gets the optimal learning opportunity. This involves an in-depth analysis of the diverse needs and characteristics of students, so curriculum developers need to design a tool for analyzing student needs and characteristics, one of which is by using diagnostic assessments. By considering the diagnostic results, developers can create a curriculum that not only meets learning objectives but is also relevant to the context of students' lives. Furthermore, curriculum developers also need to collaborate with educators to ensure effective implementation of this differentiated approach. So sometimes the process of integrating differentiated learning curriculum is not designed by each school's curriculum developers themselves, but is submitted or adjusted to the planning of the teaching teachers. The planned curriculum is then integrated into the teaching module as a guide for implementing differentiated learning. In addition, the integration of learning in the curriculum is also unplanned. This is usually known as a hidden curriculum. Hidden curriculum itself is something that is not planned. However, it should be emphasized here that the meaning of unplanned means that its structure is not written in a document. While the differentiated learning process certainly still requires separate planning as steps for its implementation. Curriculum change is an important process in improving the quality of education and adapting to the times. In the context of globalization and technological advances, the curriculum must be able to answer new challenges and the changing needs of society. This process involves an in-depth analysis of student needs, as well as the involvement of various stakeholders, such as principals, curriculum developers, educators, parents, and communities. Curriculum change does not only focus on the content of the material, but also on the teaching and assessment methodology, thus creating a more relevant and effective learning experience. Thus, curriculum change is expected to create an inclusive learning environment and support the development of competencies needed by students in the future.

Based on the results of the study, there was a change in the curriculum with the previous curriculum, namely in terms of content and learning approach. In terms of content, several curriculum developers stated that the differentiated learning curriculum or independent curriculum is simpler and shorter, not as thick as before, and more practical, not much explanation. In terms of approach, the current curriculum emphasizes the student-centered approach. Examples of activities with a student-centered approach that previously only used books and lectures, now with the help of audio sound and video film media that can attract students' attention and are combined with group learning. The integration of differentiated learning curriculum often faces various obstacles that can hinder its effectiveness. Some of the challenges faced include the diversity of student characters, requiring a lot of preparation, lack of teacher understanding, and school adaptability, and government policies that do not simply let schools

implement this approach. Because many teachers are accustomed to traditional, uniform teaching methods, they have difficulty adapting to strategies that require adjustments to materials and methods according to the needs of individual students. Without adequate training and sufficient support, the implementation of a differentiated curriculum is less than optimal, which has the potential to reduce the quality of learning. In addition, infrastructure and resource constraints are also significant factors in the integration of this curriculum. Several driving schools experience limited access to technology, teaching materials, and adequate learning spaces to support differentiated learning. This inadequacy can hinder the implementation of various innovative and creative teaching methods. Therefore, support is needed from the government and other stakeholders to ensure that all schools have sufficient resources to adapt differentiated learning curricula effectively.

The advantage of this study compared to previous studies is that it focuses on the differentiated learning curriculum (integration, change and constraints). While previous studies have always focused on the impact, in fact, to produce the desired impact or influence, it must be planned in advance, namely through the curriculum. So analyzing and evaluating a curriculum planning and implementation is also important. This study certainly contributes as a guideline that can be used as a step in integrating the differentiated learning curriculum. It will certainly have implications for the formation of a guide for implementing differentiated learning. The research that has produced this is certainly not free from a limitation, namely the ethical limitation that is required to maintain confidentiality and protect the privacy of the respondent's name. The data that has been processed and becomes information or the results of this study need to be further developed and can be a recommendation for the development of a guide for compiling a differentiated learning curriculum.

## Discussion

From the perspective of curriculum developers, it is important to design a curriculum that is simple, practical, and able to accommodate differences in students' abilities, interests, and learning styles (Ismajli & Imami-Morina, 2018; Manggalastawa, 2023; Ruben et al., 2013; Wulandari et al., 2024). Thus, the curriculum not only focuses on academic achievement but also prioritizes the development of students' character and social skills, which are important aspects of today's education. Furthermore, the development of varied teaching materials is key to implementing differentiated student-centered learning. One of the important steps in developing a differentiated curriculum is the use of initial assessments to identify each student's learning profile (Alstete et al., 2021; Fauzia & Hadikusuma Ramadan, 2023). Through this assessment, teachers can identify students' strengths and weaknesses, as well as understand their interests and learning styles. The information obtained will help teachers design more personalized and relevant learning experiences so that each student feels involved and motivated (Demir, 2021; Halimah et al., 2023). With this approach, curriculum developers need to provide tools and guidance that support teachers in implementing effective assessments. The development of content and appearance of the curriculum document also need to be developed simply and concisely to make it easier for teachers to understand the content and structure of the curriculum. Furthermore, the development of varied teaching materials is key to implementing differentiated learning. Curriculum developers must provide various learning resources, such as books, videos, and interactive modules, which can be accessed by students according to their needs (McKoy & Merry, 2022; Waton, 2023). In addition, curriculum developers also need to encourage teachers to apply various teaching strategies, such as project-based learning, collaborative learning, and the use of technology (Ismail & Allaq, 2019; Marantika et al., 2023). So that it does not emphasize lectures too much in facilitating students. The obstacles faced by curriculum developers in curriculum integration include the diversity of students who vary, require a lot of preparation, teacher understanding, school adaptation to the new curriculum, government policies, and facilities and infrastructure. This is in accordance with other studies state common problems that occur in the implementation of differentiated learning such as lack of understanding of the concept and practice of differentiated learning, limited time and facility resources, large class sizes, and difficulty evaluating student performance (Tajik et al., 2024; Wardani et al., 2023).

Finally, the success of differentiated learning is highly dependent on the support of all stakeholders, including principals, teachers, and parents. Curriculum developers need to build strong collaboration between all parties so that the implementation of this curriculum can run smoothly. Training and workshops for teachers are essential so that they feel confident in implementing differentiated learning. With a supportive environment and commitment from all parties, it is hoped that learning in Empowering Elementary Schools throughout Sleman Regency can be more effective and comprehensive, helping each student achieve their best potential.

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#### 4. CONCLUSION

Based on the results of the review of the perspective of curriculum developers in Empowering Elementary Schools throughout Sleman Regency who integrate differentiated learning into the curriculum, it can be concluded that by using initial assessments, developing the content and appearance of curriculum documents is very important to implement in order to achieve the expected educational goals. In this regard, the perspective of curriculum developers as learning process planners must be a concern to obtain views based on their experiences. The process of curriculum integration and changes from the previous curriculum have positive and negative impacts. These negative things are currently the obstacles for the differentiated learning curriculum development team. The hope for further research is to examine in more detailed stages such as planning, implementation, and evaluation based on the perspective of curriculum developers.

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