Elementary School Teachers' Challenges to Implementing Differentiated Instruction in Kurikulum Merdeka

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Abstract. Each individual has different characteristics and needs, especially in learning. Teachers have a very important role in facilitating the learning needs of each student. This study aims to explain the implementation and challenges experienced by teachers in implementing Differentiated Instruction in elementary schools. This study used qualitative descriptive method. The research data was obtained through FGD with teachers from several regions in Indonesia followed by interviews with 4 teachers who were selected purposively. In-depth interviews were also conducted with two Curriculum Merdeka trainers from the Sleman District Education Office, Yogyakarta. The results showed that the implementation of Differentiated Instruction is still rarely carried out by teachers because there are still many teachers who experience obstacles. The obstacles experienced by teachers in implementing differentiation learning are influenced by internal and external factors. Internal factors include time constraints and different learning strategies caused by teachers' ability to conduct diagnostic assessments to determine student needs. External factors include: leadership carrying capacity, school culture, and flexible curriculum. The obstacles experienced by teachers can be reduced by providing support so that a mindset is formed to always change for the better, training that improves teacher professionalism, a supportive environment for mutual collaboration, and a flexible curriculum with educational goals.

Keywords: Differentiated Instruction, Kurikulum Merdeka, Elementary School Teacher.

1   Introduction

The curriculum is at the heart of education. The curriculum in schools is an educational program provided by the school that is not only limited to the field of study and learning activities but everything that affects the development and personal formation of students that refers to educational goals [1]. A good curriculum is anticipatory, adaptive, and applicative [2]. Curriculum changes and innovations keep pace with rapidly changing global situations [3].

The Kurikulum Merdeka is a curriculum that is applied in Indonesia today. The decision to launch the Kurikulum Merdeka is one of the solutions for learning recovery in Indonesia where the condition of education in Indonesia is currently happen learning loss and learning crisis. One of the principles of the Kurikulum Merdeka is that learning is designed by taking into account development, level of

achievement, learning needs, and showing the characteristics and development of diverse students . Teachers are given flexibility in designing learning according to the needs and interests of students. Thus, students will learn happily according to their needs and interests. Learning according to the needs and interests of learners that are diverse and reasonable or possible to be implemented is called DI [6].

DI is considered effectively applied to improve the quality of learning. DI can increase student interest in learning, encourage focused and independent thinking, and improve academic achievement [7]. DI has an effect on increasing student achievement and motivation [8] and can have a positive impact on the learning processs [9].

DI requires effort to successfully apply it. One of the factors for the success of its application lies in the teacher. The ability, commitment, and motivation of teachers in implementing DI is very important [10]. The implementation of the Kurikulum Merdeka which emphasizes the use of technology and learning communities to share good practices between teachers, students, and academics is a learning resource for teachers. Every time there is a curriculum change, teachers must be able to adapt so that implementation can run optimally [11] and can achieve the educational goals to be achieved [12].

DI is also common in various countries. Although effective in improving the quality of learning, it also has many challenges that teachers must face in their implementation. In the Philippines, the challenge experienced by English teachers in implementing DI such as poor human resources, time, diversity of student needs, reluctance to change, assessment and evaluation, and classroom management are in the spotlight [10]. In Australia, DI challenge occur due to limited school resources, student behavior problems, and inadequate time for planning and implementation [13]. In Malaysia, the 4 main challenges experienced by chemistry teachers in implementing DI are meeting student needs, learning planning and delivery, support and skills, and challenges to time availability in implementing DI [14]. Challenges also faced by teachers in South Africa in implementing DI are teacher ignorance of student needs in understanding needs, teacher training that is lacking in identifying learning barriers and to create and implement activities that suit the needs, time, resources of large class dates and inability to manage and maintain classroom discipline. Based on this description, there are many factors, both internal and external, that become obstacles in the implementation of DI.

Apart from various studies that have been conducted in an international context, it provides insight that DI still experiences many obstacles from various factors. The application of DI shows that the quality of DI in Indonesia is still of low quality [15]. This study was conducted to determine the extent of the implementation of DI in elementary schools that have been carried out and what are the obstacles experienced by elementary school teachers. By obtaining this information, it can provide information to policy makers about needs in the field that support the implementation of DI optimally.

2   Method

This study used qualitative descriptive method. Through this method will produce written data related to the object of research. Data collection techniques in this study through Focus Group Discussion (FGD) and interviews. The FGD was conducted with 100 elementary school teachers from various districts / cities in Indonesia. After obtaining the results, the researchers took 4 informants who were elementary school teachers in Sleman Regency to conduct semi-structured interviews in depth. The next informants were two trainers of the Kurikulum Merdeka of Sleman Regency.

The validity test of the data is carried out by credibility test through the triangulation method. The triangulation performed is the source triangulation. After the data was collected, data analysis was carried out using interactive data analysis techniques by Miles and Huberman. This analysis begins with collecting data, reducing and categorizing, displaying data, and drawing conclusions.

3   Result

3.1   Implementation of DI in Schools

DI for most teachers in Indonesia is new. Most teachers feel that they do not fully understand DI. A small part can understand well, and the rest are still hesitant about their understanding. Most of them are familiar with DI since the implementation of the Kurikulum Merdeka.

"I know there has been DI since the Kurikulum Merdeka, so not long ago I also knew that there is such a learning model" (Teacher in Semarang Regency, Central Java Province).

The implementation of DI is also diverse. Based on discussions and interviews, the application of DI is divided into 3. First, teachers who already have a good understanding prepare DI by conducting diagnostic assessments to determine the needs of students. Assessment is carried out in various ways such as observation, questionnaires, school data, previous teacher data, assessment results, and others. The teacher determines the goals to be achieved according to the needs of students. Then, the teacher prepares the appropriate learning strategy. The second model, teachers have student data based on diagnostic assessment results but teachers have not been able to determine student needs. The teacher prepares several strategies to implement and students choose which strategies are of interest or considered to suit them. The third model, DI is carried out as a form of teacher response. This learning is carried out as a scaffolding given by the teacher to certain students who have problems in learning or who have more abilities above the class average.

"I don't know, what I do includes DI or not. I observe students during learning, if they have difficulties I help in different ways according to their understanding" (Teacher in Sleman District, DIY Province).

Teachers don't do DI every day. Many teachers find it difficult to implement. They find to implement DI more difficult and requires a lot of preparation compared to regular conventional learning. In addition, DI takes longer in its application.

"I can't afford DI every day, because I think the preparation takes a lot of time and energy. Sometimes, there are things outside the plan such as additional tasks, administration, and others that must be done" (Teacher in Jember Regency, East Java Province).

3.2   Challenges Experienced by Teachers in Implementing Differentiated Instruction

Based on FGDs and interviews, in general, the challenges experienced by teachers come from internal and external factors. In detail, the challenges of teachers in implementing the Kurikulum Merdeka in chart 1.
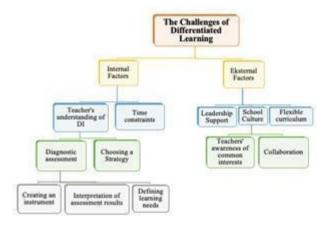

Fig. 1. Challenges of DI for Primary School Teachers

Internal factors

Teacher's understanding of DI
DI is not new in education, but this concept has only been understood by teachers since the implementation of the Kurikulum Merdeka. The low understanding of teachers towards DI can be seen from the teacher's answers when asked about these learning misconceptions. Based on the 3 questions asked, more than one-third of respondents still answered with the wrong answer. In addition, teachers are also still doubtful about whether what has been done is right or not.
"I don't really understand how DI really is, is what I'm doing right? (Teacher in Sleman District, DIY Province).
The same thing was also expressed by the trainer of the Kurikulum Merdeka of Sleman Regency that:
"The average teacher does not understand DI, for that my team and I are still working on how teachers and fathers can understand and implement it in schools" (Trainer Kurikulum Merdeka).
        DI begins with diagnostic assessment activities. Diagnostic assessment is an initial assessment carried out by teachers to students to identify the competencies,

strengths, weaknesses of students so that learning can be designed as needed. The results of the diagnostic assessment will greatly determine the learning design carried out by the teacher. However, there are still many teachers who do not understand how to make an appropriate diagnostic assessment, both from the method and the technical in carrying out.

"I don't know the right technique to conduct diagnostic assessment" (Teacher in Sijunjung District, West Sumatra Province).

In addition to the teacher's ability to understand how to make assessments and apply them, the teacher's challenge in making assessments is to adjust the conditions of students. There are cooperative learners, so teachers can easily conduct assessments. However, not a few students and parents are not cooperative in the diagnostic assessment process. This usually happens to lower grade teachers. Children have not been able to convey things related to their profiles. To browse the profiles of these students, teachers make observations through parents. However, not all parents are cooperative with this. The teacher's communication skills are very important in this regard.

"Children sometimes cannot answer according to the actual situation and parents are sometimes less open with the condition of children at home". (Teacher in Jogja City, DIY Province).

In addition to understanding when preparing diagnostic assessments, many teachers have not been able to analyze students' answers. The teacher felt that the students' answers were not as expected.

"I still have difficulty reading or summing up the answers from the students" (Teacher in South Halmahera Province).

Time

The teacher's challenge in dividing time is indeed a polemic in itself. In addition to teaching, teachers have a lot of administration to complete. Designing DI activities has stages that are not as short as preparing learning without design. This makes time division the second biggest challenge experienced by teachers.

"Preparing different learning instruments is very time-consuming" (Teacher in Brebes Regency, Central Java Province).

"My obstacle to wastes DI is time because I have additional tasks piling up" (Teacher in Kediri Regency, East Java Province).

External factors

Leadership Support.

DI is basically complex learning because it involves all components of the school. The supporting capacity of the principal plays a huge role in the mindset, progress, and development of all school residents.

"I was encouraged to do DI because I was supported by the principal to attend various trainings on DI (Teachers in Sleman District, DIY Province).

"Currently, DI has not become entrenched in schools. To start with it, teachers must have a strong determination and be supported by school leaders" (Kurikulum Merdeka Trainer).

Support from various parties in implementing DI makes the burden on teachers lighter. The complexity of DI makes teachers have to have multi-skills that must be developed. Many schools have not developed a culture of collaboration.

"Teachers implementing DI feel hard because of the lack of collaboration, many schools have not made collaboration a positive culture" (Kurikulum Merdeka Trainer).

School Culture

School culture is a set of shared values, beliefs, and norms that influence how educators and administrators think, feel, and behave in schools [16]. School culture can have a great impact on the process of student development.

1. Teachers' awareness of common interests

   Teachers are a very important element in education. Teachers' awareness of professionalism must continue to be improved to support educational needs and meet the demands of the times. Teachers must hone their skills to advance education.

   "In my school, teachers are eager to learn Kurikulum Merdeka" (Teacher in Sidoarjo Regency, East Java Province).

2. Collaboration

   Collaboration can increase motivation in teachers. Teachers who have colleagues to collaborate with will usually not easily give up on failure.

   "I was confused about where to start, I didn't understand DI. Want to ask, in my school the teachers also don't understand. KKG (learning community) is also not very active" (Teacher in South Central Timor District, East Nusa Tenggara Province).

Flexible curriculum.

Flexible curriculum is a program intended for students to get access according to their needs and capacities [17]. Flexible curriculum is conceptualized based on the adaptability and ease of access of the curriculum to the needs of learners and their capacities. Curriculum Merdeka strives to make the curriculum flexible in several aspects such as when and where learning occurs, what and how students will learn, how to deliver instructions, and what strategies can be used to organize learning. This curriculum flexibility is needed by teachers.

"Actually, this DI is very fun as long as it is not rushed with the target material that must be completed, especially in class VI where there will be assessments from the regions" (Teacher in Sleman Regency, DIY Province).

One of the policies of the Kurikulum Merdeka is the abolition of the National Examination. However, in certain regions there are still regional-based assessments to standardize graduation. This makes teachers feel less free in applying DI.

The enthusiasm of teachers in implementing DI is indeed very large, but the many obstacles experienced finally many teachers have not been able to apply learning properly. Although DI support is very strong, many teachers have not implemented it well in their respective schools.

4   Discussion

Implementation is the process of putting into practice an idea, program, or set of new activities or things to make changes [16]. The implementation of DI is used as one of the efforts in the restoration of education in the Kurikulum Merdeka because of the feasible approach to accommodate the diverse learning needs of students in the same class [3] and maximizing student learning capacity [18]. The application of DI requires teachers to know the readiness, interests, and learning profiles of students [16] so teachers can design learning by differentiating content, products, or processes [19]. In its implementation, teachers act as learning leaders, guides, trainers, arrange different classes so as to achieve the expected goals [6].

In its implementation, teachers act as learning leaders, guides, trainers, arrange different classes so as to achieve the expected goals [6]. However, teachers' understanding of the flow of DI implementation is still very lacking. This is because there are still many new teachers familiar with the launch of the Kurikulum Merdeka and until now teachers are still learning and adapting to changes.

Changes in education occur voluntarily or forcefully [16]. Teachers agree that curriculum changes, especially in DI, have a positive impact, but in their application there are still many challenges experienced. Changes to the curriculum and all related will be received with different responses from teacher to teacher. Broadly speaking, there are two views of this change, namely teachers are willing to learn and adapt to change while others try to resist change and feel comfortable with the teaching model commonly used. Teachers located in urban areas with access to higher education, easier training available, and supportive learning communities are more likely to accept change. They adapt to change and perceive that changes for the better need to be made. This view is balanced by the consequence that they must be willing to learn the stone thing, spend more time studying, preparing, and trying. Different conditions occur for teachers in areas that are far from urban areas and lack less active learning communities. They tend to have a mindset to resist change.

The teacher's mindset will greatly influence the teacher in understanding the concept of DI. Teachers who have a mindset of accepting change will have greater motivation to learn and try. In understanding DI, teachers are supported through Platform Merdeka Mengajar (PMM), webinars organized by the government, non-profit organizations, and fellow teachers who are members of the learning community. The process of teachers understanding DI can be said to be still in a very short period of time, so it can be understood that many are still experiencing difficulties. The biggest difficulty teachers have in implementing DI is understanding student needs.

Understanding the needs of students is the first stage that teachers must do. In understanding student needs, teachers can make observations and assessments of students [6]. In practice, teachers have difficulty understanding the needs of students due to the absence of appropriate assessment instruments, interpretation of assessment results with different actual conditions, too many students, and limited time. This condition shows that teachers' understanding of DI still needs to be improved. Teachers must get professional training so that they are able to design [14] learning based on the characteristics of students so that it can design learning that suits the needs and characteristics of students [20]. A change will not run quickly, there are

phases that must be passed, namely by adopting, implementing and making improvements from the experience made, to sustainable [16].

The lack of competence possessed by teachers and the implementation mechanism of DI is not clear [14]. Without good knowledge, teachers will not be interested in implementing DI and invest more in preparing for the needs of learners [21]. Therefore, teachers need proper guidance and some standard references and strategies that can be replicated to support their needs as they strive to become teachers who can meet the needs of learners efficiently [22].

The process of teachers implementing DI is also highly dependent on the availability of time. In practice, there are still many teachers who are burdened with additional tasks and administration that take up teachers' time in preparing quality learning. In addition to time to prepare for learning, in its implementation teachers are required to be able to divide time effectively and efficiently. For most teachers, preparation time is critical in determining the application of classroom learning [23], [24]. Previous research confirms that teachers claim that DI characteristics are time-consuming because they require thorough lesson planning [25], additional modifications to learning media [23], and a longer implementation period compared to other methods [26]. However, time as an obstacle to the application of DI is a manageable factor that can be changed depending on the teacher's efforts [24].

In addition to challenges from within teachers, leadership factors, school culture, and flexible curriculum also provide challenges. Changes that occur, cannot be done alone. School principals, teachers, cultures, curricula, learning communities, and related parties must collaborate with each other for the same purpose [16]. DI will be very difficult if done alone, all parties must be involved for its application. Today, changes in the educational curriculum are happening slowly. This aims to prepare all parties to achieve the same goal. In addition to the national curriculum, there are certain regions that have certain policies that require schools in the area to implement different systems so as to reduce the level of flexibility of the curriculum applied.

The state of the school and resource adequacy are among the aspects that teachers consider to practice DI [27]. Therefore, school administration plays an important role in promoting cultural, collaborative work among teachers and providing adequate support, encouragement and professional development training for teachers to practice DI in the classroom [28]. Losing support from school administration will cause teachers to lose motivation and be more opposed to the use of DI [24].

5   Conclusion

DI is one of the learning that humanizes students by meeting their learning needs. Believing that every student is unique and different in learning, teachers as agents of educational transformation have a huge role to play in the success of their students. Every learner has the right to learning that supports adequate interest to support his progress. But meeting the needs of every student is not an easy thing to do. The role of teachers and all education stakeholders must support each other so that DI can run effectively and efficiently.

DI is still widely carried out by teachers in elementary schools because teachers have many obstacles in its implementation. There are many factors behind the

challenges experienced by teachers. The challenges experienced by teachers are divided into 2, namely from within the teacher (internal) and from outside the teacher (external). Internal factors consist of teachers' understanding of DI and time constraints, while external factors are influenced by leadership support, school culture, and flexible curriculum. The challenges experienced by teachers can be reduced by providing support so that a mindset is formed to always change for the better, training that improves teacher professionalism, a supportive environment for mutual collaboration, and a curriculum tailored to educational goals. With the support both internally and externally provided, it is hoped that all teachers can carry out concrete actions in the implementation of the Kurikulum Merdeka to achieve the goals of education in Indonesia.

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