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Utilisation and impact of the Merdeka Mengajar Platform in the implementation of the Merdeka curriculum: Lessons from Guru Penggerak

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Abstract

Indonesia's education system has transformed with implementing the Merdeka Curriculum, supported by PMM to enhance teaching effectiveness. While Guru Penggerak teachers actively use PMM, variations exist in their level of engagement. This study uses a qualitative evaluative approach with the STAKE model to examine the utilization of PMM among Guru Penggerak and its impact in schools. Data was collected through interviews, observations, and document analysis. Findings indicate that Guru Penggerak firmly understands PMM, which is supported by schools through dedicated teams and infrastructure. PMM utilisation aligns with guidelines, and key features are effectively implemented. The platform positively impacts teachers' skills and self-development. However, time constraints due to additional administrative duties pose challenges. These findings highlight the benefits and barriers of PMM, offering insights for optimising its implementation to enhance educational outcomes.
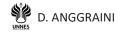
INTRODUCTION

Along with the development of the times, changes have also occurred in the education system in Indonesia. These developments are quite influential in various aspects of life, including education. Education sector development can be seen in the development or renewal of the education curriculum. The curriculum in Indonesia constantly transforms in each period. Since Indonesia's independence, the curriculum has undergone twelve changes, the last change from the 2013 curriculum to the Merdeka curriculum (Halil *et al.*, 2024).

Current technological developments require teachers to adapt to the evolving needs of education in today's digital era. The challenges teachers face today stem from the vast information and knowledge available from various learning sources. Education in Indonesia has undergone a significant transformation with the implementation of the Merdeka Curriculum. Successful implementation of this curriculum requires several supporting factors, including teacher training, access to learning resources, innovative teaching tools, and support from school principals and local education offices (Priantini *et al.*, 2022).

Furthermore, enacting the Merdeka Curriculum aligns with the Merdeka Mengajar platform (PMM) launch, a further step toward fostering digital-based education. This platform is expected to serve as a partner for teachers, supporting and encouraging them throughout the learning process (Rohmah *et al.*, 2024). Research by Partikasari *et al.* (2023) suggests that the PMM has the potential to become a collaborative platform that assists teachers in implementing the Merdeka curriculum while promoting a spirit of cooperation and knowledge sharing.

Besides the PMM, the government also established the so-called Guru Penggerak program designed to be the frontline of successfully implementing the Merdeka curriculum. In this regard,

the implementation of the Merdeka Belajar, the role of Guru Penggerak and ordinary teachers (non-Guru Penggerak) is equally important because both contribute and still have the task of driving learning while having the responsibility to create an engaging and enjoyable learning environment so that students are motivated to reach their potential (Sibagariang *et al.*, 2021). Guru Penggerak has an important role in optimising the utilisation of PMM in their school.

Scholars have conducted several previous studies on this topic. For example, Muchlis (2022) illustrated that the PMM improved teachers' competence and learning quality in Southeast Sulawesi. In a similar context, Setiariny (2013) reached the same conclusion. However, many teachers still struggle to optimize the use of PMM. Zzulfa *et al.* (2022), for example, studied the effectiveness and impact of the PMM and identified at least two major barriers that teachers face in using the platform. *First*, a lack of understanding of PMM requires teachers to spend time learning the platform before they can utilise it effectively. *Second*, some teachers lack technological literacy, which makes these challenges even more complex.

The existing and previous studies on optimising the Merdeka Mengajar platform (PMM) by Guru Penggerak within so-called Sekolah Penggerak have largely overlooked systematic and comprehensive evaluations of this issue. Regardless of their specific contexts, the absence of evaluative research has shaped a particular perspective on PMM implementation in schools by Guru Penggerak. To address this gap, this study employs a qualitative evaluation model to assess the issue systematically. This study makes a technical contribution to PMM implementation by offering diverse and meaningful insights from teachers as platform users.

Technically, preliminary research conducted by the researcher in one of the Sekolah Penggerak in Semarang city revealed that while PMM was familiar to teachers, their perceptions varied. Even within the Guru Penggerak communities, differences in PMM utilisation were evident, with some teachers completing a high number of actual actions while others had significantly lower completion rates. Therefore, the preliminary research result was suitable for conducting this research in Semarang, the capital city of the central Java province, Indonesia. Additionally, this study will contribute to the theoretical discourse on using online learning and Learning Management Systems (LMS) to enhance teachers' competencies, particularly in developing contextualised curricula in schools.

LITERATURE REVIEW

As an appropriate and suitable evaluation is required to fill the research gap, this study proposes a STAKE evaluation model. STAKE emphasises that evaluation consists of two main activities: description and consideration. According to STAKE, the assessment of an education program can be done by comparing the program relative to other programs or absolutely by comparing it to specific standards (Tayibnapis, 2000; Ananda & Rafida, 2017). STAKE developed these essential elements in carrying out the evaluation and emphasising the two basic things that must exist: description and judgment. Then, it developed them into three main aspects of the evaluation study's object: antecedents, transactions, and outcomes (Kamal& Rahmadani, 2024).

Antecedents refer to the initial conditions prior to the implementation of a program. These conditions influence the implementation of the program. This category includes resources, models, and inputs such as manpower, funds, participant characteristics, achievable objectives, and environmental factors that can affect program outcomes. Another example in the context of Education is the teacher's background (understanding of the program), the appropriate curriculum, and the availability of resources (Lestari & Arifin, 2023).

Transaction is a form of program implementation that includes plans, processes, activity schedules, models, assessment methods and so on; it can also be said that transaction is a form of program execution based on initial plans and observations of phenomena that occur during program implementation. Outcomes are the final results of program implementation that include

the benefits felt by participants, responses to program systems, the effects of these systems, and the influence of the instructional experience provided (Lestari & Arifin, 2023).

Furthermore, in the context of policymaking, the Merdeka Mengajar platform is one of the efforts issued by the government to overcome learning loss after the Covid-19 pandemic and enhance teachers' competence in the implementation of the Merdeka curriculum (Sumandya *et al.*, 2022). Merdeka Mengajar platform is a kind of Learning Management System (LMS) platform provided by the Ministry of Education and Culture to become a driving friend for teachers and principals in teaching, learning, and working. The Merdeka Mengajar platform was built to support the implementation of the Merdeka Curriculum to assist teachers in getting references, inspiration, and understanding to implement the curriculum using the Merdeka Mengajar platform.

In general, the pocketbook of the independent teaching platform is prepared to serve as a guide for teachers or educators in utilising various content on the independent teaching platform. Furthermore, the Ministry of Education and Culture and Research (2022) states that the Merdeka Mengajar platform was built to support the im- implementation of the Merdeka Curriculum so that it can assist teachers in getting references, inspiration and understanding implementing the Merdeka Curriculum. In addition, the Merdeka Mengajar platform can also be used to optimise the internalization of Pancasila values as stated in the Pancasila Student Profile (Alawiah & Setyorini, 2023).

In essence, the Merdeka Mengajar platform is intended for teachers and school principals. On the platform, there are several places for teachers to be creative, namely Student Assessment, Teaching Tools, Proof of Work, Self-Training, Inspiring Videos and Communities. On the platform, teachers can create several places, namely student assessments, teaching tools, proof of work, independent training, inspirational videos, and community videos. By using the independent teaching platform, it is hoped that the independent curriculum can be well implemented at all levels of education in Indonesia (starting from preschool, kindergarten, primary, and secondary, as well as higher education). By using the independent curriculum, changes are felt in schools; teachers are more flexible to be creative in teaching as much as possible and are more aware of students' interests, talents, needs and abilities (Albani & Mu'arifin, 2023).

According to the brief review of the evaluation model for the programmatic education and learning practices—STAKE was chosen in this study—and the Merdeka Mengajar platform was officially created, established and enacted by the Indonesian Ministry of Education; a well thorough systematic evaluation is needed. PMM is complex not only in terms of how to use and benefits from it for the teachers, students and schools but also in some technical, cultural and values issues surrounding the application. A modified approach of the STAKE evaluation model by incorporating a qualitative approach will enrich the previous studies on the topic of the implementation of the PMM in the Indonesian curriculum policymaking context.

METHOD

This research employs qualitative methods. Bogdan and Taylor (as cited in Moleong, 1994) define qualitative methodology as a research procedure that generates descriptive data in the form of written or spoken words from people and observable behaviour. This study adopts an evaluative research approach, which is conducted to assess and determine the outcomes of a particular program or project following its planned objectives. It aims to evaluate whether the program has been successful by objectively collecting and analysing data.

In this study, the researchers applied the countenance model (Stake model) (see Lestari & Arifin, 2023) to evaluate the utilization of PMM, which is examined through three aspects: planning (*antecedents*), implementation (*transactions*), and evaluation of results (*outcomes*). The research was conducted in one of the high schools with Sekolah Penggerak label in Semarang, with a focus on the utilisation of the independent teaching platform by Guru Penggerak within

the school.

The researcher collected data from informants during the 2023/2024 academic year and selected five teachers (n=5) as the study's informants. The primary data source in this research consists of teacher interviews regarding the utilisation of the independent platform in schools. The words and actions of the observed or interviewed individuals serve as the primary data sources in this study. Interviews were conducted directly (face-to-face) during the research period. Additionally, secondary data were obtained from a series of learning activities and documentation related to other supporting materials from schools and institutions relevant to the issues explored in this study.

In this study, the researcher employed a structured interview method, in which interviews were conducted with a clear understanding of the specific information to be obtained. Observations were carried out to collect data on how teachers use PMM, the outcomes they gain from using PMM, and how PMM is implemented. Document analysis was used as a supporting method for data collection, including teacher learning videos, teaching modules uploaded on PMM, school infrastructure that supports PMM, school decrees listing teachers appointed to the PMM team, and documentation of interviews and observations related to PMM utilisation. Qualitative data analysis was conducted following the approach proposed by Bogdan and Taylor (as cited in Moleong, 1994).

RESULT AND DISCUSSION

The research findings presented were obtained using various predetermined data collection techniques, including interviews, observations, and document analysis. The evaluation of PMM utilisation by Guru Penggerak was conducted using the Stake evaluation model, which consists of several stages: evaluation of planning (antecedents), implementation (transactions), and results (outcomes).

Table 1 Three main domains of the STAKE evaluation model

No	Evaluation Aspect	Description
1	Antecedents	1. Understanding of PMM concept
		2. PMM socialisation
		3. Availability of resources
2	Transaction	PMM Usage Process
3	Outcome	1. Teacher performance after using PMM
		2. Influence on learning

A. Evaluation of Planning (Antecedents)

Evaluation of the antecedents of the utilization of the Merdeka Mengajar Platform by the Guru Penggerak in one of the Sekolah Penggeraks in Semarang City includes 3 main things, including PMM socialisation, teacher understanding, and school policies.

Teachers at the Sekolah Penggerak already understand that PMM is a digital platform that plays an important role in their professional development. As a personalised learning media, PMM provides various learning and training resources that allow teachers to improve their competencies and skills in teaching autonomously and continuously. Teachers' understanding of PMM is fundamental because it affects their use PMM. This is in line with Setiariny's (2013) research, which mentions the importance of coordination and collaboration in assisting teachers to improve their understanding of PMM applications so that the education objectives can be achieved later.

Based on the interview results, the teacher himself began to know PMM (Merdeka Teach-

ing Platform) before joining the Guru Penggerak program. This encounter with PMM was carried out through socialisation organised by the school. The socialisation aims to introduce this digital platform to support the learning process in the Merdeka curriculum and teacher professional development. This socialisation is related to the diffusion of innovation, which describes how users introduce, accept, and adopt innovations (Setyawan, 2017).

PMM, as an educational technology innovation, must go through several stages of diffusion. The first stage is the introduction, where teachers begin to realise the existence and benefits of PMM. Next is the persuasion stage, where socialisation from the school and principal aims to convince teachers of the advantages of PMM and motivate them to use it. The next stage is decision, which occurs when teachers use PMM in their learning. The implementation stage involves the active use of PMM in daily activities, and the confirmation stage is where teachers evaluate the effectiveness of PMM and decide whether to continue using it or look for other alternatives.

In the school context, Sekolah Penggerak strongly supports using the Merdeka Mengajar platform by forming a PMM team whose task is to facilitate and monitor teachers' learning and use of this platform. Apart from being supported by the PMM team, the school also provides various facilities that support teachers' use of the Merdeka Mengajar platform. These facilities include computers, a stable internet network via WiFi, and other additional devices. The availability of these facilities allows teachers to access PMM more easily using personal devices and devices provided by the school. With this infrastructure support, the digital-based learning process can run more optimally, making it easier for teachers to utilise PMM features to support classroom learning quality.
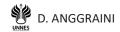
This is in line with research conducted by Ambawani *et al.* (2023), where PMM at the school is managed and managed in a structured manner, starting from planning implementation strategies and resources, organising by forming a learning committee in charge of managing PMM starting from technical understanding, student assistance, training for teaching staff, and coordination with the Foundation. In line with this research, the school, through the principal, plays an important role in actively empowering teachers to use PMM. The principal provides moral and technical support and can facilitate collaboration between individuals (Ambawani *et al.*, 2023).

The evaluation of PMM utilisation by Guru Penggerak at Sekolah Penggerak in Semarang highlights the importance of PMM socialisation, teacher understanding, and school policies. Teachers recognise PMM as a valuable digital platform for professional development, with their adoption influenced by structured socialisation efforts aligned with the diffusion of innovation models. The school plays a crucial role by forming a PMM team, providing infrastructure support, and facilitating teacher empowerment through training and collaboration. These findings align with previous research, emphasising the significance of leadership, coordination, and resource availability in optimising PMM use to enhance teaching quality.

B. Evaluation of the Implementation aspect (transaction)

In the next stage of the STAKE evaluation, the transaction domain focused on the implementation or, in this context, the use of the PMM. This component evaluates teachers' habits in using PMM, the features they utilise, and the frequency of its use in daily activities. These habits are developed through continuous experience and practice, supported by the school. Guru Penggerak regularly uses PMM to enhance learning, access various educational resources, and improve professional competencies.

The frequency of PMM utilisation among teachers varies, influenced by time availability and teaching workload. For instance, one teacher reported accessing the platform three times, while another used it almost daily. Some teachers engage with the platform two to three times a week, indicating reasonably regular use. However, one teacher did not access the platform at all this year, possibly due to a heavy workload or other teaching priorities.

The varying frequency of PMM use reflects differences in time availability and workload among teachers. Those with heavier teaching schedules may access the platform less frequently due to time constraints, while those with more flexibility use it more often. Time availability and teaching workload are key factors influencing the intensity of platform use. Regarding usage, mentor teachers have gradually adapted to PMM after continuous training. They have also begun applying the knowledge gained through the platform in their daily teaching. In school, Master Teachers utilise various PMM features to enhance their teaching competencies and classroom activities.

For example, self-competence can be improved using the PMM application's self-training feature. The self-training feature contains training materials teachers can use to improve their competence, accessed anywhere and anytime (Marzelni *et al.*, 2023). This feature also includes materials related to the implementation of the independent curriculum. Using the self-training feature, teachers can learn about materials supporting the Merdeka curriculum learning. This menu provides various materials for teachers with flexible time and can be accessed anywhere. Apart from teachers conducting independent training, teachers can also take real action. Real action is the final activity in completing one independent training topic in the independent teaching application. This fundamental action is the practice of the results of the teacher learning the topic, which is then practised and realised.

The other menu is the inspiration feature designed to inspire teachers. This menu contains inspirational videos created by the Ministry of Education, Culture and Research and experts that can be used as teacher references (Ministry of Education, Culture and Research, 2023). This feature can help teachers find new and innovative ideas from other teachers in Indonesia to design more effective and engaging learning. Ideas here can be ideas related to learning media or even learning methods.

The next feature is e-performance management, which measures teachers' performance. Performance management is a tool that makes it easier for teachers to determine performance targets that are more contextual to the needs of the education unit and teacher career development to improve the quality of student learning (MoEC Ristek, 2024). Teachers use this feature to determine their performance and the points they get.

The other feature that might be the main feature of the PMM is the teaching tools feature, which contains various teaching materials that support learning activities, such as teaching materials, modules, and textbooks (Kemendikbud Ristek, 2023). This feature supports the implementation of the Merdeka curriculum. Teachers use this feature to learn to prepare learning modules based on the Merdeka curriculum and to see the inspiration for teaching tools from other teachers.

The following feature in the PMM is an assessment menu that helps the teachers improve their understanding and competence in assessment. In this regard, the student assessment feature helps analyse students' learning needs. Student assessment is a feature that can help teachers evaluate students' literacy and numeracy skills so that they can apply developmentally appropriate learning (Defa *et al.*, 2023). This feature assists teachers in analysing students' learning needs. The assessment feature helps teachers to analyse students' learning needs more accurately and efficiently. Through this assessment feature, teachers can identify each student's strengths and weaknesses and identify each student's academic performance, skills, and development.

In using the PMM, this study found that Guru Penggerak utilises several digital platforms to support the independent learning process of the Merdeka Mengajar (PMM) Platform. One of the ways this is done is by using platforms such as Youtube and Google as a reference source and tools. The teachers explained that they often look for video tutorials or learning materials on Youtube to understand better what they are learning or teaching. In addition, Google is used to find additional information, titles, and other relevant teaching materials. Utilising these two platforms is one of the solutions when teachers have difficulties understanding the PMM.

In addition to utilising digital media such as YouTube and Google, teachers also participate in the learning community at PMM. Teachers explained that the learning community at PMM provides various activities that are very helpful in their professional development process. One of the activities that is often utilised is webinars. Teachers gain new insights and perhaps even solutions to their challenges through these webinars. This learning community is also a place for teachers to work together, discuss, and provide mutual support that can enrich their competence in implementing the understanding of PMM in their respective schools.

C. Evaluation of the Outcome aspect

From this stage is the effect of the learning experience (observation); in this case, an example is teacher performance and performance improvement (Tayibnapis, 2000: 19; Ananda & Rafida, 2017). Evaluation measures several things, including the results obtained from the utilisation process, namely how it affects teacher performance and influences learning. Some of the effects of PMM utilisation on teachers are explained below.

First, the Merdeka Mengajar (PMM) platform has provided significant impetus for teachers to improve their pedagogical competence, which can be seen in the fact that teachers are more active in creating lessons, more especially in the school of this study, as has been shown by the majority of the informants of this study. With the resources and features provided by PMM, teachers now have wider access to learning and seek inspiration for innovative and interactive learning. This makes it easier for teachers to design engaging lessons and encourages teachers to continue to innovate and adapt to student's learning needs and interests.

Second, the Merdeka Mengajar platform helps teachers improve their understanding of the independent curriculum by providing various features and materials based on the independent curriculum. The Merdeka Mengajar platform has a variety of training and inspiration materials for teachers to provide opportunities for teachers to learn from each other, share experiences, and develop a better understanding of the implementation of the independent curriculum in their classrooms.

Third, the Merdeka Mengajar (PMM) platform has changed the teacher's paradigm in organising learning to favour students and consider their learning needs. Through PMM, teachers receive various training materials that encourage implementing student-centred learning, such as differentiated learning. The PMM materials encourage teachers to develop strategies that demand active involvement in the learning process, thus enabling students to become critical and creative independent learners.

Fourth, the Merdeka Mengajar platform also encourages collaboration between teachers, which is seen through various activities such as completing training topics, working on concrete actions, and managing performance. In completing topics, teachers can share with fellow teachers regarding the material studied and share related to the implementation of learning practices based on the training topics that have been followed. In performance management itself, there are times when teachers work together to conduct observation activities with peers so that teachers can provide input and suggestions that build each other's teaching and learning activities. Observations help teachers know what to improve and what strengths each has, allowing teachers to develop together.

In addition to its influence on teachers, the Merdeka Mengajar (PMM) platform also impacts learning. PMM helps teachers improve the quality of learning by providing a variety of valuable materials, allowing them to enrich the learning methods and media used in the classroom and gain inspiration and knowledge related to assessment. As a result, the learning process becomes more effective and oriented to student needs, fostering more excellent student activity and involvement. Moreover, PMM plays an important role in helping teachers implement the Merdeka Curriculum by facilitating their understanding and application of the curriculum through

various available resources and materials.

According to teachers, independent teaching platforms also impact student learning outcomes. The materials provided by PMM help teachers understand and implement the independent curriculum better, thus assisting teachers in designing lessons that better suit students. Their curriculum-based learning pays close attention to the individual needs of students. With methods that focus more on students' needs, teachers think that improved learning outcomes can also occur because students are more motivated and have the opportunity to learn in their learning style.

CONCLUSION

In conclusion, the research on utilising the Merdeka Mengajar (PMM) platform by Guru Penggerak reveals several key findings. In terms of planning (antecedents), PMM has been used by Guru Penggerak for nearly two years, even before they officially became part of the program. The teachers are already familiar with PMM, and the socialisation team plays a crucial role in supporting the PMM process and aiding teachers in their learning. Regarding implementation (transactions), Guru Penggerak has gradually applied the knowledge gained through PMM to enhance classroom learning, utilising self-training, inspiration, performance management, teaching tools, and student assessments. Finally, regarding outcomes, using PMM has led to notable changes, particularly in fostering creativity, improving understanding of the Merdeka Curriculum, and positively impacting the learning process. It is suggested that future research should do—at least—qualitative inquiry that could critically analyse the complexities of the PMM acceptance by teachers at the schools.

ACKNOWLEDGMENT

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