THE IMPACTS OF REAL ACTION FEATURES IN THE MERDEKA MENGAJAR PLATFORM (PMM): MATHEMATICS TEACHER'S PERSPECTIVE

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Received September 20, 2023; Revised November 15, 2023; Accepted November 26, 2023

Abstract:
This research is a qualitative study that aims to describe the impact of using the real action feature on the Merdeka Mengajar (PMM) platform from the perspective of mathematics teachers. This research was conducted from August 2023 to September 2023. This research uses data obtained from documents or real action information from 22 mathematics teachers from West Sulawesi and South Sulawesi. Data are obtained from descriptions, reflections, and documents that can be accessed on the Merdeka Mengajar platform, especially in the resource person section in the community feature. The mathematics teachers referred to and selected in this study are teachers who are resource persons for the Merdeka curriculum because they are among the teachers who receive many benefits from using the real action feature in PMM. The data analysis used refers to three steps, namely data condensation, data display, and conclusion making. Based on the research results obtained, the real action feature on the Merdeka Mengajar platform has many positive impacts on mathematics teachers, students, and schools. These impacts include improving teacher competence, making teachers visionary person, making teachers accustomed to reflecting, improving the condition of education units, overcoming misconceptions, improving the quality of teacher learning tools, strengthening the relationship between teachers and students, having a positive impact on students, and deepening or adding new knowledge.

Keywords: Real Action, Merdeka Mengajar, Impacts, Mathematics Teachers

DAMPAK AKSI NYATA DALAM PLATFORM MERDEKA MENG AJAR (PMM): PERSPEKTIF GURU MATEMATIKA

Abstrak:
Penelitian ini merupakan penelitian kualitatif yang bertujuan untuk mendeskripsikan dampak dari penggunaan fitur aksi nyata di platform Merdeka Mengajar (PMM) dari perspektif guru matematika. Penelitian ini dilaksanakan sejak bulan Agustus 2023 sampai bulan September 2023. Penelitian ini menggunakan data yang diperoleh dari
dokumen atau informasi aksi nyata dari 22 guru matematika yang berasal dari Sulawesi Barat dan Sulawesi Selatan. Data diperoleh dari deskripsi, refleksi, dan dokumen yang dapat diakses di platform Merdeka Mengajar, khususnya pada bagian Narasumber di fitur komunitas. Guru matematika yang dimaksud dan dipilih pada penelitian ini adalah guru yang menjadi narasumber kurikulum Merdeka dikarenakan merekalah yang termasuk guru yang menerima banyak manfaat dari pemanfaatan fitur aksi nyata di PMM. Analisis data yang digunakan mengacu pada tiga langkah yaitu kondensasi data, tampilan data, dan pengambilan kesimpulan. Berdasarkan hasil penelitian yang diperoleh, fitur aksi nyata yang ada di platform Merdeka Mengajar memiliki banyak dampak positif terhadap guru matematika, siswa, maupun sekolahnya. Dampak tersebut di antaranya adalah meningkatkan kompetensi guru, membuat guru menjadi pribadi yang visioner, membuat guru untuk terbiasa melakukan refleksi, memperbaiki kondisi satuan Pendidikan, mengatasi miskonsepsi, meningkatkan kualitas perangkat pembelajaran guru, mempererat hubungan antara guru dan siswa, berdampak positif terhadap siswa, dan memperdalam atau menambah pengetahuan baru.

Kata Kunci: Aksi Nyata, Merdeka Mengajar, Dampak, Guru Matematika


INTRODUCTION

Mathematics is one of the sciences which can be applied in various sectors. Mathematics can also teach us many things from critical thinking to systematic thinking. Mathematics can help students develop the skills needed in their lives, including in their future careers (Maass & Engeln, 2019). Nevertheless, there are some concerns related to the learning of mathematics. Many students in Indonesia consider mathematics to be a very complicated course and they reveal that studying mathematics is often boring due to the lack of teacher innovation in providing high-quality and exciting learning (Enny & Sihotang, 2021). Hence, the teaching practice of mathematics teachers is two of the areas that need attention.

Teachers are one of the cornerstones of education. Teachers are responsible for preparing students to face various increasingly large and complex challenges in this day and age (Mamoh & Bete, 2019). In this case, teachers have a role in providing quality education and learning to students (El-ahwal, 2020; Fadhliyah, Mirizon, & Petrus, 2020; Fatmawati & Utama, 2023;
Konig, Blomeke, Jentsch, Schlesinger, Nee-Nehls, Musekamp, & Kaiser, 2021; Nelly, Situmorang, R., & Iriani, 2022; Suryawati, Harfal, & Syafrinal, 2021). This is supported by research by Sheveleva, Mahotin, Lesin, and Curteva (2021) which showed that from her survey of 600 teachers, professionalism is one of the most significant factors affecting the quality of education.

Mathematics teachers encounter a variety of challenges in their teaching and learning. They are dealing with the need to continuously adapt to the ever-changing standards and expectations for learning mathematics today (Hollebrands & Lee, 2020). These shifts are even more significant as the covid-19 pandemic sweeps across the globe and education is one of the sectors affected. Teachers are required to adapt by transitioning to online activities, including teaching (Daniel, 2020; Ikram & Rosidah, 2023). Another issue that also arose was the lack of pedagogic competence and professionalism (Utami, Atmojo, & Saputri, 2021). There is also the issue of teachers often having limited resources to support their professional development (Hollebrands & Lee, 2020).

One part of developing teacher professionalism is self-development. Self-development is one of the tasks that teachers must do (Safruddin, Suaedi, & Ilyas, 2020). Self-development is a teacher task carried out intending to enhance the quality of education and learning (Ambarwati, 2019; Jawahir & Yusuf, 2021; Kartomo & Slameto, 2016; Nuryanti, Abdullah, & Murniati, 2022; Sennen, 2020). Self-development is also one of the work productivity indicators that can help teachers as agents of change in the world of education (Andriani, Hidayati, Abdullah, Rosmala, & Supriyono, 2022; Lestari, Hendarman, & Hidayat, 2022). This self-development can be done in various methods, namely by attending training, seminars, workshops, courses, and so forth (Jawahir & Yusuf, 2021; Kartomo & Slameto, 2016).

During the pandemic, various digital platforms have appeared to support teachers' self-development, with more and more teachers turning to online platforms that provide self-development activities (Hollebrands & Lee, 2020). These platforms have an impact on teachers' teaching quality as teachers use various resources to plan and develop their competencies and learning (Lei & Medwell, 2021; Pepin, Xu, Trouche, & Wang, 2017).

The government during the pandemic has not stayed silent and has introduced several platforms that can help teachers' self-development, including the Merdeka Mengajar (formerly Guru Berbagi) platform (figure 1 and figure 2). This platform can facilitate teachers, government, and education
experts to collaborate and share their ideas and innovations (Jawahir & Yusuf, 2021). The Merdeka Mengajar (PMM) platform can assist teachers in planning and implementing innovative learning (Setyawan & Syamsuryawati, 2023). PMM was launched as an effort to enhance teacher professionalism (Putu, Arnyana, Dantes, & Wirawan, 2023). In conclusion, PMM is a very beneficial platform for teachers.

One of the most helpful features of PMM is the real action feature. This feature comes with self-training where teachers are required to apply or implement what they have learned. This feature is certainly very helpful for teachers, including mathematics teachers, because they not only receive the content of the self-training provided but also directly implement what they have learned. In real action, other teachers can also provide feedback to improve the teacher's teaching practice.

Of the many benefits and impacts that PMM can offer, including its real action features, information or research related to PMM is still lacking (Jawahir & Yusuf, 2021). The research by Jawahir and Yusuf (2021) discusses PMM and Guru Belajar and how they respond to them. However, they did not discuss in detail the features, especially the benefits obtained from the features.

Another study by Budiarti (2022) also examined PMM and focused on discussing the responses of mathematics teachers. Budiarti also mentioned the features contained in it and their benefits but did not discuss in detail the Real Action feature. This feature is very useful because it is one of the proofs that
teachers have understood and applied what they have learned in PMM. By knowing what benefits have been obtained from this feature, teachers can be more motivated to maximize PMM to develop their competencies. Therefore, more detailed information is needed regarding what benefits have been obtained by mathematics teachers from this feature.

The need for research related to PMM is not only based on the lack of research that discusses it specifically and more deeply about the platform. The need for research related to the platform is also based on its relationship with the currently implemented curriculum (Merdeka Curriculum) and research based on mathematics education. The Merdeka Curriculum can provide freedom for schools to develop and design a mathematics curriculum that suits student needs and is oriented towards the use and application of mathematics in everyday life (Daimah & Suparni, 2023). The Merdeka Mengajar platform can facilitate mathematics teachers to implement the Merdeka Curriculum more flexibly and responsively to student and local needs. Teachers can use findings from mathematics education-based research as a reference and integrate them into their lesson designs to create more relevant and contextualized learning experiences. They can then share these results on the PMM platform as a reference for other mathematics teachers in designing their lessons. Conversely, mathematics education-based research can use the data available on the Merdeka Mengajar Platform to gain in-depth insights into the effectiveness of the curriculum, teaching strategies, and the effectiveness of the features offered, including real action features.

Another problem that arises is the lack of use of PMM by teachers. As of September 11 on gurubelajardanberbagi.kemdikbud.go.id, of the total 1,406,085 teacher users, there were only 671,644 and 14,082 posts related to lesson plans and articles. In addition, there are only 1439 posts related to videos and real actions taken.

In addition to the previously mentioned problems, the topic related to the use of technology by teachers in mathematics learning is also an important topic recommendation put forward by Clark-Wilson, Robutti, and Thomas (2020). Clark-Wilson, Robutti, and Thomas (2020) suggested that teachers often consider that the self-development they do is not relevant to their experience in the classroom. This is of course very related to the topic to be investigated, namely the impacts of the real action feature that requires teachers to implement their learning outcomes in PMM. Therefore, information on the benefits obtained from this real action feature is still needed.
Based on the previously mentioned problems, the researcher considers it important to investigate the perspective of mathematics teachers regarding the impact of using the real action feature on the Merdeka Mengajar platform.

**METHODS**

This study is a descriptive qualitative research that aims to describe the impact of utilizing the real action feature in PMM from the perspective of mathematics teachers. This research was conducted from August 2023 to September 2023.

The data sources of this study were obtained from the documents of 22 mathematics teachers. Documents are one category of data sources in the form of public or private records that provide information about a participant (Creswell, 2019). Documents in this study are public records available on the Internet in the form of reflections and descriptions of real actions taken by mathematics teachers. This information is available on the Merdeka Mengajar Platform application and can be obtained through the resource or speakers feature in the Community section. The mathematics teacher referred to in this study is a mathematics teacher who has become a speaker on the Merdeka Mengajar Platform (PMM). This selection was made because they are one of the groups of mathematics teachers who certainly feel a lot of impact and benefits from the real actions that have been taken. Mathematics teachers whose descriptions and reflections on real actions are discussed in this study are mathematics teachers from all over South Sulawesi and West Sulawesi. Using the filter of subject matter resource persons by region or location, 22 mathematics teachers who have become resource persons in PMM were found whose real actions could be accessed.

The data analysis used in this study followed three main steps: data condensation, data display or presentation, and decision-making (Miles, Huberman, & Saldana, 2020). In data condensation, the researcher filtered the data by selecting which data should be the main focus to be re-examined. However, the researcher in this case did not dispose of or delete data that was not the main focus. Researchers keep the data for comparison purposes at a later date because researchers may reuse it when the temporary conclusions obtained are insufficient. Researchers in this step organized and categorized the responses given by mathematics teachers based on what benefits or impacts were obtained from the real action features in PMM. In Data Presentation or Display, researchers present data in the form of tables, or
images to compare the descriptions or reflections given by the mathematics teachers. Based on the results of the comparison, the researcher then made conclusions. The conclusions obtained may be temporary. In this case, the researcher will re-examine the data that is not the main focus or consider collecting more data.

In this study, data validity was achieved using triangulation. Triangulation is a method used to validate research findings (Creswell, 2019). The triangulation used is data triangulation by comparing documents, descriptions, and reflections from different mathematics teachers. By comparing data from several respondents, more credible data can be obtained.

RESULTS AND DISCUSSION

Based on the results of the analysis of document data in the form of descriptions, proof of work, and reflections on the real action features of PMM, the following impacts or benefits were obtained.

Table 1. Mathematics Teachers' Response to the Impacts of PMM's Real Action Feature

<table>
<thead>
<tr>
<th>No.</th>
<th>Impacts</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enhance teachers’ competence</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>Making teachers into visionary individuals</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Getting teachers to get used to reflecting</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>Improving the condition of the education unit</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>Solve misconception</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>Improve the quality of teachers’ teaching tools</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Strengthen the relationship between teachers and students</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Positive impact on students</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>Deepen or add new knowledge</td>
<td>22</td>
</tr>
</tbody>
</table>

Table 1 shows the various impacts felt by the mathematics teachers after utilizing the real action feature of the independent training they attended. The most common benefits perceived by the teachers were improving teacher competence and getting teachers to get used to reflecting. These impacts were mentioned by all teachers. There were also school-related benefits in the form of improvements to the condition of the education unit as seen in the concrete actions taken by 11 mathematics teachers.
1. Enhance teachers’ competence

Teachers, including mathematics teachers, in teaching need to master four competencies, namely personality competence, social competence, professional competence, and pedagogical competence. The competencies possessed by teachers are the key to success in achieving school goals (Putri, Sulastri, Rifma, & Adi, 2022). Therefore, teachers should train in these four competencies.

In the data available at PMM, it appears that all 22 mathematics teachers benefited in terms of improving their competencies as teachers. These competencies include the four competencies described earlier, namely personality competence, social competence, professional competence, and pedagogical competence.

The first competency is personality competence. This competency is a personal skill that reflects a steady, stable, mature, wise, and authoritative person, a role model for students, and a noble character (Rahmatunisa, Fahri, & Nawawi, 2022; Solong & Husin, 2020). The traits and characteristics of teachers in displaying their personality competence in the learning process include acting by the norms, having consistency in action, having a work ethic as a teacher, showing openness in thinking and acting, having authority and exemplary behavior (Rahmatunisa, Fahri, & Nawawi, 2022; Sari & Yulia, 2023).

The development of teacher personality competence can be seen in several real actions taken by teachers. First, there is P5 who stated that after taking real action related to lesson planning, P5 became more open to various learning methods that can be applied and not limited to the classroom. This openness is also shown by P4 where they together with the students formulate the rules and learning contracts that apply in the classroom so that the results obtained are the fruit of thought by all parties. There is also a reflection done by P6 after implementing real action in the form of In-House Training where the teacher learns or practices in dealing with differences of opinion from his peers.

The next competency is social competence. Social competence is the ability of a teacher to communicate and interact politely and effectively, be it verbally, in writing, and/or gestures with all elements, both within the school environment such as students, fellow teachers, coworkers, principals, and so on, as well as outside the school such as parents or guardians of students and the surrounding community (Hana, Gayatri, & Robbani, 2021; Sagita, Ikhwan,
The social competence of an educator is the basic capital for educators in carrying out their duties as teachers professionally (Yulianto, Kuntari, & Sarumpaet, 2022).

Social competence is also one of the competencies that developed after the mathematics teachers utilized the real action feature in PMM. This can be seen from the real actions of some teachers who carry out socialization, workshops, exposure, and training. This can be seen in the real action carried out by P2, namely in the form of socialization of the operational curriculum of the Education unit. In this socialization, P2 did it through a meeting forum with parents, students, supervisors, committees, principals, and teachers. Of course, this can train teachers to communicate and interact effectively with various elements, both within the school environment and outside the school such as parents.

Apart from P2, many teachers also presented the material. One of them is P17 which can be seen in figure 3 below.

![Figure 3. Merdeka Curriculum Implementation Workshop by P17.](image)

At the workshop, P17 acted as one of the presenters, and in her reflection, P17 revealed that she learned how to communicate with her fellow teachers.

The third competency is pedagogical competence. This competency is the teacher's ability to manage students' learning which at least includes understanding educational insights or foundations, understanding the characteristics and needs of students, developing curriculum or syllabus, designing learning, implementing educational and dialogical learning,
utilizing learning technology, evaluating learning outcomes and developing students to actualize their various potentials (Dego, Santie, Deehop, & Kerebungu, 2019; Nainggolan, Situmorang, Anggreni, Supiani, & Sitompul, 2023; Perni, 2019; Sulaki, Hamdani, & Noor, 2019). Pedagogical competence also includes utilizing the results of assessment and evaluation for the benefit of learning, and conducting reflection actions to improve learning quality (Balulu, Masrifah, & Eki, 2021).

This pedagogical competency is one of the most developed competencies after the mathematics teachers utilize the real action feature in PMM. More details, related to the development of pedagogical competence, can be seen in table 2 below related to some of the real actions and benefits obtained.

Table 2. Response of Several Mathematics Teachers on the Benefits of PMM's Real Action Feature on Pedagogical Competence Development

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Real Action</th>
<th>Benefits Obtained</th>
</tr>
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<tbody>
<tr>
<td>P1</td>
<td>Develop a flow of learning objectives (ATP) and learning objectives (TP) for mathematics subjects</td>
<td>Train the ability to design learning (formulate ATP and TP) by considering student characteristics and school-carrying capacity</td>
</tr>
<tr>
<td>P2</td>
<td>Develop prompting questions</td>
<td>Train skills in encouraging students to explore and argue according to the results of their thoughts and experiences. This is following one of the pedagogical competencies, namely the ability to carry out learning.</td>
</tr>
<tr>
<td>P8</td>
<td>Colors of Math: Summative assessment on two-variable linear inequality system material by using technology</td>
<td>Understand and can develop summative assessments by utilizing technology which is following two abilities included in pedagogical competence, namely related to the evaluation of learning outcomes and the use of technology in learning.</td>
</tr>
<tr>
<td>P11</td>
<td>Cognitive diagnostic assessment</td>
<td>Design learning based on the results of cognitive diagnostic assessment. This is following the ability to utilize the results of assessment and evaluation for the benefit of learning.</td>
</tr>
</tbody>
</table>
It can be seen that one of the benefits obtained by mathematics teachers is their help in carrying out assessments. This is in line with research conducted by (Aritonang, Al-Aziz, & Suwandi, 2023) which suggests that PMM has a positive impact in helping teachers to carry out assessments because PMM has a variety of assessments that can be used as references.

The last competency is professional competence. This competency includes a broad and deep mastery of subject matter following the content standards of the education unit program, subjects, and or groups of subjects to be taught as well as the concepts and methods of relevant scientific disciplines, technology, and art (Prastania & Sanoto, 2021; Rahayu, Sutrio, Hikmawati, & Verawati, 2018; Sulaki, Hamdani, & Noor, 2019). This mastery includes knowledge related to the application of concepts in everyday life (Prastania & Sanoto, 2021).

The development of this competency can be found in several concrete actions taken by mathematics teachers. One of them is stated in the real action carried out by P12. The real action taken is in the form of a meaningful understanding of the benefits of straight-line equations in everyday life. P12 stated that he began to instill more meaningful learning by explaining the benefits of learning a mathematical concept in everyday life. This is certainly related to one of the previously mentioned mastery, namely understanding the benefits of scientific concepts in everyday life.

We can see that teacher competence can be developed by utilizing the real actions in PMM. This is in line with several studies that suggest that PMM can improve teacher competencies (Aulia, Murni, & Desyandri, 2023; Defa, Lasmawan, & Suastra, 2023; Marisana, Iskandar, & Kurniawan, 2023; Ramdani, Yuliyanti, Rahmatulloh, & Suratman, 2022; Suryadi & Hidayati, 2023), including mathematics teachers (Budiarti, 2022).

2. Making Teachers Visionary

One of the benefits seen in the real actions taken by mathematics teachers at PMM is that they become visionary individuals. This means that teachers are accustomed to always having a plan or steps related to what will be done next. One example can be found in the reflection done by P1 during the training on why the curriculum needs to change. In the reflection, P1 mentioned a plan to create a community of practitioners to discuss the curriculum more deeply and according to the needs of the school. On the same
topic, P22 made a plan to analyze the needs of teachers and students in implementing curriculum changes.

3. Getting teachers to get used to reflecting
   Another benefit seen in the real actions carried out by mathematics teachers at PMM is that it makes teachers accustomed to reflecting. In the real action carried out by the teachers, they are required to write a reflection on the real action that has been carried out. This reflection is in the form of what benefits have been obtained, the obstacles faced, and the next action plan that will be carried out. With the obligation to make reflections, teachers will get used to reflecting and thinking about the activities they have carried out and how to optimize the results of these activities in the future.
   Reflection activities carried out by teachers are supported by the comment feature on the real actions that have been carried out. The majority of teachers gave positive responses to the real actions that had been carried out. Many teachers were inspired by the real actions taken.

4. Improving the condition of the education unit
   The next benefit obtained is related to the school, namely the improvement of the condition of the education unit. This is shown by one of the real actions carried out by P2, namely the process of reviewing the vision, mission, and objectives of the Education unit. In this concrete action, P2, together with other elements of the school environment, worked together to adjust the vision, mission, and objectives to the conditions of the education unit and the diversity of students. This review also includes consideration of the implementation of school programs that have been implemented based on the adjusted vision, mission, and objectives.

5. Solve misconceptions
   Another benefit obtained by mathematics teachers is the elimination of misconceptions experienced by the teachers. This is stated in the reflection made by P1 on the concrete action of compiling the flow of learning objectives where at first P1 thought that compiling ATP was based on the package book. After carrying out the real action, P1 understood that preparing ATP was adjusted to the needs of students and the carrying capacity of the school. There is also a description provided by P6 on the real action of the "Free School from
Sexual Violence seminar where teachers understand that sexual violence is of many kinds and types.

6. Improving the quality of teacher-learning tools

One of the real actions carried out by P2 is academic supervision of teacher learning tools. P2 revealed that there were still many teachers who felt that their teaching tools were in favor of students even though the differentiation strategy had not appeared on their devices. Therefore, P2 conducts coaching to improve the quality of learning tools in her school.

7. Strengthens the relationship between teachers and students

One of the benefits of concrete actions taken by teachers is to strengthen the relationship between teachers and students. This is shown in making rules and learning contracts in the classroom carried out by P4 and P6 in the real action-themed Positive Discipline. In the real action carried out, the teacher collaborates with students to make all the rules and learning contracts that will be applied in the future. This makes students more excited and enthusiastic and can eliminate the barrier between teachers and students in solving problems. The involvement of students will make them feel more valued and cared for so that the relationship between teachers and students will be better.

8. Positive impact on students

Many of the impacts reported by teachers are positive impacts on students. The first positive impact is related to students’ learning comfort. In the real action of making class rules carried out by P4, based on P4’s reflection, students’ learning comfort began to increase. This is due to the involvement of students in the process of making rules that will be applied in the classroom later. In addition, another impact obtained from the real action carried out by P4 is that students’ awareness has also begun to increase, which is shown by students who know their mistakes without being reprimanded and can find their solutions. Students’ comfort in learning is also shown in the real action carried out by P8 in the form of a summative assessment that he titled Colors of Math. The assessment utilizes technology so that students are not tense, more active, and enjoy participating in the assessment. The classroom atmosphere was also relaxed and not tense during the assessment.

The next positive impact was found in the reflection done by P9. The real action he carried out was entitled Angel of Kindness which aims to train
students how to accept diversity. Students were asked to write the strengths of their friends. After the real action was carried out, students began to be more motivated to do good and love diversity. According to P9, this is because they realize that what students do is still considered good in the eyes of their friends. Another case with P9's real action is related to the Pancasila student profile. This real action is in the form of integrating the profile into learning where students can show creativity without any burden in solving the problems or math problems given.

Another positive impact found was the increase in student literacy. This was found in P10's concrete action of creating a text-rich physical environment in the classroom with a reading corner. The existence of this facility in the classroom makes students more interested in reading. P10 utilizes the reading corner that has been created by getting students used to reading books in the reading corner for 15 minutes before the lesson starts. This can certainly strengthen students' literacy.

Increased interest in learning was also found in the real actions taken by P21. P21 took concrete action by formulating meaningful understanding in his lesson planning. P21 used sparking questions to provoke discussion between students. According to P21, the use of these questions can generate new questions in the minds of students so that it can captivate their interest in learning the topic.

9. Deepen or add new knowledge

Another impact that arises from the utilization of real action is the deepening of knowledge. This can be seen in the teacher's real action in the form of socialization or exposure to Merdeka curriculum material. The teachers' reflections suggest that they understand more about the implementation of the Merdeka curriculum with real action in the form of socialization and exposure. The findings we obtained are in line with the findings obtained by (Susanti, Fadriati, & Asroa, 2023; Triscova, Rahma, & Nurlillahi, 2022) which suggest that teachers are helped in understanding the implementation of the Merdeka curriculum.

In addition to understanding the Merdeka curriculum, some teachers also mentioned increasing or improving their understanding of a topic. There is P1 who stated that he gained new knowledge that compiling the flow of learning objectives must be completed in one phase. In addition to P1, there is also P2 who said that in the real action of academic supervision of his fellow
teachers' learning tools, he became more aware of the concept of academic supervision and could do it properly and correctly. Another example is P4 who carried out the real action of making learning rules and contracts where P4 understood the concept of class rules and the technicalities of making them. In addition, there was also P13 who mentioned that the new thing he learned was that curriculum changes occur not because of changes in the Minister but indeed because of changes in the times that require teaching methods to be changed according to student conditions.

CONCLUSION

Based on the research results obtained, the real action feature on the Merdeka Mengajar platform has many positive impacts on mathematics teachers, students, and schools. These impacts include improving teacher competence, making teachers visionary person, making teachers accustomed to reflecting, improving the conditions of the education unit, overcoming misconceptions, improving the quality of teacher learning tools, strengthening the relationship between teachers and students, having a positive impact on students, and deepening or adding new knowledge.

The positive impacts stated are obtained from different real actions. Therefore, teachers are advised not to take just one concrete action, but to perform many.

This study only involved descriptions, reflections, and documents from mathematics teachers in West Sulawesi and South Sulawesi. Researchers interested in the same topic can conduct research by expanding their reach to other regions or may be able to discuss documents or information from teachers of other subjects. Other researchers may also be interested in discussing other features of the Merdeka Mengajar platform such as principal selection, community, assessment, or even inspirational videos.

ACKNOWLEDGMENT

We want to thank the Directorate General of Higher Education, Research and Technology of the Ministry of Education, Culture, Research and Technology of Indonesia for their assistance so that the authors could carry out this research smoothly.
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