

## TEACHER PROFESSIONAL COMPETENCY AND UTILIZATION OF INDEPENDENT TEACHING PLATFORM TO IMPROVE STUDENT-CENTERED LEARNING

**Nurjanah**

Universitas Muhammadiyah Metro  
[nurjanah.092019@gmail.com](mailto:nurjanah.092019@gmail.com)

**Sutrisni Andayani**

Universitas Muhammadiyah Metro  
[trisnimath.andy@yahoo.com](mailto:trisnimath.andy@yahoo.com)

**Marzuki Noor**

Universitas Muhammadiyah Metro  
[marzuki4metro2015@gmail.com](mailto:marzuki4metro2015@gmail.com)

**Dedy Subandowo**

Pázmány Péter Catholic University, Hungary  
[subandowo.dedy@hallgato.ppke.hu](mailto:subandowo.dedy@hallgato.ppke.hu)

### Abstract

Competency is the ability, skill, state of authority, or fulfilling the requirements according to legal provisions for a teacher to carry out his obligations responsibly and appropriately. The aim of this research is to obtain comprehensive and in-depth information about teachers' professional competence to improve student-centred learning in detail in developing teacher professionalism by utilizing the independent teaching Platform. This research uses a qualitative descriptive approach to describe and understand phenomena based on perspectives and experiences research subjects, namely teachers at SMP Negeri 13 Krui, Pesisir Barat Regency, Lampung Province, who have implemented the Independent Curriculum with the Changed Independent Category. The research results show that teacher competency can be improved by using an independent teaching platform that supports teachers in creating optimal student-centered learning in accordance with the principles of implementing the Independent Curriculum. Conclusion Teacher professional competence is a very influential factor in the success of student-centered learning. The use of the Merdeka Mengajar Platform provides opportunities for teachers to improve their professional competence in various aspects that support student-centered learning. Student-centered learning is an approach that emphasizes the active involvement of students in the learning proses, where the teachers functions as a facilitator and companion.

**Keywords:** Professional competence, independent teaching platform, student centered learning

### INTRODUCTION

The flow of modernization and globalization has an impact on the development of the era from manual to the digital era which makes communication seem to have no boundaries of space and time. In this modern era, there are many technological developments that cannot be avoided, the lives of teenagers in the past are very

different from the lives of teenagers today. Learning in today's era is very different from learning in the past. At this time, digital technology has entered all aspects of life including education. The rapid development of technology and information in the current era of globalization cannot be avoided anymore its influence on the world of education.

National Education System Law No. 20 of 2003 Article 3 states that "the goal of national education is to develop the potential of students to become human beings who believe and are devoted to God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens". This means that national education in Indonesia is directed at forming people who have the skills needed to maintain the culture and identity of the nation amidst the onslaught of various cultures and civilizations of other nations in the era of globalization (BNSP, 2010).

Global demands require the world of education to always and continuously adjust technological developments to efforts to improve the quality of education, especially adjusting its use for the world of education, especially in the learning process. Digital technology can be beneficial for changes in human behavior including education and students, in searching, collecting, documenting, processing and transferring teaching materials according to needs. Mixing teaching materials in the learning process with digital technology can be more interesting and provide learning motivation, because mixing teaching materials is not monotonous in text, but can be mixed more creatively and interestingly because it combines images, audio, video and animation, so that it can influence changes in learning behavior to develop better.

In the rapid development of technology, accompanied by the emergence of equipment and applications that are very easy to learn and use as a medium for improving teacher competence and learning media. Technological equipment that is already very familiar among the public is gadgets that have many application features that are easy to use in searching for learning information, in gadgets there are already many social media applications that can be used in searching for learning materials and are very easy to operate. With the ease of accessing technological developments through the internet network, knowledge is very easy to access and disseminate, even with the help of this technology, educators and students are able to implement learning without carrying out face-to-face or using online applications. This indicates that the role of technology is very significant in learning that adapts to the times.

Ministry of Education, Culture, Research and Technology (2021) The Merdeka Mengajar (PMM) Platform provides equal opportunities for educators to learn and improve their competencies whenever and wherever they are. The "Learning" feature in the Merdeka Mengajar (PMM) Platform provides independent training facilities for educators and education personnel to obtain various quality training materials and study them independently. Teachers can monitor and provide individual feedback to students. Utilization of the Merdeka Mengajar (PMM) Platform can help teachers improve their competencies in terms of transferring knowledge to students, helping to overcome challenges that may arise during the implementation of the Merdeka curriculum, improving the quality of education,

increasing student engagement and increasing student activity in online learning modules.

Competence encompasses the knowledge, skills, and abilities that individuals possess, which are essential for effective performance in a variety of professional contexts. The distinction between “competence” and “competence” is significant; competence refers to the predetermined requirements for knowledge and skills necessary for success in a particular field, while competence reflects the qualitative application of these skills in practice, often influenced by personal attributes and situational factors (Nesterenko, 2024) (Wen & Korsun, 2023).

The competence of a teacher is very important in forming an intelligent and moral generation. Allah elevates the status of those who believe and are knowledgeable, indicating that knowledge is the main factor in achieving glory. A teacher must have a deep understanding in the field being taught, and continue to develop themselves in order to be able to provide true and beneficial knowledge to students. In addition, a teacher must also have the skills to transfer knowledge with appropriate methods, so that students can understand and practice it in their daily lives. With strong competence, a teacher is not only respected in the world, but also gets a high position in the sight of Allah SWT according to His word in QS. Al-Mujadilah (58:11):

يَا أَيُّهَا الَّذِينَ آمَنُوا إِذَا قِيلَ لَكُمْ تَفَسَّحُوا فِي الْمَجَالِسِ فَافْسَحُوا يَفْسَحِ اللَّهُ لَكُمْ وَإِذَا قِيلَ انشُرُوا فَانْشُرُوا يَرْفَعِ اللَّهُ  
الَّذِينَ آمَنُوا مِنْكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ وَاللَّهُ بِمَا تَعْمَلُونَ خَبِيرٌ

Meaning: *O you who believe, when it is said to you "Make room in the assemblies," make room, surely Allah will make room for you. When it is said, "Stand up," (you) stand up. Allah will surely elevate those who believe among you and those who have been given knowledge to several degrees. Allah is most careful about what you do (QS. Al-Mujadilah (58:11)*

Professional teachers are required to have various competencies that support success in the teaching and learning process. According to (Channa et al., 2024) One of the main aspects that must be possessed is a deep mastery of teaching materials. This is important so that teachers are able to deliver material systematically, clearly, and relevant to students' needs, making it easier for them to understand each concept taught. In addition, according to (Sari et al., 2024), teachers must also have superior pedagogical skills, namely skills in designing and implementing learning with a variety of approaches. This approach is designed to create an effective, interesting learning experience that is able to motivate students to develop their potential optimally.

21st century learning emphasizes meaningful and student-centered learning. "Students learn actively and independently with technology as a means of mastery of learning" (Alhamuddin, 2014), Teachers in the learning process in the classroom are seen as being able to play an important role, especially in helping students to build positive attitudes in learning, arouse curiosity, encourage independence and accuracy of intellectual logic, and create conditions for success in learning. Student-centered learning is a learning model that places students at the center of the learning process (Medriati & Risdianto, 2020). Student-centered learning is a learning approach that places students at the center of the learning process.

This study distinguishes itself from previous research, which has predominantly examined the use of the *Merdeka Mengajar* Platform (PMM) in relation to the *Merdeka* Curriculum and learning innovation, involving both students and teachers. Prior studies have focused on various aspects such as student engagement, teacher readiness, professional competence, digital literacy, and overall curriculum implementation. In contrast, the present study specifically addresses the role of teacher professional competence and the integration of PMM in enhancing Student-Centered Learning (SCL), which prioritizes the active involvement of students in the learning process.

Departing from the importance of teacher professionalism in creating quality education in accordance with the development of the world of education in the application era, teachers can learn more independently to improve their professional competence, this proposal aims to explore professional competence and Utilization of the *Merdeka Mengajar* Platform to improve student-centered learning at SMP Negeri 13 Krui Pekon Biha, Pesisir Selatan District, Pesisir Barat Regency, Lampung Province.

#### **METHODOLOGY**

This study employed a qualitative descriptive approach to explore teachers' professional competence in enhancing student-centered learning through the utilization of the *Merdeka Mengajar* Platform. The purpose was to gain a comprehensive and in-depth understanding of how the platform supports the implementation of the *Merdeka Curriculum* in practice. The research was conducted at SMP Negeri 13 Krui, located in Pesisir Barat Regency, Lampung Province, Indonesia. Participants were selected through purposive sampling, focusing on teachers who had actively implemented the *Merdeka Curriculum* under the Changing Independent Category. This sampling method ensured that the participants possessed the relevant experience and insights required for the study.

Data were collected through semi-structured interviews using prepared questions designed to capture participants' perspectives and experiences. In addition, documentation from the school and references to previous validated studies were used to triangulate the findings and ensure the credibility of the data.

Ethical considerations were strictly observed throughout the research process. Prior to data collection, participants were informed about the purpose and procedures of the study, and informed consent was obtained. Participants were assured of the confidentiality of their responses, and their identities were anonymized in the reporting of the findings. Participation was voluntary, and respondents had the right to withdraw from the study at any point without consequence.

## RESULTS AND DISCUSSION

### A. Teacher Professional Competence and Utilization of the Merdeka Mengajar Platform

This study examined teacher professional competence with a focus on four main indicators, namely mastery of material, teaching skills, use of educational technology, and self-development. The results of the study indicate that the majority of teachers have good mastery of the material according to their field of expertise. A deep understanding of the curriculum and essential concepts in the subjects taught are the main factors in increasing the effectiveness of learning. The change from the 2013 Curriculum to the Merdeka Curriculum at the beginning of the 2023/2024 Academic Year marked an important turning point in the learning system at SMP Negeri 13 Krui. Researchers saw an initiative from the school in forming a teacher competency improvement committee. This strategy has proven effective in encouraging the utilization of the Merdeka Mengajar Platform in a structured manner. Teachers not only access the material independently, but are also scheduled to share good practices with colleagues. This process strengthens the culture of collaborative learning among educators and accelerates understanding of the essence of the Merdeka Curriculum.

Teachers at SMP Negeri 13 Krui had good mastery of the material, which is reflected in their ability to deliver material comprehensively and relevantly to the context of students' lives. Teachers not only conveyed theory, but also linked learning concepts with real experiences, so that learning becomes more meaningful and easy to understand. Teachers at SMP Negeri 13 Krui have shown initiative in developing a curriculum independently that is tailored to the characteristics and needs of students. Professional awareness in managing the learning process reflectively and adaptively has developed quite well, teachers not only act as conveyors of information, but also as active and innovative learning designers, as stated by Wahyudi (2023) that teachers who are able to develop the curriculum contextually can create a more effective and meaningful learning process. Teachers' professional competence includes various important aspects that support the effectiveness and quality of learning, one of which is mastery of teaching materials.

Mastery of the material is the foundation in carrying out the teacher's duties as an educator. Acharya et al. (2024) stated that a deep understanding of the subject matter is the main basis for teacher professional competence because it affects the teacher's ability to convey knowledge accurately and relevantly to students. In addition, teachers are also required to be able to develop and adapt the curriculum so that learning is more contextual and in accordance with student needs. This is reinforced by the findings of Sari et al. (2024), which emphasizes the importance of curriculum adaptation as a strategy in optimally meeting the needs and potential of students.

In the cognitive aspect, the teaching skills of teachers at SMP Negeri 13 Krui were good at accommodating the strengthening of 21st century skills such as critical thinking, collaboration, communication, and creativity. Activities such as debates, presentations, storytelling, and the use of digital technology support the creation of

dynamic learning that is relevant to future challenges. The integration of character values and real-life contexts, especially in subjects such as IPS, PPKn, and arts and culture, further strengthens the meaning of learning received by students.

Teachers of SMP Negeri 13 Krui are able to implement learning differentiation well, namely adjusting teaching strategies based on the level of ability, interests, and learning styles of students. This practice provides space for students to develop according to their potential. Students who have high learning speeds are given additional challenges, while those who have difficulties get assistance and a simpler approach. This reflects the teachers' understanding of the concept of inclusivity in education. Teachers at SMP Negeri 13 Krui have significantly developed teaching skills.

Teaching skills are an important component of teacher professional competence, which includes the ability to choose and apply learning methods and strategies that are appropriate to the needs and characteristics of students (Turner, et al., 2024). According to Matongo and Goronga (2024), these skills greatly determine the effectiveness of the learning process because teachers are responsible for creating a conducive, interesting learning atmosphere and encouraging active student involvement. Teachers are not only required to master the material, but also to be able to manage the learning process flexibly and innovatively, and to adapt pedagogical approaches to developments in the era. In line with research by Matongo and Goronga (2024) and Atikah et al. (2024), which emphasizes the importance of pedagogical and technological innovation in improving the quality of teaching.

The teaching skills demonstrated by teachers of SMP Negeri 13 Krui reflect high professionalism and commitment to creating an effective, inclusive, and meaningful learning process for all students. Today's teaching skills are characterized by the ability to integrate educational technology as part of learning. Atikah et al. (2024) emphasize that the use of technology can enrich students' learning experiences and increase the effectiveness of interactions between teachers and students. Therefore, teachers need to continue to improve technological literacy and develop creative approaches that are able to combine digital elements in learning activities.

The use of educational technology by teachers of SMP Negeri 13 Krui is good. The use of educational technology has shown positive progress. Teachers have actively utilized interactive learning software, educational videos, and e-learning platforms in their teaching activities. The use of these media has been proven to create a more interesting and participatory learning experience, while supporting the active involvement of students in learning. Teachers have utilized digital media and internet-based applications to enrich teaching materials and facilitate independent learning of students, both inside and outside the classroom. The use of technology is needed as a strategy to increase teacher capacity in carrying out learning activities.

The use of technology in education is one of the important indicators in assessing the professional competence of teachers in today's digital era. Technology not only functions as a learning aid, but also as a means to encourage pedagogical innovation, increase efficiency, and expand access to more diverse learning resources. This

finding reinforces the importance of the role of teachers as lifelong learners. According to Atikah et al. (2024), the integration of technology in learning allows for the creation of a learning process that is more interesting, personal, and adaptive to the needs of students. On the other hand, Susanti & Nugroho (2023) emphasize that the success of utilizing educational technology is greatly influenced by the ability and willingness of teachers to continue learning and following the latest developments in educational technology.

However, it was found that there were still challenges faced by some teachers at SMP Negeri 13 Krui, especially related to the mastery and use of technology. Some teachers experienced difficulties due to low digital literacy, lack of motivation to take part in training, or limited supporting facilities. This is in line with the findings of Susanti & Nugroho (2023) which showed that even though infrastructure is available, mastery of technology among teachers is uneven, resulting in less than optimal application of technology in the learning process. This fact shows that institutional support and ongoing training are needed to ensure that all teachers are able to keep up with technological developments and apply them effectively in learning.

In addition, increasing teachers' digital literacy must also be accompanied by pedagogical coaching so that technology is not only used as a complement, but truly becomes part of the transformation of the teaching and learning process. To improve the Utilization of Educational Technology, it can be done through training and inspiration from the Merdeka Mengajar Platform (PMM). Teachers will be increasingly competent in utilizing digital technology as a pedagogical tool. In line with student-centered learning because it provides opportunities for independent learning, accessing materials at any time, and getting feedback quickly.

Self-development is an integral part of teacher professional competence that requires a commitment to lifelong learning. Most teachers at SMP Negeri 13 Krui have demonstrated a commitment to developing themselves professionally. This is demonstrated by active participation in various capacity building activities such as training, seminars, training, and involvement in learning communities both at the school level and externally (Webinars organized by learning communities linked to the Merdeka Mengajar Platform). Teachers realize the importance of continuous capacity building to support the quality of learning and adapt to changes in the curriculum and developments in educational technology. Teachers as agents of change are required to continuously update their knowledge, skills, and professional attitudes in order to adapt to the ever-changing dynamics of education. According to Rahmawati et al. (2023), teacher involvement in self-development activities such as training, seminars, workshops, and learning communities has a positive impact on improving the quality of learning in the classroom. In addition, Prasetyo & Lestari (2024) stated that teachers who are active in self-development tend to have higher innovation and motivation in their teaching practices. However, not all teachers are consistently involved in professional development programs. Some teachers still participate less for reasons such as being busy, lack of motivation, or minimal support from the work environment. This condition is in line with the findings of Prasetyo & Lestari (2024), which stated that teacher involvement in self-development is often influenced by external factors such as workload, training

facilities, and school organizational culture that supports or does not. Therefore, in addition to providing access to self-development activities, there needs to be institutional encouragement and school culture that supports teacher professional growth. Self-development should be part of a structured and sustainable coaching system, not just an additional activity. When teachers have access and strong motivation to continue learning, the quality of learning will increase significantly.

Thus, the results of this study indicate that SMP Negeri 13 Krui has a good foundation in terms of teacher self-development, although it still needs to be optimized through a more strategic and inclusive approach so that all teachers can participate actively and equally in the process of improving their professionalism. Overall, the results of the study which include four main indicators of teacher professional competence, namely understanding the material, teaching skills, use of educational technology, and self-development can be concluded that teachers at SMP Negeri 13 Krui have generally shown a good level of professionalism and commitment to improving the quality of learning. SMP Negeri 13 Krui has been on the right track in developing teacher professionalism. However, there are still several areas that can be improved, especially in the equalization of technology utilization and participation in self-development. Therefore, targeted coaching strategies, ongoing training, and strong institutional support need to be continuously improved so that teacher professional competence can develop optimally and evenly.

## **B. Utilization of the Merdeka Mengajar Platform for Student-Centered Learning**

The change from the 2013 Curriculum to the Merdeka Curriculum at the beginning of the 2023/2024 Academic Year marked an important turning point in the learning system at SMP Negeri 13 Krui. Researchers noted that the Merdeka Mengajar Platform was present as the only primary source for teachers in understanding and implementing this new curriculum, especially because there was no direct assistance from external parties. This shows that teachers are required to be independent learners as well as active collaborators in the school environment. The development of education policies in Indonesia through the implementation of the Merdeka Curriculum has encouraged the need for systematic support for improving teacher competence. One important initiative in supporting this is the Merdeka Mengajar Platform (PMM), a media for independent training, a source of inspiration, and a learning reference.

The use of self-training and feedback features is a gateway for teachers to conduct continuous reflection on their teaching practices. Researchers see that this process changes the role of teachers from merely conveying information to facilitators of learning. Teachers begin to realize the importance of self-evaluation, learning from peers' good practices, and continuous adaptation to the needs of their classes. The independent training feature of PMM is perceived positively, offering teachers opportunities for self-development and improvement of pedagogical practices (Kartono & Johan, 2024). Overall, while PMM facilitates a transformative approach to education, addressing the challenges of digital workload and improving teachers' technological skills remain essential to maximize its potential (Soedjono, 2023),

(Ardiantoro. Et.al 2024). Inspirational videos in PMM have provided a motivational boost for teachers to experiment with new and more participatory learning approaches.

Teachers felt an increase in professional competence and creativity, especially in designing learning that is not only oriented towards academic achievement, but also character building and 21st century skills development. This finding strengthens the view of Muslim et al. (2024), who found a correlation between teacher proficiency in using technology and the effectiveness of PMM utilization in improving teaching competence. Teachers said that PMM had encouraged them to apply a more active, contextual, and student-oriented learning approach. This training not only increased insight but also strengthened teachers' reflective abilities, because each training module was equipped with reflection activities to evaluate their own teaching practices. This is in line with the idea of Ardiantoro et al. (2024), which emphasizes the importance of reflection in continuous professional development.

The Merdeka Mengajar (PMM) platform serves as an important resource for teachers, providing inspiration, references, and support to implement independent curricula in various educational settings. Interactive materials such as videos, simulations, and collaborative projects from the platform are used by teachers to create engaging and participatory learning. Researchers note that this approach has succeeded in increasing active student engagement. In addition, teachers also provide space for students to choose their learning methods, which strengthens the role of students as subjects in the learning process, no longer just objects that receive materials.

Based on the results of interviews with teachers at SMP Negeri 13 Krui, it was found that one of the most impactful features of PMM is the inspirational video feature. The teachers revealed that the inspirational content displayed through good practice videos greatly helped them in developing more creative, relevant, and contextual learning strategies, especially in connecting teaching materials with students' daily lives. This feature provides access to various examples of the implementation of the Independent Curriculum by teachers from all over Indonesia, which can be easily imitated or modified according to the needs of each class. This supports the findings of Kartono & Johan (2024), which stated that independent training in PMM was perceived positively because it provided real opportunities for teachers to reflect and develop pedagogical practices directly.

The ease of access to PMM plays a significant role in building a culture of independent learning among teachers. The facilities provided by this platform provide teachers with the freedom to continue to improve their competencies sustainably and contextually, even in the midst of limited resources or busy teaching schedules. However, to maximize the potential of PMM, institutional support is needed in the form of affirmative policies, provision of internet quotas, and advanced digital training, so that all teachers can access this platform evenly and optimally.

Teachers at SMP Negeri 13 Krui assessed that the ease of access to PMM is one of the main factors that supports digital learning across subjects and accelerates the

process of adapting to the new paradigm of education. This finding is in line with the results of research by Kurnia & Prawira (2024) which shows that the user-friendly design of PMM encourages teachers to be more active, independent, and involved in the self-development process. This ease of access is an important trigger for teachers to explore various training content and inspiration available, as well as increase the frequency of voluntary use of the platform.

Easy access to digital learning resources is one of the key factors in the successful implementation of the Merdeka Curriculum. The Merdeka Mengajar Platform (PMM) is one of the strategic initiatives developed by the Ministry of Education and Culture of the Republic of Indonesia to support teachers in understanding and implementing the Merdeka Curriculum effectively. PMM is designed as an easy-to-use and flexible platform, with features that allow teachers to navigate training materials, inspirational videos, and teaching tools without the need for complex technical training (Kurnia & Prawira, 2024).

The self-development of teachers at SMP Negeri 13 Krui by actively participating in independent training through PMM. The teachers acknowledged that this training was very useful in improving pedagogical and professional competence, especially in terms of understanding the Merdeka Curriculum and its application in the classroom. The training materials provided in PMM are considered relevant to the learning problems faced by teachers, and provide practical solutions that can be directly applied in the teaching process.

The use of the "Teaching Devices" feature on the platform is utilized optimally by teachers to select and adjust learning materials to local conditions and student characteristics. This is in line with the researcher's findings that teachers are starting to shift the paradigm from uniform teaching to relevant, contextual, and personal learning. Teachers are no longer fixated on textbooks, but have the flexibility to design more meaningful learning experiences for students.

The researcher highlighted that the "Student Assessment" feature on the platform plays an important role in encouraging differentiated learning. Teachers are starting to get used to using diagnostic and formative assessment data as a basis for making instructional decisions. This approach creates space for students with diverse learning needs to get learning experiences that are appropriate to their respective ability levels. This is a strong indication that the principle of learner-centered learning is starting to be implemented in real terms.

The Merdeka Mengajar (PMM) Platform is here as an innovative solution to support educational transformation in the Merdeka Curriculum era. The use of PMM has a positive impact on improving teacher professional competence, especially in four main aspects: mastery of material, curriculum adjustment, teaching skills, and utilization of technology and self-development.

Independent teaching platforms have become one of the important breakthroughs in supporting teacher professional development in the digital era. Various studies have shown that such platforms provide access to the latest educational resources, strengthen collaboration between educators, and encourage the adoption of more

innovative and responsive learning approaches to student needs (Supangat et al., 2024; Putri et al., 2024). In the Indonesian context, the Merdeka Mengajar Platform (PMM) is present as a concrete form of independent teaching that supports the implementation of the Merdeka Curriculum. The use of PMM has a real positive impact on improving their professional competence.

One of the most appreciated features is the existence of a feedback system and reflective evaluation that allows teachers to evaluate teaching practices contextually. Teachers considered that the reflection carried out through PMM, especially after completing independent training, was very helpful for them in identifying the strengths and weaknesses of the methods that had been implemented, as well as in developing continuous learning improvements. This finding is in line with Dahnoun's (2023) opinion, which emphasized that the integration of a real-time feedback system into a learning platform can increase interactivity, both in distance and face-to-face learning. This allows teachers to adjust their teaching approaches based on direct feedback from the teaching and learning process, so that learning becomes more adaptive and responsive. Teachers at SMP Negeri 13 Krui also acknowledged that the form of evaluation in PMM is more practical, not only demanding theoretical understanding, but also encouraging real applications in the classroom context. Thus, the Merdeka Mengajar Platform (PMM) not only functions as a training platform, but has developed into a digital learning space that forms a reflective and collaborative culture among teachers.

Through self-teaching features, feedback, and pedagogical inspiration, the Merdeka Mengajar Platform (PMM) becomes a strategic tool to improve the quality of education from within the classroom, by making teachers the main actors of change. Teacher competence in implementing student-centered learning is in a better and more optimal category after being supported by the use of the Merdeka Mengajar Platform. The Merdeka Mengajar Platform (PMM) has made a real contribution in supporting the improvement of teacher professionalism, both in planning, implementing, and reflecting on learning. In order for teacher competence to develop further, ongoing support is needed in the form of intensive training and mentoring in the use of the Merdeka Mengajar Platform, as well as strengthening in the practice of identifying individual student learning needs.

### **C. Student-centered learning**

The student-centered learning (SCL) approach is a main pillar in the transformation of the 21st century education paradigm. In this approach, students are no longer positioned as passive objects in the learning process, but as active subjects who are consciously and responsibly involved in the search, construction, and interpretation of knowledge. Based on the results of research conducted at SMP Negeri 13 Krui, researchers found that this approach has been implemented actively and consistently by teachers in the classroom learning process.

Teachers at SMP Negeri 13 Krui adopt various active learning strategies, including the learning by teaching model, group discussions, project presentations, simulations, and problem-based learning (PBL). These strategies provide space for students to explore ideas, develop arguments, convey views, and solve real problems collaboratively.

The learning by teaching approach specifically gives students the role of “teachers” for their peers. This strategy, as confirmed by the findings of Manalo et al. (2024), not only improves students’ conceptual understanding but also strengthens their communication skills and self-confidence. In addition, this strategy shifts the pattern of classroom interaction from one-way to dialogic, thus encouraging meaningful two-way communication between students and students, as well as between students and teachers.

The results of observations and interviews showed that students became more active and enthusiastic in participating in the learning process. This increase was evident in students’ activeness in asking questions, discussing, giving opinions, and presenting group work results. These activities foster a sense of ownership of the learning process and increase awareness of personal responsibility in achieving academic success.

Teachers confirmed that through this approach, students showed development in their independent learning abilities. They were encouraged to design learning strategies that suited their individual learning styles, take the initiative in accessing learning resources, and evaluate their own learning outcomes. The implementation of SCL at SMP Negeri 13 Krui is also seen in the tendency of teachers to link learning to the context of students’ real lives. Learning activities are designed to reflect social, cultural, and environmental conditions. This not only increases the relevance of teaching materials, but also encourages students to interpret knowledge more deeply.

For example, in the subject of Social Sciences, teachers direct students to identify social problems in the surrounding environment and design solutions together. This activity not only fosters social awareness, but also develops students’ critical and reflective thinking skills in responding to the social dynamics around them. Along with the implementation of the student-centered learning approach, there has also been a transformation in the role of teachers. Teachers are no longer the center of information, but act as facilitators who provide space for exploration, guide the critical thinking process, and provide constructive and personal feedback.

Teachers provide adaptive scaffolding, which is support given according to the needs and developmental level of students. For example, in the discussion process, teachers provide provocative questions, direct the flow of thinking, and help students to construct logical and data-based arguments. This transformation shows a paradigm shift from traditional learning to more participatory and humanistic learning. The implementation of student-centered learning at SMP Negeri 13 Krui is very much in line with the direction and spirit of the Merdeka Curriculum. This curriculum emphasizes differentiated learning, independent learning, and strengthening the Pancasila Student Profile. Learning activities carried out at this school support dimensions such as critical thinking, independence, mutual cooperation, and global diversity. Through project-based learning and contextual exploration, students are not only equipped with academic knowledge, but also moral, social, and cultural values that are important foundations in shaping the character of the nation.

Student-Centered Learning (SCL) not only places students as the main actors in the learning process, but also requires deep attention to the needs, interests, and individual characteristics of students. Fulfilling students' needs is one of the main foundations in building an inclusive, meaningful, and transformative learning environment. The results of interviews with teachers at SMP Negeri 13 Krui showed that they have a good understanding of the diversity of student characteristics, both in terms of academic ability, learning style, interests, and socio-cultural background. Teachers realize that not all students can learn in the same way. Therefore, they design flexible and adaptive learning, which allows each student to learn according to their uniqueness and potential.

The first step taken by teachers is an initial diagnostic assessment. This assessment is used to map students' learning profiles, including strengths, weaknesses, learning preferences, and special needs. Based on the results of this mapping, teachers develop learning strategies that are responsive to students' conditions individually and collectively.

The application of the principle of differentiation can be seen from various practices carried out by teachers, such as: 1. Providing a variety of assignment choices according to student interests. 2. Providing a variety of learning media (text, video, discussion, direct practice). 3. Setting a learning tempo that is adjusted to students' abilities. 4. Designing exploratory activities based on local interests and contexts.

These practices show that teachers at SMP Negeri 13 Krui have implemented a personalized learning approach functionally. This is in line with the views of Overby (2011) and Wang & Ursuline (2014), which state that learning based on students' needs and interests can increase intrinsic motivation and better learning outcomes.

Teachers consistently link learning materials to the real-life context of students. They create activities that are not only theoretical, but also concrete and applicable, for example through local case studies, observations of the surrounding environment, and project-based activities that are relevant to students' interests. This approach fosters a sense of relevance and connectedness between lessons at school and life outside the classroom.

The SCL approach implemented by teachers at SMP Negeri 13 Krui also encourages the development of independent learning. Students are given space to organize their own learning strategies, set achievement targets, and evaluate their results through reflection. In this way, students learn to take responsibility for their learning process and outcomes, an important skill in the era of lifelong learning.

This learning model directly fosters the character of students who are resilient, disciplined, and independent. This also supports the spirit of the Independent Curriculum which prioritizes student autonomy in managing and evaluating their own learning.

Researchers noted that with an approach that is responsive to student needs, there was an increase in the quality of interaction and participation in the classroom.

Students appeared more involved, had higher enthusiasm, and showed more even learning achievement between individuals. Teachers not only act as conveyors of material, but also as companions and designers of learning experiences that are appropriate to student needs.

This approach supports Nikoladze's (2023) findings that state that a learning environment that pays attention to the individuality of students contributes greatly to academic achievement, personality development, and the formation of social skills. One of the most essential aspects of student-centered learning is the transformation of the teacher's role from a traditional instructor to a learning facilitator. In the Student-Centered Learning (SCL) approach, teachers are no longer the only source of information, but rather become companions who facilitate students to build knowledge through the process of exploration, social interaction, and self-reflection. Based on the results of research at SMP Negeri 13 Krui, researchers found that this change in role has been actively adopted by teachers in daily learning activities.

The transformation of the teacher's role is clearly visible in the learning strategies implemented. Teachers no longer dominate learning with one-way lectures, but rather create collaborative, open, and exploration-based learning spaces. Teachers become guides who design activities, organize class dynamics, and provide pedagogical support tailored to the needs of each student. In this case, teachers act as:

- a. Dialogue facilitator: Invites students to discuss, ask questions, and develop ideas independently.
- b. Scaffolding provider: Provides directed support (starting questions, reflective feedback) so that students are able to reach their potential development zone.
- c. Activity designer: Develops learning activities that are challenging, contextual, and enable collaboration between students.
- d. Process evaluator: Guides students in reflecting on their learning experiences and evaluating understanding formatively.

This transformation reflects a paradigm shift from teacher-centered to learner-centered, as stated by Grant (2003) and Elwarraki et al. (2023), that teachers in modern learning need to be designers of adaptive and reflective learning experiences. Teachers at SMP Negeri 13 Krui provide appropriate scaffolding in the learning process. They provide guidance or pedagogical interventions when students face difficulties, but gradually reduce this support as students' abilities and independence increase. The forms of scaffolding used include:

- a. Providing open-ended questions to stimulate critical thinking.
- b. Providing examples or demonstrations.
- c. Providing assessment rubrics to help students evaluate their own work.
- d. Providing reflective feedback that guides, not judges.

Feedback is given constructively and personally, allowing students to understand areas for improvement and encouraging them to improve themselves independently. This approach is very important in building students' self-confidence and intrinsic motivation. Researchers noted that teachers showed sensitivity to the diversity of student characteristics, both in terms of academic ability, cultural background, and

learning styles. This is reflected in the practice of differentiated learning, where teachers design a variety of activities, delivery methods, and forms of assessment that are tailored to each student's profile. Teachers also encourage two-way communication and active collaboration between students and teachers. The relationship that is built is not an authoritative relationship, but a dialogic and mutually respectful one. Teachers create an emotionally safe classroom atmosphere, so that students feel comfortable expressing ideas, asking questions, or even expressing differences of opinion.

This interaction strengthens a positive learning climate, where students learn not only from teachers, but also from peers and from direct experience. In line with the opinion of Anggraeni & Yusnita (2017), 21st-century teachers are required to activate the potential of students through effective, collaborative, and constructive communication.

The implementation of the role of teachers as effective facilitators also reflects the professionalism of teachers at SMP Negeri 13 Krui. Teachers demonstrate mastery in terms of:

- a. Active and meaningful learning planning,
- b. Participatory class management,
- c. Utilization of educational technology,
- d. Continuous self-development, including the use of the Merdeka Mengajar Platform (PMM) for independent training and teaching inspiration.

In the context of 21st-century education, two main competencies that are highly emphasized are critical thinking skills and collaborative skills. Both are important foundations in forming a generation that is adaptive, solution-oriented, and ready to face the challenges of the global world. The student-centered learning approach is the most relevant pedagogical framework to develop both of these competencies simultaneously. The results of the study at SMP Negeri 13 Krui showed that the learning practices at this school have actively encouraged the development of both competencies through participatory, reflective, and contextual learning strategies.

Critical thinking is the ability of students to analyze information objectively, evaluate arguments, make decisions based on data and evidence, and develop solutions with a systematic approach. At SMP Negeri 13 Krui, this ability is developed through various approaches, including:

- a. Giving HOTS (Higher Order Thinking Skills)-based questions,
- b. Open discussions and contextual case studies,
- c. Exploratory projects and scientific experiments, and
- d. Reflection on current social issues.

Teachers actively encourage students to not only memorize facts, but also question assumptions, compare opinions, and build logical arguments. For example, in social studies, students are asked to analyze social conflicts in local communities, evaluate the causes, and design feasible solutions based on social and cultural perspectives. Such activities strengthen reasoning skills, data analysis, and critical decision-making.

This finding is consistent with the results of Martar's (2024) study, which states that project-based learning and problem-solving strategies are effective methods for fostering high-level thinking skills among students. Collaborative skills include various interpersonal skills, such as:

- a. Communicating effectively,
- b. Listening actively,
- c. Respecting the opinions of others,
- d. Resolving conflicts constructively, and
- e. Working together to achieve common goals.

Teachers at SMP Negeri 13 Krui consistently apply group-based learning models, such as:

- a. Cross-disciplinary collaborative projects,
- b. Social simulations or group debates, and
- c. Field practice activities or joint observations.

This activity provides ample space for students to interact with each other, share roles, negotiate ideas, and evaluate the contributions of group members reflectively. In its implementation, the teacher facilitates the collaborative process by setting clear goals, managing group dynamics, and providing feedback on the process and results of student collaboration. As stated by Schreurs & Al-Huneidi (2011), collaborative learning that is designed socially and constructivist allows students to build shared knowledge and understand material from various perspectives.

The researcher noted that teachers at SMP Negeri 13 Krui not only focus on academic achievement, but also integrate local social and cultural values into the collaborative process. For example, mutual cooperation activities based on environmental projects, exploration of local culture through artwork, to debates on customary issues or local wisdom. This strategy has been proven to not only increase students' emotional involvement, but also foster contextual awareness and strong cultural identity. This finding supports the research results of Yani & Tirtoni (2024), which states that collaborative learning integrated with a cultural context can increase the meaning of learning and strengthen critical thinking skills in a more relevant way. It is also reinforced by Madkur et al. (2024), who found that teachers' awareness of implementing context-responsive pedagogy can enhance learner engagement and cultural relevance.

The learning environment built by the teacher is inclusive, allowing every student to be actively involved without fear of being wrong or judged. The collaborative process is also complemented by reflection sessions, both individually and in groups, where students evaluate their learning process and provide feedback to their peers. This reflection is an important part of forming metacognition, which is awareness of one's own way of thinking and learning. Through this activity, students not only learn about the material, but also learn how to learn effectively with others.

## CONCLUSION

Based on the results of research conducted at SMP Negeri 13 Krui, Pesisir Selatan District, Pesisir Barat Regency, Lampung Province, it can be concluded that the use of the Merdeka Mengajar Platform (PMM) significantly contributes to improving teacher professional competence, especially in supporting student-centered learning. This study revealed that most teachers have demonstrated good mastery of the material, teaching skills, ability to use educational technology, and self-development. This is indicated by the increasingly widespread use of active and participatory learning methods, the use of PMM features such as Teaching Tools, Diagnostic Assessments, and Independent Training, as well as increasing teacher capacity in compiling differentiated learning according to student needs.

However, several obstacles were still found, such as uneven digital literacy, limited technological facilities, and the suboptimal use of reflective and assessment features by some teachers. These obstacles have been responded to with strategic solutions such as internal training, the formation of teacher learning communities, increasing technological support, and collaboration with external parties such as the Lampung Provincial BPMP.

Overall, the Merdeka Mengajar Platform has proven to be effective as a digital ecosystem that supports the transformation of teachers into learning facilitators. This platform not only expands access to learning resources and training, but also strengthens a reflective and collaborative culture in the school environment. Therefore, improving teacher professional competence through optimizing PMM is an important strategy in realizing more flexible, contextual, and student-centered education. To maintain the sustainability of this positive impact, schools need to continue to develop targeted training, mentoring, and academic supervision programs, as well as strengthen collaboration in the learning community to ensure that the use of PMM runs optimally and comprehensively.

The findings of this study imply that enhancing teacher professional competence through the use of the Merdeka Mengajar Platform plays a critical role in supporting the implementation of student-centered learning within the Merdeka Curriculum. By fostering reflective teaching practices, improving digital literacy, and providing accessible learning resources, the platform empowers teachers to create more engaging and effective learning environments tailored to students' needs.

For future research, it is recommended to conduct broader studies across different regions and school levels to compare how the Merdeka Mengajar Platform is utilized in various educational settings. In addition, quantitative or mixed-methods research could be employed to measure the impact of professional development on student outcomes more concretely. Further exploration into students' perspectives and experiences with student-centered learning initiatives may also provide a more holistic understanding of the platform's effectiveness in improving educational quality.

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