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Analysis on Platform Merdeka Mengajar (PMM): Does It Affect Teachers' Workload and Well-being?

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Abstrak

Integrasi platform pengajaran digital yang meluas dalam pendidikan telah mendorong eksplorasi dampaknya terhadap beban kerja dan kesejahteraan guru. Penelitian ini berfokus pada pemahaman dampak Platform Merdeka Mengajar (PMM), platform pengajaran digital terkemuka di Indonesia, terhadap beban kerja dan kesejahteraan guru sekolah menengah yang berpartisipasi di Kota Banda Aceh dan Kabupaten Aceh Besar, Provinsi Aceh, Indonesia. Dengan menggunakan desain penelitian deskriptif kualitatif, enam guru diwawancarai untuk mengeksplorasi pengalaman mereka dengan PMM. Analisis tematik dari wawancara tersebut mengungkapkan bahwa meskipun PMM menawarkan sumber daya yang berharga dan mendorong kolaborasi profesional, PMM juga meningkatkan beban kerja dan stres karena waktu persiapan tambahan dan kebutuhan untuk adaptasi teknologi. Studi ini menyoroti pentingnya memberikan pelatihan yang ditargetkan, meningkatkan kegunaan platform, dan meningkatkan fitur integrasinya untuk mengurangi tantangan ini. Terlepas dari keterbatasannya, termasuk ukuran sampel yang kecil dan potensi bias dalam data kualitatif, studi ini memberikan wawasan tentang potensi manfaat dan tantangan mengintegrasikan platform digital ke dalam praktik pendidikan di Indonesia. Temuan tersebut menggarisbawahi perlunya pendekatan yang seimbang terhadap integrasi teknologi yang mendukung pengembangan profesional dan kesejahteraan guru. Akses yang lebih mendukung diperlukan untuk mengembangkan platform digital guna menyeimbangkan dinamika beban kerja dan kesejahteraan guru.

Kata Kunci: *Platform Merdeka Mengajar, PMM, Platform mengajar digital, Beban kerja guru, Kesejahteraan guru*

Abstract

The widespread integration of digital teaching platforms in education has prompted an exploration of their impact on teacher workload and well-being. This research focuses on understanding the effects of Platform Merdeka Mengajar (PMM), a prominent digital teaching platform in Indonesia, on the workload and well-being of participating high school teachers in Banda Aceh Municipality and Great Aceh Regency, Aceh Province, Indonesia. Utilizing a qualitative descriptive research design, six teachers were interviewed to explore their experiences with PMM. Thematic analysis of the interviews revealed that while PMM offers valuable resources and fosters professional collaboration, it also increases workload and stress due to additional preparation time and the need for technological adaptation. The study highlights the importance of providing targeted training, improving the platform's usability, and enhancing its integration features to mitigate these challenges. Despite its limitations, including a small sample size and potential biases in qualitative data, the study provides insights into the potential benefits and challenges of integrating digital platforms into educational practices in Indonesia. The findings underscore the need for a balanced approach to technological integration that supports teachers' professional development and well-being. A more supportive access is necessary to develop the digital platform to balance the nuanced dynamics of teachers' workload and well-being.

Keyword: Platform Merdeka Mengajar, PMM, Digital teaching platforms, Teacher workload, Teacher well-being

INTRODUCTION

In recent years, the landscape of education in Indonesia has undergone a transformative shift with the integration of digital teaching platforms (Hadi & Kamarullah, 2024), even to artificial intelligence ones (Kamarullah et al., 2024). The advent of these platforms has brought forth new opportunities and challenges, reshaping the traditional paradigms of teaching and learning. One noteworthy player in this digital evolution is PMM, which is proposed by the Minister of Education and Culture, aimed at transforming the educational landscape in Indonesia by promoting a more flexible and student-centered learning environment (Kementerian Pendidikan dan Kebudayaan, n.d.).

The educational landscape in Indonesia has faced diverse challenges, including geographical disparities, resource limitations, and the need for innovative pedagogical approaches. In response to these challenges, PMM emerged as a pioneering digital platform, seeking to bridge educational gaps and empower teachers through a collaborative and technology-driven framework. PMM, at its core, is designed to facilitate the collaboration of teachers across regions and empower them with resources, tools, and a supportive community. The platform encompasses a diverse array of teaching materials,

interactive modules, and collaborative spaces, fostering an environment conducive to professional development and knowledge exchange. As teachers engage with PMM, they are not only navigating the digital realm of education but are also contributing to a collective effort to elevate the quality of teaching and learning experiences nationwide.

As the integration of digital teaching platforms becomes increasingly integral to the education landscape in Indonesia, it is imperative to scrutinize the impact of such initiatives on the educators themselves. This research focuses on understanding the specific dynamics surrounding PMM, aiming to unravel its implications for teacher workload and well-being. By examining the experiences of educators navigating the digital landscape, we aim to provide insights that contribute to the ongoing discourse on technology's role in shaping the future of education in Indonesia.

Understanding the impact on teacher workload and well-being

The rapid integration of digital teaching platforms in the educational landscape of Indonesia, exemplified by the emergence of PMM, marks a pivotal shift in the roles and responsibilities of educators. As classrooms increasingly become digitally mediated spaces, teachers are not only disseminators of knowledge but also orchestrators of innovative learning experiences. This transformative evolution prompts a critical examination of the consequences, necessitating an in-depth exploration of the impact of PMM on teacher workload and well-being. The introduction of PMM brings forth a wealth of tools, resources, and collaborative opportunities designed to enrich teaching practices. However, as educators navigate this digital terrain, there exists the potential for an augmentation of their traditional workload (Kamarullah & Sarinauli, 2023). Unraveling the nuanced dynamics of this shift is paramount for identifying areas that may require optimization and targeted support.

Moreover, teaching in the digital age introduces unique stressors and challenges that may influence the overall well-being of educators. The constant connectivity, the need to adapt to evolving technologies, and the potential for an increased workload demand a focused examination. Understanding these factors is not only crucial for fostering a supportive educational environment but is also essential for providing insights into cultivating the well-being of teachers as they navigate the complexities of digital pedagogy.

An essential dimension of this study lies in its potential to enhance professional development. By conducting a thorough analysis of how PMM impacts teacher workload and well-being, the research aims to identify aspects of the platform that positively

contribute to the growth of educators. These insights can then be leveraged to optimize PMM for sustained professional development, ensuring that the platform serves as a catalyst for continuous improvement in teaching practices.

Platform Merdeka Mengajar (PMM): An overview

PMM is a digital teaching platform developed by the Indonesian Ministry of Education and Culture. At first, PMM was created to support teachers in delivering high-quality education, especially in the face of challenges such as the COVID-19 pandemic, which necessitated a rapid shift to online and blended learning models. By leveraging technology, PMM aims to bridge gaps in educational access and quality across diverse and geographically dispersed regions in Indonesia.

There are some key features of PMM, such as curriculum resources, professional development, content sharing and validation, collaboration and community, and accessibility and inclusivity. The platform provides a comprehensive repository of curriculum-aligned resources, including lesson plans, teaching materials, and multimedia content. These resources are curated to help teachers deliver engaging and effective lessons. It also offers various professional development modules and courses designed to enhance teachers' pedagogical skills and technological proficiency. These modules cover a wide range of topics, from classroom management to the integration of digital tools in teaching. An efficient management of teaching, particularly in digitalized context, somewhat, improves the quality of learning (Maisura et al., 2023). Then, teachers can share their own teaching materials and resources with other users on the platform. Before these resources are made available to the wider community, they undergo a validation process by PMM to ensure quality and relevance. Furthermore, PMM fosters a collaborative environment where teachers can share best practices, exchange ideas, and support each other through online forums and communities of practice. This feature promotes professional networking and peer learning. Lastly, the application is designed to be accessible to teachers across different regions, including those in remote areas.

The integration of digital platforms in education

The integration of digital platforms in education has been a transformative force, redefining teaching and learning paradigms across the globe. Numerous studies highlight the potential benefits of digital platforms in enhancing instructional practices. For instance, research by Clark and Mayer (2016) underscores the cognitive advantages of multimedia learning, showcasing how interactive elements in digital platforms can facilitate better

retention and comprehension. Additionally, the work of Garrison and Vaughan (2007) emphasizes the role of online platforms in fostering a collaborative and constructivist learning environment, encouraging active participation and knowledge construction among students, which shape their characteristics, principally (Rahmiaty & Kamarullah, 2024).

As educators increasingly embrace digital tools, the literature also sheds light on the challenges associated with this transition. The study by Ertmer et al. (2012) explores the barriers to effective technology integration, ranging from inadequate training and support to resistance from educators. Understanding these challenges is crucial for developing strategies that facilitate a seamless integration of digital platforms into educational practices.

In the context of teacher workload and well-being, recent research by Johnson et al. (2012) examines the relationship between technology use and teacher stress. The study indicates that while digital platforms offer opportunities for innovation, they may also contribute to heightened stress levels due to the demands of adapting to new technologies and managing increased workload. This finding underscores the importance of investigating the specific implications of digital platform integration on teacher well-being.

Furthermore, the literature recognizes the role of digital platforms in promoting professional development among educators. Darling-Hammond and McLaughlin (2011) argue that technology can serve as a powerful tool for ongoing teacher learning, facilitating collaboration and access to a diverse range of resources. However, studies such as that by Inan and Lowther (2010) caution that effective professional development strategies are essential to harness the full potential of digital tools, emphasizing the need for targeted training programs.

In the Indonesian context, where PMM has emerged as an official digital teaching platform provided by the government, there is a scarcity of literature specific to its impact on education. However, the broader global literature provides a foundational understanding of the opportunities, challenges, and considerations associated with the integration of digital platforms in education. Building upon these insights, this research aims to contribute to the existing knowledge base by exploring the unique dynamics of PMM and its implications for teacher workload and well-being within the Indonesian educational landscape.

Teacher workload, well-being, and technology in the classroom

The intersection of teacher workload, well-being, and the infusion of technology into the classroom has become a focal point of educational research. A substantial body of literature addresses the complexities and dynamics of these interconnected elements, offering valuable insights into the evolving landscape of teaching.

In terms of teacher workload and technology integration, Inan and Lowther (2010) have explored the relationship between technology integration and teacher workload. Their findings indicate that while technology can enhance instructional practices, challenges arise concerning the time required for preparation and adaptation, not to mention for refreshment of the classrooms (Kamarullah et al., 2018). The study underscores the importance of recognizing and addressing the impact of technology on the workload of educators.

Then, research by Hakanen et al. (2006) investigates the link between teacher well-being and job satisfaction. The study emphasizes the significance of a positive work environment, supportive leadership, and manageable workloads in fostering teacher well-being. Understanding these factors is crucial for creating conditions that contribute to the overall satisfaction and fulfilment of educators. In a broader concept of occupational burnout, teachers potentially face excessive demands associated with technology integration, providing a framework for understanding the psychological toll of increased workload, as highlighted by Maslach and Leiter (2016). Some positive attitudes towards technology, coupled with adequate support and professional development opportunities, contribute to higher levels of job satisfaction among educators as found in the study of Ertmer et al. (2012). The condition, inevitably, may affect the balance technology integration and teacher well-being. A comprehensive review by Skaalvik and Skaalvik (2017) argue that positive teacher-student relationships, autonomy in pedagogical choices, and adequate support systems are pivotal in mitigating the potential negative effects of technology-related stress on teacher well-being.

Meanwhile, a meta-analysis by Hattie (2015) synthesizes findings on the effects of technology use in the classroom on student outcomes. While the focus is primarily on student achievement, the study indirectly addresses teacher workload by examining the effectiveness of different technology-mediated teaching approaches. Understanding the correlation between effective technology use and positive student outcomes is essential in assessing the overall impact on teacher workload and satisfaction.

In examining these studies collectively, it becomes evident that the integration of technology into the classroom has profound implications for teacher workload and well-

being. As educational systems worldwide continue to embrace digital tools, it is imperative to draw upon these insights to inform policies and practices that foster a supportive and sustainable environment for educators. In the subsequent sections of this research, overarching themes will be applied to the specific context of PMM, shedding light on its potential effects on Indonesian teachers' workload and well-being, which becomes the objective of this current study.

RESEARCH METHODS

This study employed a qualitative descriptive research design to explore the impact of PMM on teacher workload and well-being. This approach allows for a detailed and nuanced understanding of teachers' experiences and perceptions, providing rich insights into the implications of PMM usage in educational settings. The study involved six high school teachers from Banda Aceh Municipality and Great Aceh Regency, Aceh Province, Indonesia, as this region needs more development in terms of education quality (Manan et al., 2023; Muchsin et al., 2022).

Table 1. The Demographic of the Informants

Initials	Sex	Age	Subjects
SB	M	50	Physical education
DW	F	49	Economics
IR	F	43	Physics
AM	F	54	History
FP	F	32	Sociology
SF	F	39	Chemistry

In Table 1, the informants, who represent a diverse range of subjects and ages, were selected to ensure a broad perspective on the impact of PMM. These teachers might provide insights into the different ways PMM affects their workload and well-being, reflecting varied experiences across different disciplines.

The primary data collection method was semi-structured interviews. Each informant was interviewed for 15 to 20 minutes at their respective schools in March 2024. The interviews were guided by questions designed to explore the impact of PMM on their workload, job satisfaction, and well-being. The data collected from the interviews were analyzed using thematic analysis. This technique involves identifying, analyzing, and reporting patterns (themes) within the data. The process includes several steps – transcribing the interviews, coding for relevant data, defining themes of detailed analysis,

and presenting the themes.

The research adheres to ethical guidelines to ensure the well-being and rights of the participants as follows. All informants were provided with detailed information about the study's purpose, procedures, and potential implications. Informed consent was obtained prior to their participation. Then, the identities of the informants were protected throughout the study. Also, participation in the study was entirely voluntary, and participants were free to withdraw at any stage without any consequences. Finally, all data were securely stored and accessible only to the research team, ensuring confidentiality and data integrity.

RESULTS AND DISCUSSIONS

We concluded the findings in the form of mind-mapping, as showcased in Figure 1. It highlights key areas of impact on teacher workload when using the PMM, focusing on workload impact, challenges, resource access, work-life balance, and community support. The mind-mapping is discussed in depth below.

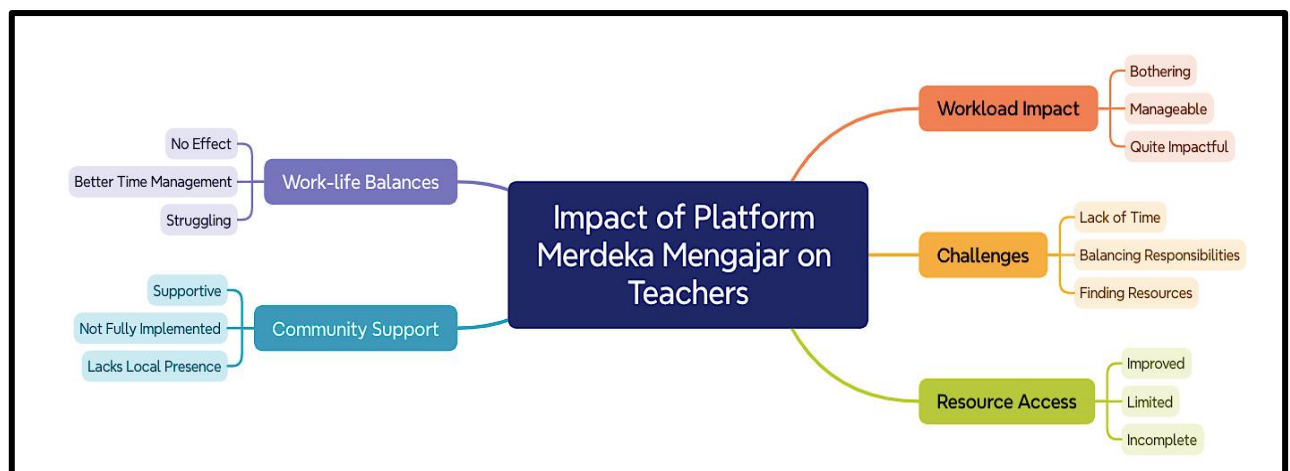


Figure 1. Mind-mapping of the impact of PMM on teachers

Impact on teacher workload

Workload impact

The increased workload is a significant concern among teachers using PMM. Teachers reported that the platform is "quite impactful" in terms of workload, with some finding it "manageable," while others described it as "bothering." This aligns with findings from Inan and Lowther (2010), and Clark and Mayer (2016), which emphasize the importance of technological proficiency and user experience in the successful integration

of educational technologies. Teachers who are more comfortable with using PMM report better management of their workload, while those less proficient feel burdened by the additional tasks as IR's statement, *"Integrating PMM into my daily teaching requires significant time and effort. I often find myself working late to prepare and adapt materials, which is quite bothersome"*. In the meantime, IR also optimistically stated, *"With PMM, I spend significantly more time preparing my lessons. The resources are there, but I often need to adapt them to fit my class's needs, which takes additional effort."* This sentiment is then echoed by AM, who mentioned, *"The lesson plans and materials on PMM are comprehensive, but I find myself investing more hours in preparation than before, especially to tailor the content to our curriculum standards."* Both teachers highlighted that while PMM offers extensive resources, the time required to customize these materials to suit their specific classroom contexts has increased their overall workload.

This increase in preparation time can be related to the findings of Inan and Lowther (2010), who identify that the effective integration of technology in education is highly dependent on the teachers' ability to adapt and modify resources to meet their pupils' needs. The additional effort required to tailor PMM's resources to fit specific classroom settings underscores the necessity for teachers to possess not only content knowledge but also technological proficiency to manage their workload effectively.

Challenges

The challenges highlighted include a "lack of time," "balancing responsibilities," and "finding resources." These issues are consistent with the literature, such as studies of Johnson et al., (2012) and Hattie (2015), who discuss the critical role of designing user-friendly interfaces and seamless integration tools to minimize additional workload. The lack of time to adapt and implement digital resources exacerbates teachers' workload, making it challenging to balance their teaching responsibilities. This is reflected by DW's response, *"Finding the right resources on PMM is time-consuming. Balancing this with my regular teaching duties is a real challenge."* She also shared, *"For someone who is not very tech-savvy, like me, using PMM feels overwhelming at times. The extra time I spend just navigating the platform adds to my workload."* In contrast, FP remarked, *"I'm quite comfortable with technology, so using PMM hasn't significantly increased my workload. It's more about adjusting to a new system and figuring out the most efficient ways to use it."* These contrasting experiences highlight the significant role that technological proficiency plays in shaping teachers' perceptions of their workload when using digital platforms like PMM.

The variation in workload perceptions aligns with the findings of Clark and Mayer (2016), who emphasize that teachers' self-efficacy with technology can significantly influence their ability to integrate digital tools into their teaching practices. Teachers with higher technological proficiency, like FP, can more efficiently navigate and utilize PMM, thereby experiencing a lesser increase in workload compared to their less proficient counterparts, such as DW. This disparity highlights the importance of providing adequate technological training and support to ensure all teachers can effectively use digital platforms without an undue increase in workload (Istiaryah et al., 2019).

Resource access

SB expressed, *"The resources on PMM are excellent, but integrating them smoothly into my existing plans is challenging. A more user-friendly interface would save a lot of time."* Similarly, SF noted, *"I appreciate the variety of teaching materials available, but sometimes the usability issues make it hard to access what I need quickly. Better integration tools would help a lot."* These observations point to a common appreciation for the quality and comprehensiveness of PMM's resources, coupled with a desire for improved usability and integration features to streamline their use.

Moreover, AM revealed, *"PMM has improved access to resources, but many of them are incomplete or not fully applicable to my teaching context"*. Teachers' access to resources through PMM is described as "improved," but still "limited" and sometimes "incomplete." This suggests that while PMM has potential, its current state may not fully meet teachers' needs. This resonates with the theoretical framework provided by Clark and Mayer (2016), who emphasize the need for comprehensive and user-friendly digital resources to enhance teaching practices without adding to the workload.

In addition, SB pointed out, *"PMM has many great resources, but it lacks direct interaction features with students. This makes it challenging to engage my students effectively."* Similarly, AM noted, *"The platform is teacher-focused, which is great, but without student engagement tools, it feels like something is missing. I need to find other ways to interact with my students."* These concerns highlight a significant gap in PMM's capabilities, particularly in fostering direct teacher-student interactions. Garrison and Vaughan's (2007) theory of blended learning indeed stresses the importance of interaction between teachers and students in creating an effective learning environment. The absence of features that facilitate direct student engagement can undermine the effectiveness of digital platforms like PMM, potentially impacting teacher satisfaction and well-being negatively.

These responses underscore that the user experience of educational technologies is crucial in determining their effectiveness and impact on teacher workload (Johnson et al., 2012). A more intuitive and user-friendly interface can significantly reduce the time and effort required to integrate digital resources into teaching practices, thereby alleviating the additional workload experienced by teachers. The importance of usability and seamless integration of technology in education is further supported by Hattie (2015), underlining that the ease of use of educational tools can enhance their adoption and effectiveness.

All in all, the findings suggest that while PMM has the potential to enhance teaching practices, addressing the issues related to preparation time, technological proficiency, and usability is essential to optimize its impact on teacher workload and well-being. Providing targeted training and support, as well as improving the platform's interface and integration features, can help teachers more effectively leverage PMM's resources, thereby reducing their workload and enhancing their overall teaching experience.

Impact on teacher well-being

Work-life balance

Teachers reported mixed experiences with work-life balance when using PMM. Some found "better time management," while others were "struggling" or noticed "no effect" at all. This mixed response reflects Maslach and Leiter's (2016) findings on burnout, indicating that while access to resources can be beneficial, the associated increase in workload and complexity can lead to higher stress levels. The struggle to maintain a work-life balance is a critical aspect of teacher well-being that needs to be addressed, as complained by AM, *"Using PMM has made it harder to manage my time. I often find myself working late into the night"*. IR, in a fair way, responded, *"The PMM platform has been both a blessing and a curse. On one hand, it provides a lot of resources that I can use, but on the other hand, managing and adapting those resources can be stressful."* Similarly, DW admitted, *"Using PMM adds another layer of responsibility. I sometimes feel overwhelmed trying to balance my regular teaching duties with learning and using the new platform."* These responses highlight the dual impact of PMM on teacher stress levels, where the availability of resources is beneficial but also adds to the workload, contributing to increased stress.

Maslach and Leiter (2016) emphasize that while access to resources can enhance job performance, the additional workload and complexity associated with new technologies can lead to higher stress levels and potential burnout. The need to adapt to and manage new digital platforms can create a sense of being overwhelmed, which is a significant factor in teacher well-being (Kamarullah & Sarinauli, 2023; Skaalvik & Skaalvik, 2017).

Community support

Community support was identified as both "supportive" and "not fully implemented," with some teachers noting a "lack of local presence." This aligns with Darling-Hammond and McLaughlin's (2011) emphasis on the importance of professional learning communities. While PMM's community features are beneficial, their incomplete implementation and lack of local support can limit their effectiveness in reducing teacher isolation and providing necessary emotional and professional support. This is represented by SF, "*PMM's community features are supportive, but there is a lack of local presence which makes it less effective for real-time collaboration*".

Nonetheless, FP expressed, "*One of the best features of PMM is the ability to connect with other teachers. It feels good to share experiences and resources, and it helps me feel less isolated.*" SF, in the same way, echoed this sentiment, "*The collaboration tools on PMM have been very helpful. Being able to discuss and share ideas with my colleagues has provided both professional and emotional support.*" These positive remarks underscore the value of PMM's community and collaboration features in supporting teacher well-being. The importance of community and collaboration in reducing stress and enhancing well-being is well-supported by the work of Darling-Hammond and McLaughlin (2011). They highlight that professional learning communities and collaborative practices can provide crucial emotional and professional support, reducing feelings of isolation and stress among teachers. PMM's collaborative features align with this perspective, offering a platform for teachers to share resources and experiences, thereby enhancing their well-being.

Implications of the PMM as the center of teachers' working platform

The integration of PMM into educational practices represents a significant step towards modernizing education in Indonesia. However, the findings indicate that increased preparation time, technological proficiency, and user experience are critical factors impacting teacher workload and well-being. Providing targeted training and improving the platform's interface can help teachers leverage PMM's resources more effectively, reducing their workload and enhancing their teaching experience.

Nonetheless, the increased workload and stress associated with using PMM have significant implications for teacher well-being. Maslach and Leiter (2016) indicate that access to resources can enhance job performance, the associated increase in workload and complexity can lead to higher stress levels and potential burnout. Addressing these

challenges by providing adequate support and resources can help teachers manage their workload effectively and reduce stress.

Then, in order to grasp professionalism in teaching, PMM is crucial in helping teachers navigate the challenges associated with using digital platforms, leading to career development. The findings highlight the significant role of technological proficiency in shaping teachers' perceptions of their workload and well-being. Providing targeted training and support, as well as fostering a collaborative culture among teachers, can help create a supportive and collaborative teaching environment, reducing stress and enhancing teacher satisfaction. One cannot ignore the digitalization and professionalism in their working domains, despite of their incapability, unsupportive facilities, and scarcer communities.

CONCLUSIONS

The findings of this study illuminate both the potential benefits and the challenges associated with the use of PMM among high school teachers in Banda Aceh Municipality and Great Aceh Regency, Aceh Province, Indonesia. The impact of PMM on teacher workload and well-being is multifaceted, reflecting a mix of positive and negative experiences. On one hand, PMM provides valuable resources and fosters professional collaboration, aligning with the theories of technological integration in education and the importance of professional learning communities. On the other hand, the increased preparation time, differences in technological proficiency, and limited usability of the platform contribute to a higher workload and increased stress levels among teachers. Providing targeted training and support, improving the platform's user interface, and enhancing its integration features can help teachers more effectively leverage PMM's resources, thereby reducing their workload and improving their overall teaching experience.

Nevertheless, this study has several limitations. Firstly, the sample size is relatively small, consisting of only six high school teachers from a specific region in Indonesia. This limits the generalizability of the findings to a broader population. Secondly, the study relies on qualitative data from interviews, which may be subject to personal biases and may not capture the full range of experiences among all teachers using PMM. Lastly, the study does not measure the long-term impact of PMM on teacher workload and well-being, which could provide a more comprehensive understanding of its effects. Therefore, some recommendations can be considered. Enhancing user interface and usability of PMM to reduce the learning curve and increase efficiency, introducing features for student

engagement to make PMM a more holistic educational tool, or providing more targeted professional development resources that cater to varying levels of technological proficiency among teachers are topics which can be explored in future studies.

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