Tutor Readiness in the Implementation of E-PKBM in the Equivalency Education Program

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Abstract: Non-formal education in Indonesia, particularly in the context of equivalency education, faces numerous challenges in introducing innovation to the learning system. This study aims to describe the readiness of tutors in implementing E-PKBM by using a qualitative approach and descriptive method. Data was collected through observation, interviews, and documentation, and their validity was tested through source triangulation and technique triangulation. Data analysis included data collection, data reduction, data presentation, and conclusion drawing. The results describe (1) tutors show professional confidence in implementing the system, although they still need support and further training to handle complex questions. (2) Comprehensive institutional support, including training, appreciation of achievements, and constructive communication, is crucial. (3) Tutors need to develop competence in using the system to optimize the learning process. The implications of this study emphasize the need for continuous training programs and the development of self-learning skills. This study concludes that tutor readiness makes a significant contribution to the success of E-PKBM, and these findings make a valuable contribution to the development of tutor training programs in PKBM.
Keywords: equivalency, tutor readiness, online learning, community learning center

INTRODUCTION

Along with the rapid advancement of information technology, the non-formal education sector in Indonesia now faces various challenges and opportunities to innovate in the learning system, especially in equivalency education. This digital transformation in education not only changes the way materials are delivered but also expands access to education for previously marginalized communities (Yuridka & Nazaruddin, 2024). One of the initiatives taken is the implementation of e-PKBM (Electronic-Community Learning Activity Center), which aims to facilitate more flexible learning for the community. This innovation not only aims to expand the accessibility of education for the community, but also to improve the quality of learning through more interactive and engaging methods (Wahid et al., 2025).

With this system, the learning process can be flexible, allowing learners to learn at a time and place of their choosing. This has the potential to boost their motivation and participation in education. (Widiansyah & Catur Putri, 2022). In this context, e-PKBM innovation is a strategic step to create competent human resources who are ready to face global challenges. Additionally, this innovation can enhance the skills and knowledge of the

community, which in turn can contribute to improving the quality of human resources in Indonesia. (Hardianto & Martono, 2023). The implementation of this system in the digital era requires optimal tutor readiness to ensure the success of the learning process. Tutor readiness covers various aspects, including technical skills, understanding of educational technology, and a positive attitude towards online learning (Sabatti, 2024).

Tutor readiness is a key factor in supporting learners to utilize technology effectively in the learning process. Factors influencing online teaching readiness are instruments developed by Hung (Prabowo et al., 2020) which is adapted into Indonesian and consists of three indicators: Communication self-efficacy, Institutional support, and Self-directed learning. First, communication self-efficacy, which reflects tutors' confidence in communicating effectively through digital platforms. Research by Erwin Erlangga (2025) stated that tutors with a high level of self-efficacy tend to be more effective in overcoming challenges in online learning and creating better interactions with students. Second, institutional support, which includes facilities, training, and resources provided by the institution to support tutors in teaching online (Syahriliana Syahrir et al., 2025). Adequate support from the institution can boost tutors' motivation and confidence, making them more prepared to use technology in the learning process (Subhan Widiansyah et al., 2024). In addition, tutors' ability to self-direct learning also plays a vital role in their readiness, as tutors who are proactive in developing their skills and knowledge will be better prepared to face changes and challenges in online learning (Prabowo et al., 2020). By understanding these factors, PKBM Sanggar 21 can design a more effective strategy to prepare tutors for e-PKBM implementation.

These three indicators are interconnected and contribute to tutors' readiness to implement this e-learning system. Additionally, tutors' positive attitude towards technology plays a vital role in their readiness to teach online. Research by Baharuddin and Hatta (2024) stated that tutors' positive attitude can encourage learners' motivation to learn, which in turn contributes to the overall success of the program. In addition, research by Sidik & Sobandi (2020) emphasized that tutors with an open attitude towards technology are better able to adapt to changes and challenges in online learning, thereby creating a more dynamic learning environment. The readiness of tutors in various aspects, including self-efficacy, institutional support, and a positive attitude towards technology, is crucial for achieving the expected educational goals (Prabowo et al., 2020). Thus, tutor capacity building through proper training and support can strengthen the effectiveness of e-PKBM implementation and have a positive impact on learners (Sumianto et al., 2024). Observation at PKBM Sanggar 21 reveals that some tutors still lack confidence in using technology, which can hinder the learning process (Oktiani, 2024). This lack of confidence is often attributed to a lack of experience and skills in operating the technological devices necessary for online learning (Mutmainnah & Khaerunnisa, 2024). Additionally, Sutarman's (2023) article revealed that the lack of training and technical support for tutors is one of the factors hindering the effective implementation of the program. Wulandari et al. (2021) also emphasized the importance of continuous training for tutors' competence in using educational technology in their research. This suggests the need for further research to understand the factors that influence tutors' readiness in this context, particularly in the face of the increasingly complex challenges of online learning. The novelty of this research lies in its in-depth focus on tutor readiness in PKBM Sanggar 21, which is a local context that has not been widely studied. This research will also identify specific factors that influence tutors' readiness in implementing e-PKBM, thereby providing more relevant recommendations for the development of educational programs in the area (Sam & Sulastri, 2024). The purpose of this research is to describe tutors' readiness in implementing e-PKBM in PKBM Sanggar 21 and to identify factors that influence such readiness. This research can provide valuable insights for PKBM managers regarding the quality of education through this system.

The urgency of this research lies in the need to understand tutors' readiness in facing the challenges of online learning, especially in the current digital era. With the increasing use of technology in education, it is essential to ensure that tutors possess the necessary skills and knowledge to support effective learning processes (Wahyuni & Haryanti, 2024). Research by Wahyuni & Haryanti (2024) states that tutors skilled in information technology can enhance learner interaction and engagement, which is crucial for achieving optimal learning outcomes. Additionally, a lack of tutor preparedness can lead to learners' dissatisfaction with the learning process, which in turn can reduce their participation in the educational program (Prita Indrawati et al., 2022). The contribution of this research is to provide practical recommendations for PKBM managers on supporting tutor readiness, as well as to add to the existing literature on tutor readiness in the context of non-formal education in Indonesia. This research can also serve as a reference for future research related to the implementation of technology in education. By identifying the factors that influence tutor readiness, this research can help design more effective and relevant training programs, enabling tutors to better prepare for the challenges of online learning (Prabowo et al., 2020). In addition, the results of this study can provide policymakers with insights for formulating strategies that support tutor capacity building across Indonesia (Utaminingtyas & Evitasari, 2022).

METHOD

This type of research employs a qualitative descriptive approach. This research method is natural, with the researcher himself acting as an observer (Sugiyono, 2013). The research location is situated at PKBM Sanggar 21, located in Sidamulya, Jojogan Village, Watukumpul District, Pemalang Regency, Central Java. The focus of this research is the readiness of tutors in the implementation of E-PKBM, which through three main aspects: (1) *communication self-efficacy* related to an individual's belief in his/her ability to achieve goals, (2) *institutional support* including the provision of resources, training of managers, collaboration with various parties, and supervision and evaluation of the program to maintain the quality of education, and (3) *self-directed learning* including the ability to organize the learning process, set goals, and evaluate progress independently. The research procedure was conducted holistically, beginning with direct observation of learning interactions, followed by in-depth interviews to gain an understanding of participants' perceptions, and concluding with document analysis to complement the field findings. The researcher visited the location in a participatory manner over time to capture the dynamics that emerged naturally, without intervening in the ongoing process.

The participants in this study consisted of three tutors and one head of PKBM Sanggar 21 Watukumpul, who were selected based on their experience in managing E-PKBM. The three tutors represent a variety of expertise backgrounds and teaching durations, while the head of PKBM was selected as a key informant who understands the policy and institutional challenges. The presence of participants serves not only as a source of data but also as a means to validate the findings during the research process. Interactions with participants were built by understanding their perspectives to uncover subjective meanings related to readiness to face digital transformation, while maintaining the principles of confidentiality and volunteerism throughout data collection.

Research data were collected through interviews, observations, and documentation. The implementation of participatory observation, for 4 months at PKBM Sanggar 21, with stages: (1) the researcher directly observed the learning interaction in the classroom, (2) recorded in detail the tutor-learner communication pattern, (3) documented the use of digital media in the learning process. Field notes were made immediately after observation to ensure data accuracy. Structured interviews were conducted using a question guide that had been

validated by the supervisor, covering three main aspects: (a) tutors' experiences using digital platforms, (b) technical barriers encountered, and (c) training needs. Each interview was recorded after obtaining participants' consent, then transcribed within 24 hours to maintain data integrity. While in the documentation, it was conducted using a double-check method: (1) collecting official documents (lesson plans, modules), (2) verifying authenticity with administrative staff. All data were then stored in a two-layer filing system (hard copy and backup drive) to ensure the principle of an audit trail in qualitative research was fulfilled.

The data validation process in this study was conducted through a triangulation approach, comprising three main stages involving three tutors and one PKBM head as key participants. The first stage was source triangulation, which was conducted by: (1) comparing the results of in-depth interviews of the four participants to identify similarities and differences in perceptions, (2) confirming the findings through focus group discussions with all participants, and (3) verifying the consistency of each participant's statements in various interview opportunities. The second stage carried out technical triangulation through: (a) matching interview data with direct observation records of the three tutors during the learning process, (b) cross-checking participants' statements against official documents (lesson plans, reports, and teaching modules), and (c) cross-analyzing recorded activities with the research diary. The third stage involved a final confirmation process, during which a meeting was proposed for all participants to verify the correctness and accuracy of the data interpretation.

Data analysis in this study was carried out by following the method developed by Miles & Huberman (1992), which includes several stages, namely data collection, data reduction, data presentation, and conclusion drawing. The data collection process employed participatory observation techniques, in-depth interviews, and document studies to obtain a comprehensive understanding of tutor readiness in the implementation of E-PKBM. Data was collected systematically through field notes, transcribed interview recordings, and supporting documents, including lesson plans and teaching modules. All data were then stored in both hardcopy and digital formats to ensure security and facilitate ease of tracking (audit trail).

The data reduction stage involved selecting, focusing, and simplifying the raw data to extract core information relevant to the research focus. The researcher categorized the findings based on three main aspects: (1) communication self-efficacy, (2) institutional support, and (3) self-directed learning. Furthermore, the presentation of data in this study was packaged in the form of in-depth descriptive narratives to describe the findings related to tutors' readiness in implementing E-PKBM in PKBM Sanggar 21. The results of observations, interviews, and document analysis were parsed textually to understand various aspects of tutors' readiness in implementing E-PKBM. The process of concluding this study involved verifying the findings by applying the principles of source triangulation and technique triangulation. Source triangulation is done by comparing perspectives from various sources, such as statements from three tutors and the head of PKBM, to ensure data consistency. Meanwhile, technical triangulation was conducted by combining data from various data collection methods. Findings from interviews regarding technical constraints were rechecked through direct observation notes taken during tutor teaching sessions, as well as through document analysis, including lesson plans and learning evaluation reports. This approach enables researchers to view a phenomenon from multiple perspectives, thereby enhancing the validity of the findings.

RESULTS AND DISCUSSION

In the growing digital era, the implementation of e-PKBM is an unavoidable necessity. The transition from face-to-face learning, where tutors interact directly with learners through lecture and discussion methods, is now transforming into an online format (Utaminingtyas & Evitasari, 2022) Although face-to-face learning still exists, with the use of applications such as WhatsApp to support teaching and learning activities, new challenges arise in terms of tutors'

readiness to adapt to the e-PKBM method. Before the existence of the e-PKBM system, tutors and learners relied on instant messaging applications such as WhatsApp as a learning tool. This application served as a discussion space for tutors and students, as well as a platform for collecting assignments. However, over time, this method is no longer considered effective because information in the group is often overshadowed by incoming messages (Pohan & Isbianti, 2021). This causes many students to miss out on information, while tutors are overwhelmed in managing unstructured communication and scattered assignments. This condition highlights the limitations of learning through WhatsApp, particularly in terms of material organization, communication efficiency, and task accountability. Students who are not actively monitoring the group can easily miss important announcements, while tutors struggle to track learners' learning progress. Therefore, the transition to e-PKBM is an urgent need to create a more structured, transparent, and accessible learning system.

The design phase in this research is a critical stage in conceptualizing and designing the e-PKBM system as a solution to the limitations of WhatsApp-based learning methods. This stage involves structural planning to overcome the problems of hoarded information, difficulty tracking assignments, and unorganized communication ((Utaminingtyas & Evitasari, 2022; Wibowo & Sujarwo, 2022). The design of e-PKBM was created to ensure a centralized platform, featuring structured discussion forums, integrated task collection, and automatic notifications to prevent learners from falling behind. In addition, this phase includes the development of training modules for tutors to master the technical and pedagogical aspects of the new system, while considering psychological factors such as confidence and institutional support (Ahmad et al., 2021; Saepudin et al., 2022). With its holistic design approach, the technology transition is expected not only to address WhatsApp's weaknesses but also to create a more inclusive and scalable learning environment.

However, this transition will not necessarily go smoothly without tutors being ready to adopt the new system. This readiness is crucial so that the learning process can run effectively and efficiently, meeting the needs of students in the digital era (Tria Rahayu et al., 2023). Tutors' readiness for CBMS implementation depends not only on their technical skills, but also on various factors that influence their confidence and the support they receive (Ahmad et al., 2021). In this context, it is essential to understand how tutors can utilize existing resources to enhance the quality of their teaching in this format (Anjani et al., 2020). This study aims to describe tutors' readiness in facing this change, and how they can adapt well to the new learning environment. Thus, effective strategies can be found to support tutors in this transition process. As stated by several researchers, readiness to adopt new technology is highly influenced by various factors, including institutional support and individual ability to learn independently (Heriyanto et al., 2025). Therefore, this study will thoroughly examine the readiness of tutors in implementing e-PKBM, aiming to provide valuable insights for the development of more effective training and support programs in the future. By understanding tutor readiness, it is expected that the learning process at PKBM can run smoothly and provide maximum benefits for students.

Communication Self-efficacy (CSE) is part of the self-efficacy theory developed by Bandura (2008). This theory emphasizes that individuals' beliefs in their ability to perform specific tasks can influence their motivation, perseverance, and performance (Bandura, 2008). In an educational context, CSE includes the ability to speak in public, listen actively, and interact verbally and non-verbally. Tutors who have high CSE tend to be more confident in delivering material, interacting with learners, and managing class dynamics, both in face-to-face and online formats (Riska Aini Putri, 2023). Through interviews with three tutors at PKBM Sanggar 21 Watukumpul, it was found that, although tutors possess a high level of self-efficacy, they still face challenges in addressing complex questions from learners. The interview results describe that tutors feel confident in explaining the material, but they experience difficulties

when faced with more in-depth questions. Although they feel comfortable explaining basic material, they often feel unprepared to answer more specific or in-depth questions from learners. This suggests that although there is confidence in communication, additional training is still needed to strengthen the ability to answer more complex questions.

Tutor readiness is not only determined by the level of self-efficacy, but also by institutional support and the ability to learn independently (Hasanbasri et al., 2023). Institutional support, including training and the provision of adequate resources, is crucial for tutors' readiness to face more complex learning challenges (Rosidah et al., 2022). This study describes that support from PKBM plays a significant role in shaping tutors' readiness. If there is further training on how to respond to complex questions, this will significantly help develop their skills. Research by Marera (2022) emphasizes the importance of institutional support in building teachers' confidence and performance, which aligns with the findings in this study (Suprihartini et al., 2024). Furthermore, the observations noted that during the question-and-answer session, tutors tended to avoid questions considered difficult and preferred to return to material they had already mastered. This creates the impression that they are not fully prepared to deal with more complex interaction dynamics in learning. The study also found that tutors who received institutional support, such as additional training and access to educational resources, described improvements in their ability to answer more complex questions. This finding confirms that continuous professional development and institutional support are essential for tutors' readiness to face more complex learning challenges, as well as to ensure that they can utilize their Communication Self-efficacy effectively in the context of e-PKBM (Hakim et al., 2025). This study aligns with the findings reported by several researchers over the past five years. For example, Bachtiar et al. (2024) stated that self-efficacy plays a crucial role in influencing individual performance in educational contexts, including those involving technology-based learning. Although tutors have confidence in their communication skills, the challenge of answering complex questions suggests that self-efficacy alone is not enough to guarantee preparedness for diverse learning situations. Additionally, the importance of institutional support in building tutors' confidence and enhancing their performance has also been identified in the literature. Without adequate support, tutors may feel trapped in situations where they cannot provide learners with satisfactory answers. Research by Ananda & Mulhamah (2024) also highlighted that self-directed learning contributes to teachers' readiness to face complex learning challenges, supporting the argument that tutors need to be trained to answer more in-depth questions.

Overall, the results of this study indicate that Communication Self-efficacy plays a significant role in tutors' readiness to implement e-PKBM. However, to maximize this potential, continuous training and strong institutional support are required. Tutors who are actively engaged in self-development and have access to sufficient educational resources tend to be better prepared to face complex learning challenges. In this context, it is essential to develop training programs that not only focus on enhancing communication skills but also on strategies for addressing complex questions. Research by Nur Efendi et al. (2023) states that confidence in teaching ability can be enhanced through relevant experience and training. Therefore, a well-designed training program can help tutors feel more confident and competent in answering more in-depth questions. Furthermore, research by Alenezi et al. (2023) states that collaboration between tutors and educational institutions can create a more supportive learning environment. By building a strong support network, tutors can share experiences and strategies, which in turn can strengthen their self-efficacy. This finding aligns with the results of this study, which indicate that institutional support is crucial for tutor readiness (Ahmed & Opoku, 2022).

Based on the results of data analysis regarding tutors' readiness in implementing E-PKBM with the indicator of institutional support, it is revealed that the support provided by

educational institutions greatly influences their motivation and readiness in operating this learning system. Through interviews conducted with several tutors, many stated that the training provided by the institution prior to the program's implementation greatly helped them understand how the platform works. Research by Canals & Al-Rawashdeh (2019) stated that institutional support plays a crucial role in motivating tutors to utilize technology in learning. The training should not only cover the technical aspects of use but also include strategies to deliver material effectively through digital media. This finding is in line with Geng et al. (2019) research, which emphasizes the importance of comprehensive training for tutors for their teaching effectiveness. In addition, tutors benefited from the guidance and resources provided by the institution, which enabled them to access information related to the platform's use more easily. However, some tutors also pointed out that the support provided still needs improvement. Research by Ningsih et al. (2022) revealed that tutors often feel unprepared when facing unexpected technical obstacles, and this can disrupt the teaching process. They want more in-depth follow-up training sessions, particularly in addressing technical issues that may arise during the learning process. This leads to the conclusion that, despite initial training, ongoing training is necessary to ensure tutors can overcome any challenges that arise.

Moral support from the institution is also an important factor expressed by tutors. Research by Ramzan et al. (2023) stated that recognition of tutors' efforts and achievements can encourage them to use E-PKBM more effectively. Some tutors stated that awards or recognition from the institution can strengthen their confidence in teaching online. Research by Plak et al. (2023) also stated that recognition from the institution contributes positively to tutor motivation, which in turn can affect teaching quality. Thus, recognition and appreciation from the institution are important elements in creating a supportive environment for tutors. On the other hand, some tutors feel that communication between tutors and the institution needs to be improved. Some of them want a more effective communication channel to convey feedback or complaints related to the use of E-PKBM. This finding aligns with the research of El Galad et al. (2024), which emphasizes the importance of effective communication in supporting the learning process. Effective communication is essential so that institutions can immediately respond to the needs and challenges faced by tutors in the learning process. Research by Nguyen (2021) also confirmed that responsive institutional support can help tutors overcome various obstacles that arise during online learning. In addition, continuous technical support is also expected to be provided by the institution. Tutors want a technical team that is ready to help them when they experience difficulties using the platform, so that they do not feel overwhelmed when facing problems. Research by Al-Said (2023) stated that adequate technical support is essential for tutors' readiness to implement learning technology. Thus, comprehensive and continuous institutional support is needed to ensure tutors' readiness to implement this learning system optimally.

Furthermore, the importance of collaboration between tutors and institutions in creating a supportive learning environment cannot be overlooked. Research by Islam et al. (2018) states that good collaboration can enhance tutors' self-efficacy and foster a more positive learning atmosphere. When tutors feel supported by the institution, they are more likely to innovate in teaching methods and be more open to using new technologies. Additionally, research by Miller et al. (2023) states that confidence in teaching ability can be enhanced through relevant experience and training. Therefore, institutions need to create training programs that not only focus on technical aspects but also the development of interpersonal and communication skills necessary for online teaching. With this holistic approach, tutors will be better equipped to address the challenges that arise in implementing E-PKB M. Research by Abdel Meguid et al. (2017) also emphasizes the importance of continuous professional development in enhancing tutors' readiness to face complex learning

challenges. In this context, institutions need to provide access to adequate educational resources, including relevant training materials and responsive technical support. This will help tutors feel more confident and competent in using E-PKBM, as well as the quality of teaching they provide. Additionally, research by Rubalcaba (2022) states that strong institutional support can foster teachers' confidence and performance. With adequate support, tutors will be better able to overcome various obstacles that arise during the learning process. This research aligns with the interview results that describe tutors who receive support from the institution as being more prepared to face complex learning challenges. Therefore, institutions must continue to invest in the development of training and support programs that enhance tutors' abilities.

Based on the analysis of data regarding the readiness of tutors for implementing E-PKBM with the self-directed learning indicator, it was revealed that tutors recognize the importance of developing self-directed learning skills, both for themselves and their students. Through the interviews conducted, many tutors expressed that this system provides them with the opportunity to explore the material more deeply and independently. Research by Rabo & Hashaikeh (2021) states that tutors who possess self-learning skills tend to be more effective in managing online learning. With access to various resources and materials uploaded on the platform, tutors feel more capable of enriching their knowledge and the quality of their teaching. These findings align with Bailenson et al. (2020), research, which emphasizes that access to quality resources can enhance teaching effectiveness. However, challenges arise when they have to encourage students to develop an independent learning attitude. Some tutors noted that not all students have the same motivation to learn independently. Research by Alenezi (2023) It was also found that students' motivation in self-directed learning varies significantly, which can impact learning outcomes. Some students find it challenging to manage their time and maintain discipline when completing assigned tasks. In this context, the tutor strives to create a supportive environment that motivates learners to study independently. They employ various strategies, such as providing constructive feedback and creating engaging tasks, to encourage learners to feel more involved in the learning process. Research by Taylor et al. (2020) states that effective feedback can strengthen students' motivation and engagement in learning.

Additionally, tutors recognize the need to provide more in-depth guidance on effective self-study methods. Research by Shofwan et al. (2021) emphasizes the importance of proper guidance to help students develop independent learning skills. With the right approach, students can more easily adapt to this technology-based learning method. Some tutors expressed a need to provide clear guidance on how students can optimally utilize E-PKBM. This includes instructions on accessing materials, completing assignments, and finding additional relevant information. By providing proper guidance, students can more easily adapt to this technology-based learning method, a finding supported by Suminar et al. (2021), who emphasize the importance of guidance in online learning. Support from the institution is also considered important in fostering a culture of independent learning. Research by T Septi Dian et al. (2023) emphasizes that strong institutional support can influence the motivation of tutors and learners to engage in self-directed learning. Tutors hope for training programs that can help them develop independent learning skills, both for themselves and for their students. With proper training, tutors can be better prepared to face the challenges of implementing this learning system and encourage students to be actively engaged in the learning process. Research by Maya Sahila et al. (2023) suggests that practical training can enhance tutors' readiness to teach, which in turn will positively impact the quality of learning.

The results of this study describe that self-directed learning is a crucial aspect of tutors' readiness to implement E-PKBM in equivalency education programs. Although many tutors find assistance from this platform, there are still challenges in encouraging students to develop

a self-learning attitude. Research by T. A. Ananda & Shofwan, (2023) also emphasizes that the understanding and skills of tutors in this regard are crucial for significantly enhancing the quality of learning. Therefore, institutions need to provide ongoing support, including adequate training and resources, so that tutors can be more effective in encouraging students to learn independently. Thus, the readiness of tutors to implement this system not only depends on their skills but also on their ability to create a supportive learning environment that motivates students to be actively engaged in the learning process.

Furthermore, the importance of developing self-directed learning skills can also be seen from the perspective of lifelong learning. Research by Utami & Shofwan (2024) suggests that individuals with self-directed learning skills tend to be more capable of adapting to the changes and challenges they face in life. In the context of education, tutors who encourage students to learn independently not only help them complete academic tasks but also prepare them to become independent learners in the future. Research by Isnawijayani et al. (2022) highlights the significance of self-directed learning in achieving sustainable personal and professional development. Therefore, tutors need to integrate the principles of self-directed learning into their teaching, enabling learners to develop the skills necessary to succeed in an ever-changing world. Additionally, tutors can also leverage technology to support the process of self-directed learning. Research by Haryaningsih et al. (2022) describes that the use of technology in learning can strengthen student engagement and motivation. By utilizing the interactive features available in E-PKBM, tutors can create a more engaging learning experience and support students in developing independent learning skills. For example, tutors can use discussion forums, online quizzes, and multimedia materials to encourage students to actively participate in the learning process. This finding aligns with the research by Anjani et al. (2020), which states that technology can be an effective tool for enhancing student engagement in learning (Putri & Widyana, 2021).

Based on the results of the discussion above, it can be concluded that, prior to the implementation of e-PKBM, instant messaging application-based learning, such as WhatsApp, had significant limitations in terms of material organization, communication efficiency, and task accountability. Previous research shows that this method is often unstructured, causing important information to be hoarded, and tutors have difficulty tracking learners' learning progress (Utaminingtyas & Evitasari, 2022). This condition highlights the need for a more integrated learning system, such as e-CBM, to overcome these weaknesses. However, the transition to e-PKBM will not necessarily succeed without tutor readiness, which is influenced by technical factors, institutional support, and self-learning ability (Ahmad et al., 2021; Hasanbasri et al., 2023). Previous studies have also revealed that although tutors have high communication self-efficacy, they still face challenges in handling complex questions, suggesting the need for continuous training. (Wibowo & Sujarwo, 2022). In addition, institutional support, such as technical training, access to resources, and moral recognition, was found to be key to tutor readiness, as found in Canals & Al-Rawashdeh (2019) and Saepudin et al. (2022) studies. This finding is in line with the literature that emphasizes the importance of collaboration between tutors and institutions to create adaptive learning environments (Moh Faidol Juddi et al., 2019). Thus, although e-CBM offers a solution to the limitations of conventional methods, its success is highly dependent on tutor readiness supported by holistic training, adequate resources, and responsive communication systems. The implementation of e-CBM should be accompanied by a sustainable approach to ensure tutors are not only able to master the platform but also manage the complex learning dynamics effectively.

CONCLUSION

Based on the research results regarding tutor readiness in the implementation of e-PKBM, it can be concluded that the transition from face-to-face learning to an online format requires readiness that not only depends on technical abilities but also on institutional support and the development of self-learning skills. Tutors with strong Communication Self-efficacy are more confident in delivering material, but they still face challenges in answering complex questions from learners. Support from the institution, such as comprehensive training and adequate resources, is crucial for tutors' readiness to face more complex learning challenges. Additionally, the importance of guidance in developing independent learning skills for students is also highlighted, where tutors need to create an environment that supports and motivates students to learn independently. The use of technology in learning can encourage student engagement, so tutors are expected to utilize the interactive features available in E-PKBM to create a more engaging learning experience. Thus, the readiness of tutors to implement e-PKBM is greatly influenced by institutional support, continuous training, and their ability to encourage learners to develop independent learning attitudes.

Based on the findings of this research, it is recommended that educational institutions provide ongoing and comprehensive training programs for tutors, which not only cover the technical aspects of using E-PKBM but also strategies to enhance Communication Self-efficacy and independent learning skills. This training should include follow-up sessions that focus on addressing technical issues and developing the interpersonal skills necessary for online teaching. Additionally, institutions should establish effective communication channels between tutors and management to ensure that tutors' feedback and challenges can be addressed promptly. Moral support, such as recognition of tutors' efforts and achievements, also needs to be enhanced to motivate them. Ultimately, it is crucial for tutors to effectively utilize technology in the learning process, leveraging the interactive features available in E-PKBM to enhance student engagement. With these steps, it is hoped that the learning process at PKBM can run more effectively and provide maximum benefits for the students.

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