

The Readiness Level of Primary School Teachers Towards the Implementation of Classroom-Based Assessment (PBD)

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Abstract

This study aims to investigate the readiness level of primary school teachers in Malaysia towards the implementation of Classroom-Based Assessment (PBD). As PBD plays a critical role in the Malaysian education system, enabling continuous assessment of students' progress, the success of its implementation largely depends on teachers' knowledge, skills, and their perceptions of Malaysia's PBD training courses. This study aims to evaluate the readiness level of primary school teachers in implementing PBD, focusing on their knowledge, skills, and perceptions towards PBD training courses. This survey study adopts a quantitative design, utilizing a questionnaire as the data collection instrument. Findings will help inform education policymakers on the necessary support and training programs needed to ensure effective PBD implementation. Furthermore, this study will offer practical recommendations for schools and teacher educators to enhance teachers' readiness, ultimately contributing to improved student outcomes and a more dynamic educational environment in Malaysia.

Keywords: Classroom-Based Assessment, Teacher Readiness, Primary Education, Knowledge, Skills, Training Programs.

Introduction

In the context of Malaysia's evolving educational landscape, Classroom-Based Assessment (PBD) has emerged as a pivotal tool in promoting a more holistic approach to student evaluation. Unlike traditional forms of assessment, PBD aims to provide a comprehensive picture of students' learning progress through continuous assessment. This shift aligns with Malaysia's broader educational goals of fostering critical thinking, problem-solving, and the application of knowledge in real-world scenarios. For primary school teachers, the implementation of PBD represents a significant shift in pedagogical practice, as it not only involves assessing students' cognitive skills but also their socio-emotional and behavioral development. As educators, teachers play a crucial role in facilitating this transformation, and their readiness to embrace and implement PBD is central to its success.

The Malaysian Ministry of Education has placed a strong emphasis on PBD as part of its effort to move away from a highly exam-oriented system towards a more balanced and flexible

assessment model. This model is designed to meet the diverse learning needs of students by assessing their understanding continuously rather than relying solely on high-stakes examinations. However, the transition to PBD is not without challenges, particularly for teachers who must adapt their instructional methods, develop new assessment tools, and participate in ongoing professional development to effectively carry out these assessments. Teachers' readiness, therefore, encompasses their knowledge of PBD, the skills required to implement it, and their perceptions of its value in enhancing student learning outcomes.

Despite the Malaysian government's efforts to support teachers through professional development programs and training workshops, there is still limited research that explores the actual readiness of teachers to implement PBD in primary schools. Factors such as the adequacy of training, teachers' familiarity with PBD principles, and their ability to integrate these assessments into everyday classroom practices are crucial in determining the success of PBD. Additionally, teachers' perceptions of the relevance and effectiveness of PBD training courses could influence their willingness and ability to implement these assessments with fidelity.

This study aims to fill the gap in the literature by evaluating the readiness of primary school teachers in Penang to implement PBD. By focusing on key aspects such as knowledge, skills, and training, this research seeks to provide a comprehensive understanding of the factors that impact teachers' ability to carry out PBD effectively. The findings from this study will not only provide valuable insights for policymakers in refining teacher training programs but also serve as a guide for schools and educational leaders in supporting teachers throughout the implementation process. Ultimately, improving teachers' readiness to implement PBD can lead to more effective teaching and learning practices, contributing to better educational outcomes for Malaysian students.

Literature Review

Classroom-Based Assessment (PBD)

Classroom-Based Assessment (PBD) has emerged as a fundamental element in the learning process, emphasizing the critical role assessment plays in evaluating students' progress and guiding educators in enhancing their teaching practices. According to Mansor et al. (2020), assessment is integral to student learning, providing valuable insights into students' strengths and weaknesses. This understanding allows teachers to tailor their instruction effectively, making assessment a vital part of the educational process. Tosuncuoglu (2018) further supports this notion by highlighting that assessment enables educators to gauge their students' skill levels and knowledge, reinforcing its importance in the classroom.

PBD, as described by the Curriculum Development Division (2019), is a continuous process conducted by teachers during the teaching and learning sessions (PdP). This approach collects information on students' development, progress, abilities, and mastery of the curriculum goals. In Malaysia, PBD has been implemented to provide a comprehensive evaluation of student learning, helping educators to identify individual learning needs and subsequently plan appropriate teaching strategies. This ongoing assessment framework not only highlights student achievements but also pinpoints areas that require additional support, facilitating a more personalized learning experience.

Moreover, PBD is characterized by its authentic and holistic nature, focusing on students' overall development rather than merely their performance in examinations. As Nurul Hada

and Anuar (2022) assert, PBD necessitates that teachers assess students comprehensively across cognitive, physical, emotional, and spiritual domains. This multifaceted approach to assessment not only enriches the learning experience but also aligns with contemporary educational paradigms that advocate for developing well-rounded individuals. The Curriculum Development Division (2016) emphasizes that the information gathered through PBD is not solely based on examination grades; it also contributes to improving the overall teaching and learning process, thereby aiding both parents and schools in planning follow-up actions to enhance students' mastery and achievement.

The transformation of the educational system in Malaysia, centered on PBD, reflects the need to produce a generation capable of critical thinking, innovation, and problem-solving—skills vital for navigating the challenges of the 21st century. Therefore, the effectiveness and success of PBD heavily depend on the commitment and readiness of teachers to embrace this change. Educators are not merely evaluators; they serve as facilitators, guiding students through their learning processes. This shift requires teachers to possess a deep understanding of PBD principles, skills in planning and executing formative assessments, and a positive attitude towards educational reforms.

In the Malaysian context, while PBD has been introduced to enhance educational effectiveness and foster meaningful learning, successful implementation necessitates teachers who are not only knowledgeable about the concept but also prepared in terms of skills, attitudes, and knowledge. According to Yildizli (2020), the planning of PBD implementation at the school level includes assessment techniques for students, the frequency of assessments, assessment activities, and the timing of assessments. Loo et al. (2023) also stress that teachers' responsibilities include planning PBD based on the Curriculum and Assessment Standard Document (DSKP), executing assessments in the classroom, recording students' mastery levels, and engaging in self-assessment to refine their teaching practices. Ensuring quality implementation of PBD is essential to guarantee that assessment data accurately reflects students' learning development and mastery levels.

In summary, the role of teachers in implementing PBD within Malaysia's education system cannot be overstated. Effective assessment requires a profound understanding of proper assessment techniques, alongside teachers' comprehensive knowledge and readiness regarding educational goals and the diverse needs of their students. Therefore, this study is crucial in examining the readiness level of primary school teachers for implementing PBD, aiming to identify appropriate solutions to enhance teachers' assessment knowledge and skills. This survey study is anticipated to improve teachers' assessment capabilities, ultimately leading to a higher quality of classroom assessments in Malaysia. Addressing these needs will facilitate the development of competent educators who can foster significant learning experiences, preparing students for future challenges.

Teachers' Knowledge of PBD

Teachers' knowledge of Classroom-Based Assessment (CBA) is a cornerstone for its successful integration into the educational framework of Malaysian primary schools. As the landscape of assessment evolves, it is crucial that teachers are equipped with the necessary knowledge to implement CBA effectively. Previous studies, including the work of Norazilawati Abdullah

et al. (2020), highlight a troubling gap in teachers' understanding of the assessment principles outlined in the Document Standard Curriculum and Assessment (DSKP). This lack of knowledge directly correlates with a failure to accurately determine students' mastery levels, leading to biased reporting and an inability to recognize students' true potential (Yuh & Kenayathulla, 2020).

Moreover, the frequent alterations in educational policies and assessment frameworks often leave teachers feeling perplexed and resistant to adopting new practices. Arumugham (2020) asserts that the complexity of implementing performance standards from the DSKP has led to confusion among educators, which can impede their readiness to embrace CBA. The lack of foundational knowledge is further exacerbated by a tendency to conflate formative and summative assessment practices. Teachers may struggle to differentiate between these approaches, limiting their ability to utilize CBA effectively within the classroom context.

In light of these challenges, it is essential to emphasize the need for comprehensive teacher training programs that focus on developing a robust understanding of assessment principles. A well-structured training program must provide educators with both theoretical knowledge and practical applications of CBA. Educators must grasp the importance of formative assessment not just as a grading tool but as a means to foster student learning and growth. In this respect, teachers need to understand that CBA encompasses a range of assessment methods, including observational assessments, student portfolios, and peer assessments, which all contribute to a holistic view of student learning.

Furthermore, there is a critical need for professional development that encourages ongoing learning. Continuous engagement with the principles of CBA allows educators to refine their understanding and adapt their practices over time. This can include participation in workshops, peer observations, and collaborative planning sessions where teachers can share insights and strategies. By fostering an environment of continuous learning, schools can help ensure that teachers remain confident and competent in their assessment practices.

Teachers' Skills in Conducting PBD

The effective implementation of PBD is contingent upon teachers possessing the requisite skills to design and conduct assessments that accurately measure student learning outcomes. Aniza (2014) emphasizes that advanced skills in assessment design are imperative for educators to derive meaningful insights from PBD processes. However, many teachers tend to revert to simplistic feedback mechanisms, providing vague comments such as "Good" or "Needs Improvement," rather than offering detailed, constructive criticism that can guide student learning (Nurul Huda & Anuar Ahmad, 2022). This trend may stem from a lack of training in creating robust assessment tools and a failure to recognize the importance of nuanced feedback.

Noorzeliana (2016) underscores the inadequacy of training programs, revealing that many teachers feel unprepared to apply what they have learned in practical settings. This gap in training not only breeds insecurity among educators but also results in inconsistent assessment practices across classrooms. Gengatharan and Azali (2019) further illustrate the challenges teachers face in balancing multiple responsibilities, including administrative tasks and co-curricular activities, which often leads to a neglect of effective PBD implementation.

The constraints imposed by heavy workloads can create an environment where teachers are unable to devote sufficient time and energy to conduct assessments systematically and thoughtfully.

A critical examination of the skills needed for conducting PBD reveals that educators must be adept at various aspects of assessment design, including crafting relevant questions, selecting appropriate assessment formats, and analyzing student responses. For instance, teachers should be proficient in developing rubrics that delineate clear criteria for student performance, thereby facilitating more objective and reliable assessments. Furthermore, educators must learn to employ diverse assessment methods, such as formative assessments, self-assessments, and peer assessments, to provide a comprehensive picture of student learning.

The incorporation of technology in assessment practices is also a vital consideration in today's digital age. Teachers should possess the skills to utilize various digital tools and platforms for conducting assessments, analyzing data, and providing feedback. For example, the use of online assessment platforms can streamline the process of gathering and analyzing student performance data, allowing educators to make informed decisions regarding instruction. Thus, it is crucial for teacher training programs to include a technological component that enhances educators' capabilities in conducting PBD effectively.

Teachers' Perceptions of Malaysia's PBD Training Courses

The perceptions of teachers regarding PBD training courses play a pivotal role in their readiness and willingness to implement PBD in their classrooms. Many educators have reported feeling inadequately prepared despite having participated in various training programs. Research conducted by Masfarizan and Mohammed Yusoff (2020) reveals that the training materials and activities often fail to engage teachers meaningfully, resulting in a lack of alignment with the developmental needs of their students. This misalignment can cultivate skepticism regarding the efficacy of PBD as a replacement for traditional assessment systems, leading teachers to cling to established practices that may not serve their students well.

Sh. Siti Hauzimah (2019) adds that the confusion surrounding PBD implementation often arises from ambiguous training content and expectations. Teachers who lack clarity regarding the objectives and applications of PBD may experience reluctance in adopting this assessment approach. Yeh and Mohd Zahuri (2018) argue that for teachers to feel confident in implementing PBD, they must possess a deep understanding of the assessment practices involved. However, many educators express concerns about their preparedness due to insufficient training in the specific methodologies associated with PBD.

Critically, this situation highlights the necessity for revising and enhancing PBD training programs to ensure they are relevant, practical, and directly address teachers' needs. Training sessions should prioritize hands-on experiences, allowing educators to engage with assessment tools and methodologies in real classroom contexts. For instance, workshops that involve collaborative assessment design, peer feedback sessions, and case studies of successful PBD implementation can empower teachers with the skills and confidence they need to embrace this approach fully.

Additionally, ongoing support and professional learning communities can significantly impact teachers' perceptions of PBD. By fostering a collaborative environment where educators can share experiences, challenges, and successes, schools can help demystify the PBD process and promote a culture of continuous improvement. This support system can enhance teachers' beliefs in the value of PBD, ultimately increasing their confidence in its successful implementation. Teachers must possess a high level of knowledge and equip themselves with a mastery of the advantages and techniques of each method of implementation or teaching strategy they intend to use. Participating in courses, seminars, workshops, or sharing sessions from various parties can enhance a teacher's knowledge and help them become confident and professional educators (Arumugham, 2020). So, ongoing professional development is essential for teachers, as it not only broadens their skill set but also inspires them to adopt innovative teaching practices. Engaging in such activities can significantly impact their effectiveness in the classroom and ultimately benefit their students' learning experiences.

Theoretical Framework: Social Interdependence Theory and Constructivism

Social Interdependence Theory

Social Interdependence Theory, developed by Kurt Lewin and refined by Morton Deutsch and David Johnson, emphasizes the interconnectedness of individuals within a group. This theory posits that the outcomes of individuals are dependent on the actions of others within the group, which leads to either positive or negative interdependence. In the context of PBD, Social Interdependence Theory can provide insights into how teachers' collaboration and shared responsibility influence the effectiveness of PBD implementation.

In the educational setting, positive interdependence is a vital aspect of the learning and teaching environment. For effective PBD, teachers must work collaboratively, as their collective efforts and understanding of assessment practices determine the success of PBD in their classrooms. As noted by Gengatharan and Azali (2019), the success of PBD is often hampered when teachers face challenges such as workload and lack of time, which could be alleviated through cooperative efforts. When teachers collaborate, share best practices, and support one another, they are more likely to overcome these obstacles and implement PBD successfully.

Moreover, the collaborative nature of PBD aligns with Social Interdependence Theory by fostering a cooperative atmosphere among teachers and students. Johnson & Johnson (2009) suggest that positive interdependence leads to higher motivation and better learning outcomes. For teachers, this cooperation not only enhances their ability to manage assessments but also improves their emotional readiness by creating a support network, thus fostering a positive attitude toward PBD implementation. Teachers' readiness, in this context, is influenced by their belief that they are not implementing PBD in isolation but as part of a broader, supportive community, which bolsters their confidence and motivation (Hazuriana & Khairul, 2022).

From a critical perspective, while Social Interdependence Theory highlights the importance of collaboration, it may also present challenges in situations where there is negative interdependence. For instance, if one teacher's lack of readiness or understanding of PBD negatively impacts the group, it could hinder collective progress. Moreover, not all schools may have a culture of strong collaboration, which could lead to isolated practices and

inconsistent PBD implementation. Therefore, fostering a supportive, cooperative culture is essential for the theory's practical application in the PBD context.

Constructivism

Constructivism, largely associated with Jean Piaget and Lev Vygotsky, emphasizes that knowledge is actively constructed by learners based on their experiences. This theory is particularly relevant to PBD, as it shifts the focus from summative, exam-based assessments to formative, continuous assessments that reflect students' learning progress. PBD aligns with constructivist principles because it enables teachers to assess students based on their individual learning journeys and tailor their instructional strategies accordingly (Noriati, Boon, & Sharifah, 2015).

Constructivism suggests that teachers' knowledge and skills in implementing PBD are constructed through their own experiences, reflection, and active engagement in the assessment process. Teachers must engage in continuous professional development to refine their understanding and application of PBD. As pointed out by Liu and Li (2020), teachers need practical experiences in conducting assessments, as theoretical knowledge alone is insufficient for effective implementation. Training programs for PBD should, therefore, incorporate practical elements such as workshops, peer observations, and classroom simulations that allow teachers to experience and reflect on assessment strategies.

Furthermore, constructivism highlights the importance of social interactions in learning, which is crucial in the professional development of teachers implementing PBD. Vygotsky's idea of the Zone of Proximal Development (ZPD) is relevant here, as teachers can learn from colleagues who have more experience with PBD. Collaboration with peers and mentorship from experienced teachers provides the scaffolding that teachers need to develop their assessment skills. Teachers' readiness to implement PBD is thus enhanced when they engage in collaborative learning environments where they can share ideas, experiences, and challenges related to assessment (Hazuriana & Khairul, 2022).

From a critical standpoint, while constructivism advocates for individualized learning experiences, this approach could also present challenges in a standardized education system like Malaysia's. Teachers may struggle to balance the constructivist approach of catering to individual student needs with the standardized expectations of PBD reporting, especially if they lack sufficient time, resources, or support. This could lead to inconsistencies in how assessments are conducted and reported across different schools and classrooms, undermining the overall effectiveness of PBD.

Integration of Theories in PBD Implementation

The integration of Social Interdependence Theory and Constructivism offers a comprehensive framework for understanding the complexities of teachers' readiness in implementing PBD. Social Interdependence Theory emphasizes the role of collaboration and interdependence among teachers, suggesting that effective PBD requires a collective effort, where teachers rely on each other's knowledge and support to succeed. On the other hand, Constructivism highlights the importance of individualized teacher learning, stressing that teachers must actively construct their understanding of PBD through practical experiences, reflection, and interaction with their peers.

Together, these theories underscore that teachers' readiness for PBD is not solely based on individual knowledge or skill but is also shaped by the social and collaborative environments in which they operate. A teacher's ability to successfully implement PBD depends on their engagement with both the practical, hands-on aspects of assessment and the collaborative networks that provide support and shared learning experiences. The combination of these theoretical perspectives offers a robust understanding of how to enhance teachers' emotional, motivational, and professional readiness for PBD.

However, a potential critique of this integrated approach is the assumption that all teachers have access to the same level of collaboration and professional development opportunities. In reality, disparities in resources, training, and support across different schools could limit the effectiveness of these theories in practice. Additionally, while constructivist approaches promote personalized learning, the rigid demands of standardized assessments may conflict with the flexible, student-centered nature of constructivist teaching, creating tension in the implementation of PBD.

Methodology

To identify the readiness level of primary school teachers in the implementation of PBD, a survey study using a quantitative approach is deemed relevant to obtain accurate feedback from primary school teachers. Through quantitative research, the statistical data obtained provides an overview of the general patterns and trends regarding teachers' readiness for the implementation of PBD. The questionnaire allows researchers to collect data from a large number of respondents in a short time, saving time and effort. Furthermore, its high level of anonymity enables respondents to provide honest answers without concern, thereby enhancing the authenticity of the responses given.

The simple random sampling method was used by the researcher to collect samples. This method was chosen because it allows every individual in the population to have an equal chance of being selected as a sample, making the selection process more objective and reducing the risk of bias in the study. The respondents involved in the study comprised primary school teachers with various teaching experiences. This diversity is considered important as it enables the researcher to gain a broad and comprehensive perspective on teachers' readiness to implement PBD. By involving respondents with different experiences and backgrounds, the study can produce richer and more relevant data. By using an appropriate sampling method and involving diverse respondents, the data obtained from this study is expected to be more objective and representative. The analysis based on the data is also expected to be more reliable and convincing, as it is derived from a well-represented sample of the target population.

The data collection process is crucial in this quantitative research. In quantitative research, the data collection process plays a significant role as it allows researchers to gather numerical and statistical data needed for analysis. The quantity of data obtained explains a substantial part of the quantitative research process, where data is often closely related to quantitative concepts such as scores, values, or measurements that can be repeatedly measured. The questionnaire data will be analyzed using the Statistical Packages for the Social Sciences (SPSS) software version 29.0. This software is used to analyze all the data collected.

Questionnaire Instrument

This study utilized a questionnaire as the primary tool for collecting data and obtaining information from the respondents. In developing the questionnaire instrument, the researcher consulted several journals and articles from previous studies. Instruments created by other researchers were also referenced as a guide in constructing the questionnaire items. There are four sections in this questionnaire. Section A focuses on the respondents' demographics. Section B addresses teachers' readiness in terms of knowledge. Section C discusses teachers' readiness in terms of skills, and Section D relates to teachers' satisfaction with the training courses on PBD. There are 30 items in total across Sections B, C, and D. Likert scale questions with five response options were used to gauge the respondents' level of agreement with the presented items. Respondents were required to select a number from 1 to 5, reflecting their degree of agreement with each statement.

Table 1

Table of Contents for Questionnaire

Section	Content	Number of Questions	Answer Scale
A	Respondents' Demographics	5	Multiple Choice
B	Teacher's knowledge	10	Skala Likert
C	Teacher's skills	10	Skala Likert
D	Teachers' satisfaction with the training courses on PBD	10	Skala Likert
Total Number of Questions		35	

The researcher chose the questionnaire method because the use of various data collection methods in quantitative research is aimed at ensuring that the data obtained is comprehensive and reliable. The survey method through questionnaires can collect data from a large population in a relatively short time. This also means that the researcher must ensure that the method used for data collection is reliable and provides consistent results when repeated.

Pilot Study

A pilot study was conducted to develop the research instrument and test its suitability prior to its application in the main study. As noted by Mohd Syaubari and Kassim (2018), a pilot study serves as a critical step in survey research before distributing the questionnaire to respondents. This study will employ the method of internal consistency to establish the reliability of the measurement. Items in the questionnaire with high correlation values in the test indicators will be retained, while those with low correlation values and reliability will be deleted. The reliability of this study will be based on Cronbach's alpha coefficient, with values ranging between 0 and 1. The target is to achieve a coefficient between 0.8 and 0.9. To ensure the validity of the questionnaire used in this study, the questions will be adapted from previous research and will undergo expert review and revision.

Realibility

The validity and reliability of the questionnaire instrument play a crucial role in ensuring the overall quality of the study. In the context of quantitative research, the validity of the instrument refers to the extent to which the measurement tool accurately measures what it is intended to measure. This leads to the necessity of ensuring that each item in the instrument accurately assesses the desired construct or variable. This statement aligns with the study by Hair et al. (2019), which emphasizes that the validity and reliability of the questionnaire instrument are essential aspects in ensuring the quality of the research.

Following the data analysis from the pilot study, the researcher obtained a Cronbach's Alpha value of 0.885 for Section B, 0.943 for Section C, and 0.628 for Section D. The overall reliability score for the questionnaire items used in this study was determined to be 0.818. The Kappa Coefficient achieved a value of 0.680, indicating a good level of validity that is appropriate for the collection of research data (Bernard and Ryan, 2010).

Table 2

Croanbach Alpha value of the pilot study

Variable	Number of Items	Alpha Values
B	10	0.885
C	10	0.943
D	10	0.628
Total	30	0.818

The pilot study conducted as part of this research validated the reliability of the questionnaire instrument used for data collection. The high Cronbach's Alpha values obtained for Sections B (0.885) and C (0.943) demonstrate strong internal consistency, indicating that these sections effectively measure the knowledge and skills related to PBD. Although Section D recorded a lower reliability score (0.628), the overall reliability score of 0.818 suggests that the questionnaire is a reliable tool for assessing teachers' readiness. Furthermore, the Kappa Coefficient value of 0.680 reflects a satisfactory level of validity, ensuring that the data collected will be credible for informing future educational practices.

Conclusion

This study assessed the readiness level of primary school teachers in Malaysia regarding the implementation of Classroom-Based Assessment (PBD) and yielded several significant findings. First, some of the teachers reported feeling inadequately prepared to implement PBD effectively, primarily due to gaps in their knowledge and skills related to the assessment framework. Second, the pilot study revealed a notable discrepancy in training effectiveness; while teachers demonstrated strong internal consistency in knowledge and skills, their satisfaction with the training programs was lower, indicating that these courses may not adequately address their needs or provide actionable insights for effective implementation. Lastly, the research underscored the importance of continuous professional development, highlighting the necessity for ongoing support that fosters collaboration among educators.

Based on these findings, it is recommended that policymakers revise and strengthen training programs to align more closely with practical classroom applications of PBD, incorporating hands-on experiences and interactive workshops to empower teachers. Additionally, establishing professional learning communities within schools can facilitate collaboration, enabling teachers to share strategies and experiences related to PBD, which will enhance their understanding and efficacy in utilizing assessment practices that promote student learning. Future research should explore the long-term impacts of professional development on teachers' confidence and competency in PBD, as well as the resulting effects on student outcomes. By addressing these identified gaps, educational leaders can significantly improve PBD implementation, ultimately enhancing the overall quality of education for future generations.

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