Mudarrisa: Journal of Islamic Education Studies, 18(1), 2026: 49-69
P-ISSN: 2085-2061 | E-ISSN: 2641-3457
https://ejournal.uinsalatiga.ac.id/index.php/mudarrisa

The Effectiveness of Problem-Based Learning Model with Ice Breaking on Self-Confidence in Speaking Rumi at Primary School Students

Iis Nurasiah*[1], Jembar Kitri Fauziah[2], Annisa Aulia Faiqoh[3], Zihan Nur Halizah[4], Muhammad Rifqi Fauzi[5]
[1,2,3,4]Muhammadiyah University of Sukabumi, Indonesia
[5]Nirandon Wittaya School, Southern Thailand
*Coresponden Adress: iisnurasiah@ummi.ac.id

DOI: https://doi.org/10.18326/mudarrisa.v18i1.4917

Article history:
Received:
August 13, 2025
Revised:
June 2, 2026
Accepted:
June 4, 2026

ABSTRACT

Objectives: This research aims to find the implementation of Problem-Based Learnig with ice breaking and its effectiveness on self-confidence in speaking Rumi in sixth grade students at Nirandon Wittaya School in Thailand.

Method: This research used a quasi-experimental approach with a one-group pre-test post-test design. The participants consisted of 30 students selected through purposive sampling. Data were collected using a standardized self-confidence questionnaire and a speaking performance observation rubric and analyzed using descriptive statistics and a paired t-test.

Results: This research found five stages in implementing the Problem-Based Learnig model with ice breaking: 1) ice breaking, 2) presentation of contextual problems, 3) working in groups, 4) presenting results, and 5) reflection. This research concluded that the Problem-Based Learning model with ice breaking was effective in improving the confidence of sixth-grade students in speaking Rumi at Nirandon Wittaya School, Thailand.

Theoretical Contribution: The results of this research contribute to strengthening Bandura's Self-Efficacy Theory and the learning of *al-tiqu bi al-nafs* (self-confidence) and *izzah* (self-dignity) in Islamic education.

Implication: This research has implications for the importance of problem-based learning and ice breaking to build student's self-confidence in language learning.

Keywords:
Problem-based learning, Ice breaking, Rumi, Self-confidence, Madrasah Ibtidaiyah.

INTRODUCTION

Language plays a strategic role in human life, serving as a primary means of communication and a fundamental tool for shaping social and cognitive realities (Ellis, 2019; Vygotsky, 1978). Through structured patterns and semantic precision, language conveys information, expresses feelings, influences actions, and serves aesthetic purposes in cultural contexts (Purnamasari et al., 2016; Soyusiawaty & Aribowo, 2016). In education, language acts as a thinking tool that helps individuals construct knowledge and understand their environment. Language is essential for maintaining social identity and continuity as the primary medium for transmitting values, norms, and culture across generations (Gibson, 2019; Silverstein, 2022). Recent studies have shown that effective language use contributes to literacy development, critical thinking, and social interaction among students in the digital era (Hébert & Tabler, 2019).

Learning Rumi in Southern Thailand holds important historical, cultural, and religious value. As one of the main languages in Southeast Asia, Rumi functions not only as a communication tool across countries but also as an identity marker for the Muslim community (Rahman et al., 2024). The long history of interaction between the Rumi and Thai communities has contributed to linguistic diversity, including the emergence of various dialects (Isayah, 2019). In Narathiwat Province, where the Madrasah Ibtidaiyah Nirandon Wittaya School is located, Rumi plays a significant role in representing cultural and religious values. It is also an important medium for transmitting stories and knowledge across generations (Kantavong et al., 2017).

Mastery of the Rumi language, particularly in the spoken aspect, among elementary school students in this region faces significant challenges. One crucial challenge is students' low confidence when speaking or reading texts in Rumi. This phenomenon is particularly pronounced at Nirandon Wittaya School, where the majority of students are native Thai speakers. As a result, Rumi is not used as their daily language of communication outside the school environment, making minimal exposure and practice of Rumi outside the classroom a major obstacle (Joni, 2018).

This condition is influenced by a social environment that favors Thai as the primary language, making students reluctant to use Rumi in their daily lives.

The situation in the field is also influenced by a learning model that tends to be teacher-centered, where the teacher is the center of information and students are given less opportunity to actively participate in the learning process. The dominant lecture method often makes students passive recipients, hinders the development of speaking skills, and ultimately reduces their motivation and confidence in expressing ideas and reading texts in Rumi. In fact, self-confidence is an important characteristic that students must possess, because it influences learning outcomes and communication skills (Akbari & Sahibzada, 2020; Vaughan-Johnston & Jacobson, 2020).

Lack of self-confidence in students is often a major obstacle in learning Malay, which involves speaking skills. Therefore, developing student self-confidence is a crucial aspect that needs to be considered in Rumi language learning design (Abdullah. et al., 2025). Self-confidence is not only limited to the ability to perform in public, but also involves complex indicators such as belief in one's own abilities, optimism, objectivity, responsibility and rationality (Coe et al., 2025; Jerrim et al., 2024). In the context of speaking Malay, students must be confident in constructing vocabulary, dare to express it despite the potential for error, be optimistic in facing obstacles, and be objective in responding to the input. Students with strong self-confidence demonstrate all of these indicators, which are essential in second-language learning.

Various studies have shown that the Problem-Based Learning (PBL) model is effective in improving various aspects of student learning and character development. PBL positions students as active subjects in finding solutions to real-world problems, encouraging critical thinking, collaboration, and communication (Sasson et al., 2018; Susetyarini et al., 2022). In the context of language learning, PBL is highly relevant because it allows students to explore language meaningfully through real contexts, such as creating conversational dialogues, role-playing, or group presentations. These activities not only hone language skills, but also train the courage to appear and express opinions, which is very important for forming a

character of self-confidence. PBL also allows students to see the relevance of the language being learned in the real world, thereby increasing their intrinsic motivation (Djami et al., 2019; Jerrim et al., 2024; Latif et al., 2018).

Ice breaking strategies also play an important role in creating a conducive and enjoyable learning atmosphere. Ice breaking is a series of short, interactive activities designed to break the ice, reduce tension, and build connections between participants at the beginning or between activities (Dressel, 2020; Fitria et al., 2023). The implementation of ice breaking at the beginning of learning can reduce tension, eliminate awkwardness, and increase students' mental readiness to actively engage. The combination of PBL and ice breaking is expected to create a strong synergy, where ice breaking prepares students emotionally and socially, while PBL provides a framework for the deeper development of language skills and self-confidence.

PBL with ice breaking has been widely researched, but there is still limited research that specifically examines the effectiveness of the combination of the two in the context of learning Rumi as a second language in madrasas, especially to increase student self-confidence in a Thai-dominated environment. This lack of literature leaves a gap in practical solutions to overcome students' communication anxiety in multilingual settings. This research aims to fill this gap by conducting a systematic quantitative research to measure the impact of implementing a PBL learning model assisted by ice breaking on increasing the self-confidence of sixth-grade students at Nirandon Wittaya School in Southern Thailand.

The novelty of this research lies in its attempt to empirically examine the effectiveness of a combination of PBL with ice breaking in enhancing students' self-confidence through a systematic quantitative approach. This research not only fills the literature gap regarding the integration of cognitive and affective strategies in second language learning, but also provides a contextually relevant contribution to the development of pedagogical practices in multilingual madrasas (Islamic primary school), particularly at Nirandon Wittaya School, Southern Thailand. This research aims to find the implementation of PBL with ice breaking and its effectiveness on self-confidence in speaking Rumi in sixth grade students at Nirandon Wittaya School, Southern Thailand.

METHODS

Research Design

This research employed a quantitative approach with a quasi-experimental design to examine causal relationships without random assignment (Gopalan et al, 2020). A one-group pretest–posttest design was applied, where students' self-confidence in pronouncing Rumi was measured before (O_1) and after (O_2) the intervention. The treatment (X) involved the Problem Based Learning (PBL) model with ice breaking. The effectiveness of the intervention was determined by comparing the pre- and post-test scores.

Figure 1. One Group Pretest-Posttest (Ratminingsih, N.M. 2021)

Procedure

Stage 1: Pre-invtervention

The researchers introduced the research to 30 sixth-grade students and explained its objectives, benefits, and procedures to ensure ethical participation (Creswell & Poth, 2018). Students completed a self-confidence questionnaire and performed a short Rumi self-introduction, which was assessed by two observers. The results were combined as pre-test data through triangulation (Biesta, 2021).

Stage 2: Intervention

The intervention was conducted over four weeks (eight meetings, 90 minutes each) using PBL assisted by ice breaking. Each session included ice breaking, problem identification, group discussion, presentation, and reflection. The teacher acted as a facilitator to promote active participation and develop communication skills.

Stage 3: Post-intervention

Students completed the same questionnaire and performance assessment as a posttest. The results were compared with the pre-test scores to evaluate the effectiveness of the intervention.

Population and Sample

The population consisted of 120 sixth-grade students from Nirandon Wittaya School, Southern Thailand. A sample of 30 students was selected using purposive sampling based on the following criteria: sixth-grade level, native Thai speakers, and low self-confidence in speaking Rumi. The sample size was considered adequate for statistical analysis (Chang et al, 2019).

Data Collection

Data were collected using a self-confidence questionnaire and a rubric for speaking performance observation. The questionnaire consisted of 20 Likert-scale items (1–5) measuring indicators such as confidence, optimism, and responsibility. Content validity was confirmed by three experts, two Malay language experts and one education expert, with scores of 86, 89, and 90 (average = 88.33). Construct validity showed consistent factor loadings, and reliability testing yielded a Cronbach's alpha of 0.88. The observation rubric assessed speaking performance (e.g., fluency, articulation, and participation) using a scale of 1–5. It was validated by experts and demonstrated high inter-rater reliability with a Cohen's Kappa of 0.85 (Ahmad, et all, 2024).

Data Analysis

Data were analyzed using descriptive and inferential statistical analyses. The mean, standard deviation, minimum, maximum, and frequency distribution were used to describe the students' self-confidence scores. The Kolmogorov–Smirnov test confirmed that the data were normally distributed. Therefore, a paired sample t-test was applied to examine differences between pre-test and post-test scores and determine the effectiveness of the intervention (Verma & Abdel-Salam, 2019). In addition, Cohen's d was used to measure effect size, and percentage gain analysis was conducted to identify the proportion of students who showed improvement.

DISCUSSION

Implementation of Problem-Based Learning Model with Ice Breaking

The learning steps in this research refer to the Problem-Based Learning model integrated with ice breaking. The activity begins with a 10–15-minute ice breaking

session to create a pleasant learning atmosphere, build camaraderie, and boost students' initial self-confidence. These ice breaking activities are strategically designed to reduce students' anxiety and fear of making mistakes, which are common barriers in second language learning. By creating a relaxed and supportive environment at the beginning of the lesson, students are more emotionally prepared to actively participate in the learning process.

Integrating a 10–15 minute ice breaking session before Problem-Based Learning (PBL) strategically lowers students' "affective filters" by reducing classroom anxiety (Turner & Harder, 2018). This supportive environment directly mitigates the fear of negative evaluations and mistakes, which are common barriers to second-language communication (Subekti, 2018). Consequently, freeing students from nervous tension prevents cognitive depletion (Hwang, 2025) and fosters the emotional readiness and self-efficacy (Bandura, 1997) required to actively collaborate and solve complex problems.

Next, the teacher presents a contextual problem close to students' lives as a problem identification stage to stimulate curiosity and critical thinking. This stage enhances engagement and motivation because the problems are deeply relevant to students' daily experiences, making learning more meaningful. Furthermore, it encourages students to connect their prior knowledge with new information, allowing them to apply academic concepts to practical situations outside the classroom. This process ultimately transforms students from passive recipients of information into active problem solvers, preparing them for real-world challenges.

Integrating real-world issues into instructional practices is vital for converting abstract theoretical concepts into tangible, applicable learning experiences (Haryani, 2018; Iswandari, 2017). In this regard, stimulating students' curiosity at the beginning of a lesson is equally essential to foster cognitive readiness and maintain continuous engagement throughout the learning process (Reza et al., 2018; Sugrah, 2019). Furthermore, cultivating critical thinking via problem-based tasks empowers students to analytically evaluate information and make independent logical decisions, while simultaneously driving active participation to achieve profound educational outcomes (Suwardi et al., 2025; Wahyu et al., 2016)

Students then work in small groups to discuss the problem, seek information, and develop solutions through dialogue or communication scenarios. Collaborative group work allows students to exchange ideas and support each other, gradually building confidence, while peer interaction creates a safe space for practicing speaking skills. This setting ensures that every student takes responsibility for their collective output, maximizing classroom participation and transforming abstract language rules into practical, fluid communication.

Group discussions and collaborative learning are vital for stimulating active dialogue and mutual support while building students' self-confidence (Bandura, 1997; Hengki et al., 2017; Retnawati et al., 2018). Creating a psychologically safe environment further reduces performance anxiety, effectively lowering affective filters to optimize students' overall communicative competence (Dey et al., 2024; Setiawan, 2019). Through this interaction, learners transition into active communicators who navigate language challenges together and view mistakes as valuable milestones in the learning process.

The results of the discussion are presented through simulations or role-plays, allowing students to practice their speaking skills actively and strengthen their communicative competence in meaningful contexts. Role play simulates real-life situations, increasing students' readiness to communicate while fostering a sense of accountability through immediate feedback. By embodying different characters, learners internalize linguistic nuances that are often overlooked in traditional rote-learning exercises.

The implementation of simulations and role-plays provides critical benefits by offering dynamic contexts that mirror real-world interactions (Mamaghani et al., 2024; Tegler et al., 2025). This practice is essential because active speaking improves oral fluency, while articulating ideas clearly refines students' cognitive processing and logical expression (Habler, 2025; Mahmud & Nur, 2018). Ultimately, extending communication beyond classroom walls is vital for fostering authentic language acquisition and real-world readiness (Sukirlan et al., 2023; Turner & Harder, 2018).

In the final stage, a joint reflection between the teacher and students was conducted to evaluate the learning process, provide feedback, and strengthen their

confidence in using Rumi. This reflection helps students recognize their progress, identify areas for improvement, and develop a positive attitude toward learning the language. Furthermore, this collaborative assessment reinforces the classroom as a supportive community which learning is viewed as a shared journey, empowering students to take greater linguistic risks in future lessons.

Engaging in joint reflection allows teachers and students to collaboratively analyze the learning process (Tholibon et al., 2022). This phase is essential because systematic evaluation ensures instructional quality and measures whether the learning objectives are met (Pasini et al., 2026). Furthermore, constructive feedback bridges the gap between current performance and desired goals (Lucero et al., 2018). Ultimately, enabling students to recognize their progress and self-identify areas for improvement develops metacognitive awareness and fosters autonomy (Yusuf, 2017).

The PBL model with ice breaking in this research follows five phases; 1) ice breaking, 2) presenting contextual problems, 3) working in groups, 4) presenting results, and 5) reflection. In conclusion, these phases integrate psychological conditioning and cognitive development. The defining characteristic is the strategic insertion of ice breaking at the start and during transitions to the focus and reduce anxiety. This creates a high-energy atmosphere without compromising the rigorous critical thinking essence of the PBL model.

The PBL framework with ice breaking in this research aligns with the conventional syntax of educational experts. Peraturan Menteri Pendidikan dan Kebudayaan (2016) outlines the standard problem-based learning phases comprising problem orientation, organization, investigation guidance, artifact development, and evaluation within national educational standards. Similarly, Sumarni et al. (2016) asserted that PBL focuses on problem orientation, organization, investigation, artifact development, and evaluation. These similarities demonstrate that ice breaking does not alter the core structure of the PBL, but strengthens students' psychological readiness before entering the scientific investigation phases.

The PBL framework with ice breaking in this research presents distinct operational differences from other expert syntaxes. Tan (2004) focuses on problem finding and peer evaluation, which is structured through five comprehensive stages:

meeting the problem to identify initial facts, conducting problem analysis to formulate learning issues, engaging in discovery and reporting via independent research, formulating solutions collaboratively, and concluding with an overview, integration, and reflection phase that heavily incorporates peer evaluation. This sequential structure emphasizes students' autonomy in mapping out the problem space and critically assessing their peers' collaborative contributions throughout the problem-solving process.

In contrast, Xiaojing et al. (2025) directly initiate problem statements to trigger instant cognitive debate. Their operational model begins by presenting students with a complex, real-world problem without prior preparation, followed by a systematic process in which students list what is known and what needs to be known, independently research the identified knowledge gaps, and finally reconvene to integrate their findings, evaluate solutions, and reflect on the learning experience. Unlike these models advocating for immediate cognitive tension, this research softens that rigidity by integrating ice breaking as a crucial psychological pause to reduce anxiety. Consequently, this structural adjustment transforms a traditionally rigid problem-based environment into a more approachable and emotionally supportive learning experience.

Effectiveness of Problem-Based Learning Model with Ice Breaking

Before presenting the visual data, it is important to highlight that descriptive analysis serves as an initial step in understanding the overall pattern of students' self-confidence development in this research. Descriptive statistics not only provide numerical summaries but also help reveal trends, variations, and tendencies that may not be immediately visible in the raw data. In this research, comparing pre- and post-test scores is essential to identify whether the applied learning model contributes to meaningful changes in students' affective domain, particularly their self-confidence in pronouncing Rumi.

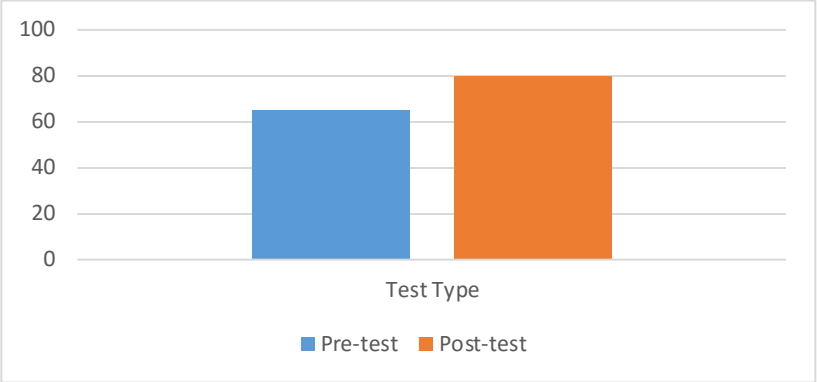

Figure 2. Students Self-Confidence Scores (Author Data Results)

As illustrated in Figure 2, there was a clear and substantial increase in the mean scores of students' self-confidence from the pre-test to the post-test. This graphical representation reinforces the numerical findings presented in Table 1, providing a more intuitive understanding of the improvements.

Table 1. Descriptive Statistics of Students' Self-Confidence Scores

No	Statistics	Pre-test (N=30)	Post-test (N=30)
1	Average (Mean)	65.2	82.5
2	Standars Devitation (SD)	8.1	7.3
3	Minimum	48	65
4	Maximum	78	95

Figure 2 and Table 1 show a substantial increase in student confidence from the pre- to post-test. Initially, the average score was 65.2, indicating moderate to low confidence due to the Thai dominated social environment. After implementing PBL with ice breaking, the average rose significantly to 82.5, reaching a maximum score of 95. This upward trend in the bar chart reflects a meaningful transition to high self-confidence, which is essential for language competence. This change provides a clear indication that the applied model effectively addresses the initial anxiety identified in this research.

The intervention also stabilized performance across the group, as shown by the standard deviation decrease from 8.1 to 7.3 points. This reduced variability suggests that lower-performing students successfully caught up, creating more inclusive and homogeneous progress. Pedagogically, this dual impact confirms that combining cognitive problem-solving with emotional support through ice breaking

fosters a balanced environment. Consequently, students are intellectually challenged while their anxiety is minimized, ensuring that self-confidence develops collectively rather than individually.

The consistency between the visual data and statistics confirms the significant enhancement of students self-confidence. While descriptive indicators provide precision, the bar chart bridges the gap between raw analysis and practical interpretation for educators. This integrated representation strengthens the empirical findings and proves the model's effectiveness in enhancing both individual and group-level confidence. Ultimately, these results demonstrate that a structured yet supportive approach is highly successful in helping students master Rumi's pronunciation with greater assurance and fewer psychological barriers.

Before conducting a paired t-test, a normality test was performed on the student self-confidence score difference data (post-test - pre-test). The Kolmogorov-Smirnov test results showed a p-value of 0.125, which was greater than the significance level (α =0.05). This indicates that the score difference data were normally distributed, so the assumptions for using the paired t-test were met. Next, a paired t-test was conducted to compare the average student self-confidence scores between the pre- and post-tests. The results of the paired t-test are presented in Table 2 below.

Table 2: Paired t-test Results for Self-Confidence Scores

Pair Variables	Mean Difference	Standard Deviation	T	df	Sig. (2-tailed)	Cohen's d
Post-test – Pretest	17.3	5.5	10.5	29	0.000	1.9

Based on Table 2, the average difference (Mean Difference) between the post- and pre-test scores was 17.3, with a standard deviation of 5.5. The t-test produces a value $t = 10.5$ with degrees of freedom *df* = 29. The significance value (Sig. 2-tailed) obtained was 0.000, because $p < 0.05$(i.e., 0.000 < 0.05), the null hypothesis (H0) was rejected. This means that the PBL model with ice breaking has a statistically significant influence on students' self-confidence in speaking Rumi.

The effect size (Cohen's d) of 1.9 indicates that the intervention had a very large impact (Creswell & Poth, 2018). This value far exceeds the threshold for a large effect (d = 0.8), indicating that the difference between the pre- and post-test self-confidence scores is not only statistically significant but also has strong practical relevance in the field. This means that the ice breaking assisted PBL intervention resulted in substantial and meaningful changes in students' self-confidence.

Furthermore, the percentage increase analysis showed that of the 30 participating students, 80% experienced an increase in self-confidence scores from the pre- to the post-test. This figure confirms the inferential statistical findings that the PBL intervention with ice breaking successfully had a positive impact on the majority of students, demonstrating the broad effectiveness of this learning model.

The significant t-test results (t = 10.5, p = 0.000) and large effect size (Cohen's d = 1.9) were driven by the synergy of ice breaking and PBL. ice breaking lowers the affective filter (Turner & Harder, 2018), whereas PBL stages encourage social persuasion and vicarious experiences (Bandura, 1997). These mechanisms boost self-efficacy, enabling students to overcome linguistic anxiety and speak Rumi with greater assurance. This integration explains the substantial and consistent impact on student performance.

According to Bandura's theory (Bandura, 1997), self-efficacy is constructed through mastery experiences, vicarious experiences, and social persuasion, all which are activated by this dual intervention. The structured PBL phases provide students with successive mastery experiences as they complete Rumi pronunciation tasks. Concurrently, collaborative group work offers rich vicarious experiences, allowing students to observe their peers' successful performances. This peer observation directly reinforced their belief in their capabilities. Furthermore, the supportive climate from i ice breaking sessions acts as social persuasion, strengthening students' confidence in speaking.

Consequently, this framework directly strengthens students' internal conviction regarding their capacity to perform. By developing higher self-efficacy, students demonstrate greater resilience when facing difficult pronunciation. This internal belief ensures that language errors are viewed as part of the learning process,

rather than a failure of competence. The combination of cognitive problem-solving and psychological support builds a robust foundation for the continuous acquisition of skills. Ultimately, this newly formed self-belief regarding their capabilities serves as a crucial bridge toward broader conceptual values (Bandura, 1997).

From an Islamic perspective, self-confidence (*al-tiqu bi al-nafs*) is linked to *izzah* (self-dignity). Allah SWT encourages believers to remain firm, as stated in QS. Ali 'Imran: 139: "Do not weaken and do not grieve, and you will be superior if you are [true] believers." This research reflects this spiritual growth, where students gained the mental strength to overcome the fear of making mistakes, aligning their academic progress with the principle of being strong, capable believers.

Furthermore, language mastery is prioritized in Islam for *silaturahmi* and *ta'aruf* (mutual understanding). Prophet Musa's (AS) prayer to "untie the knot from my tongue" (QS. Taha: 27-28) highlights the importance of clear communication. Improved Rumi pronunciation serves as a bridge for social interaction, fulfilling the command of QS. Al-Hujurat: 13 to know one another across diverse backgrounds. Thus, increased confidence enables individuals to connect and build harmonious relationships.

The implementation of PBL integrated with ice breaking significantly increased self-confidence (Cohen's d = 1.9). This aligns with Problem-Based Learning (PBL) suggesting that authentic problem-solving encourages students to seek information and express ideas, fostering optimism and responsibility (Indriani & Holisah, 2022; Moallem et al., 2019). Successfully completing these meaningful tasks builds a sense of competence and self-efficacy (Bandura, 1997; Kartikasari & Widjajanti, 2017). Furthermore, this student-centered environment provides ownership, increasing intrinsic motivation and reducing speaking anxiety compared to traditional methods (Matara et al., 2022; Tholibon et al., 2022).

Ice breaking plays a crucial role in lightening the classroom atmosphere and building the initial courage to participate (Rahman et al., 2016). By reducing the fear of making mistakes, it serves as a bridge for shy students to practice Rumi in a non-threatening context, preparing them to meet higher linguistic demands. The teacher acts as a facilitator who guides group dynamics and provides constructive feedback,

maximizing the impact of the intervention (Tholibon et al., 2022). This model effectively accommodates varying levels of initial confidence, ensuring that progress in Rumi's pronunciation is experienced collectively.

From an Islamic perspective, this success has a strong theological foundation. Surah Ali Imran (3:139) teaches believers to remain confident, while Surah At-Tin (95:4) implies that human potential must be developed to its best form. This is supported by Al-Ghazali's view that education must develop intellectual and affective potential in a balanced manner (Sheikh & Ali, 2019). Therefore, the integration of PBL and ice breaking aligns with Islamic values that promote courage, optimism, and the formation of a self-confident character (*al-tiqu bi al-nafs*) as a faithful and knowledgeable person.

Reflection in the final PBL stage cultivates students' meta cognitive awareness, enabling them to evaluate their linguistic progress and target specific areas for growth (Yusuf, 2017). This evaluative process ensures that learning objectives are achieved while developing autonomous individuals capable of managing their self-assurance (Lucero et al., 2018; Pasini et al., 2026). By acknowledging their achievements, students feel more empowered to take greater linguistic risks in a supportive academic community.

This balanced instructional design also effectively mitigates "cognitive depletion" by reducing the nervous tension often associated with second language production (Hwang, 2025). Establishing a psychologically safe environment is vital for lowering affective filters and optimizing overall communicative competence (Dey et al., 2024; Setiawan, 2019). Consequently, a secure learning environment is a critical prerequisite that directly enhances language acquisition by encouraging students to take linguistic risks. This underscores the need for future research to explore how instructional settings can structurally sustain psychosocial support.

The synergy between cognitive challenge and emotional support ultimately prepares learners for authentic and real-world social interactions (Sukirlan et al., 2023). By simulating dynamic contexts, the model fosters practical readiness and ensures that students can articulate their ideas clearly, beyond the classroom walls.

This comprehensive approach reinforces the idea that language acquisition is not just a technical skill, but an interactive process built on confidence and social resilience.

CONCLUSION

This research found five stages of implementation of the PBL model with ice breaking which include the following stages: 1) ice breaking; 2) presentation of contextual problems; 3) working in groups; 4) presenting results; 5) reflection. This research concluded that the Problem-Based Learning (PBL) model with ice breaking was very influential in increasing self-confidence in speaking Rumi in sixth-grade students of Nirandon Wittaya School, Thailand, as evidenced by the results of the paired t-test ($t = 10.5$; $df = 29$; $p < 0.001$) and Cohen's d (1.9). It also confirmed that the intervention provided had a strong and practical impact on 80% of the students. Theoretically, the results of this research contribute; 1) strengthening Bandura's Self-Efficacy Theory, 2) strengthening the learning of *al-tiqu bi al-nafs* (self-confidence) and *izzah* (self-dignity) in Islamic education. The results of this research have implications for the importance of ice breaking and problem orientation to build students' self-confidence in language learning. To expand this research, further research on the relationship between students' feelings of safety and learning climate and language learning success is recommended.

REFERENCES

Abdullah., Mahendra, Y., Purba, D., & Rozuli, A. (2025). Implementasi Global Citizenship Education (GCED) sebagai Pendekatan Edukatif Isu Sampah di Desa Karanganyar. *Jurnal Pengabdian Kepada Masyarakat Nusantara (JPkMN)*, *6*(4), 6043–6051. https://doi.org/10.55338

Ahmad, N., Alias, F.A., Hamat, M., & Mohamed, S. A. (2024). Reliability Analysis: Application of Cronbach's Alpha in Research Instruments. In *Pioneering the Future: Delving Into E - Learning 's Landscape* (pp. 114–119). https://appspenang.uitm.edu.my/sigcs/2024-2/Articles/e-Book_SIGCSe-LearningVol8_2024.pdf#page=121%0A%0A

Akbari, O., & Sahibzada, J. (2020). Students' Self-confidence and Its Impacts on Their Learning Process. *American International Journal of Social Science Research*, *5*(1), 1–15. https://doi.org/10.46281/aijssr.v5i1.462

Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. Henry Holt & Co.

https://doi.org/10.1891/0889-8391.13.2.158

Biesta, G. (2021). Mixing Methods. In *Research Methods and Methodologies in Education* (p. 186). https://ejournal.upsi.edu.my/index.php/SAECJ/article/view/10068

Chang, Y., Davidson, C., Conklin, S., & Ewert, A. (2019). The Impact of Short-Term Adventure-Based Outdoor Programs on College Students' Stress Reduction. *Journal of Adventure Education and Outdoor Learning*, *19*(1), 67–83. https://doi.org/10.1080/14729679.2018.1507831

Coe, R., Waring, M., Hedges, L. V, Ashley, L. D. A. Y., Smith, C. E., Torgerson, C. C., & Hall, J. (2025). *Research Methods & Methodologies in Education 4th Edition*.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design-Choosing Among Five Approaches* (4th ed.). SAGE Publications. https://doi.org/10.1177/1524839915580941

Dey, M., Amelia, R., & Setiawan, A. (2024). The Impact of Age on Second Language Acquisition: A Critical Review. *International Journal of Evaluation and Research in Education*, *13*(5), 3560–3570. https://doi.org/10.11591/ijere.v13i5.27958

Djami, M., Hardhienata, S., & Tukiran, M. (2019). Improvement of Job Satisfaction through Transformational Leadership, Personality, and Achievement Motivation using Scientific Identification Theory of Operations research in education management (SITOREM). *International Journal of Managerial Studies and Research (IJMSR)*, *7*(4), 62–70. https://doi.org/10.20431/2349-0349.0704009

Dressel, D. P. (2020). Breaking the Ice to Build Relationships: Using Icebreakers to Create New Relationships, Promote Emotional Safety, and Incorporate Social and Emotional Learning. *Journal of Physical Education, Recreation & Dance*, *91*(5), 51–54. https://doi.org/10.1080/07303084.2020.1739434

Ellis, N. C. (2019). Essentials of a Theory of Language Cognition. *The Modern Language Journal*, *10*(3), 39–60. https://doi.org/10.1111/modl.12532

Fitria, Y., Virgian Darmanto, R., & Widyasari. (2023). Perancangan Desain Karakter 2D Untuk Video Edukasi Rotasi Dan Revolusi Bumi. *Jurnal Ilmiah Wahana Pendidikan*, *9*(17), 690–697. https://doi.org/10.5281/zenodo.8321739.

Gibson, E. (2019). How Efficiency Shapes Human Language. In *Elsevier*.

Gopalan, M., Rosinger, K., Ahn, J. (2020). Use of Quasi-Experimental Research Designs in Education Research: Growth, Promise, and Challenges. *Sage Journals*, *44*(1), 218–243. https://doi.org/10.3102/0091732X20903302

Habler, C. (2025). When Text, Talk and Thinking Come Together: Preservice Teachers Reading Fiction in a Course in Intercultural Education. *Social Sciences & Humanities Open*, *12*(4), 1–7. https://doi.org/10.1016/j.ssaho.2025.101815

Haryani, S. (2018). Improvement of Metacognitive Skills and Students' Reasoning Ability through Problem-Based Learning. *Journal of Physics: Conference Series*, *983*(1), 121–143. https://doi.org/10.1088/1742-6596/983/1/012174

Hébert, L., & Tabler, J. (2019). *The functions of language. In An Introduction to Applied Semiotics*. https://doi.org/10.4324/9780429329807

Hengki, Jabu, B., & Salija, K. (2017). The Effectiveness of Cooperative Learning Strategy through English Village for Teaching Speaking Skill. *Journal of Language Teaching and Research*, *8*(2), 306–312. https://doi.org/10.17507/jltr.0802.12

Hwang, H. (2025). Growth of Lexical and Syntactic Complexity, Accuracy, and Fluency in Spoken Production of First Language and Second language children. *Elsevier*, *132*(8), 1–13. https://doi.org/10.1016/j.system.2025.103695

Indriani, FI, & Holisah, H. (2022). Evaluation of the Implementation of the Teaching Campus Program in Elementary Schools: A Phenomenological Approach. *Journal of Educational Research and Evaluation*, *26*(2), 137–159. https://doi.org/10.21831/pep.v26i2.46834

Isayah, K. (2019). Analisis Sosiolinguistik Masyarakat Melayu di Tiga Wilayah Sempadan Selatan Thailand Berlandaskan Teori Etnografi Komunikasi Authors. *Journal of Communication in Scientific Inquiry (JCSI)*, *1*(1), 59–76. https://ejournal.unimap.edu.my/index.php/jcsi/article/view/891?articlesBySimilarityPage=2

Iswandari, D. C. (2017). Effect of Environmental Problem-Based Learning on the Indonesian EFL Students' Environment-Related Vocabulary Mastery and Writing Ability. *Theory and Practice in Language Studies*, *7*(8), 608–616. https://doi.org/10.17507/tpls.0708.02

Jerrim, J., Latorre, C. P., & Shure, N. (2024). Self-efficacy of Teachers: A Review of the Literature. *American Educational Research Journal*, *62*(2), 378–413. https://doi.org/10.3102/00028312241300265

Joni, D, W, I. (2018). Self-efficacy Effect on Basic Level Learners in Speaking Activities. *Journal of Applied Studies in Language*, *2*(1), 1–9. https://doi.org/10.31940/JASL.V2I1.808

Kantavong, P., Sujarwanto., Rerkjaree, S., & Budiyanto. (2017). A Comparative Study of Teacher's Opinions Relating to Inclusive Classrooms in Indonesia and Thailand. *Kasetsart Journal of Social Sciences*, *38*(3), 291–296. https://doi.org/10.1016/j.kjss.2016.05.005

Kartikasari, A., & Widjajanti, D. (2017). The Effectiveness of Problem-Based Learning Approach Based on Multiple Intelligences in Terms of Student's Achievement, Mathematical Connection Ability, and Self-Esteem. *Journal of Physics: Conference Series*, *812*(1), 34. https://doi.org/10.1088/1742-6596/812/1/012097

Latif, R., Mumtaz, S., Mumtaz, R., & Hussain, A. (2018). A Comparison of Debate and Role Play in Enhancing Critical Thinking and Communication Skills of Medical Students during Problem Based Learning. *Biochemistry and Molecular Biology Education*, *46*(4), 336–342. https://doi.org/10.1002/bmb.21124

Lucero, M., Fernández, M. J., & Montanero, M. (2018). Teachers' Written Feedback

Comments on Narrative Texts in Elementary and Secondary Education. *Studies in Educational Evaluation*, *59*(4), 279–289. https://doi.org/https://doi.org/10.1016/j.stueduc.2018.07.002

Mahmud, M., & Nur, S. (2018). Exploring Students' Learning Strategies and Gender Differences in English Language Teaching. *International Journal of Language Education*, *2*(1), 51–64. https://doi.org/10.26858/ijole.v2i1.4346

Mamaghani, E. A., Hosseinian, E., & Maghsoodi, E. (2024). Role Playing is an Effective Method for Training Physical Examinations: A Mixed-methods Study. *Teaching and Teacher Education*, *19*(4), 307–404. https://doi.org/10.1016/j.teln.2024.06.005

Matara, K., Suleman, Z., & Wibawa, N. H. H. P. (2022). Law for Handling Problematic Children in Families in the Context of Child Psychology Education. *Educational Administration: Theory and Practice*, *28*(2), 74–87. https://doi.org/10.17762/kuey.v28i02.449

Moallem, M., Hung, W., & Dabbagh, N. (2019). The Wiley Handbook of Problem - based Learning. In *John Wiley & Sons, Inc.* https://doi.org/10.1002/9781119173243

Pasini, S., Maragliano, G., Kim, J., & Tonella, P. (2026). Cross-site Scripting Adversarial Attacks Based on Deep Reinforcement Learning: Evaluation and Extension Study. *The Journal of Systems & Software*, *237*(3), 1–10. https://doi.org/https://doi.org/10.1016/j.jss.2026.112856

Peraturan Menteri Pendidikan Dan Kebudayaan Nomor 22 Tahun 2016 Tentang Standar Proses Pendidikan Dasar dan Menengah (2016). https://peraturan.bpk.go.id/Details/224242/permendikbud-no-22-tahun-2016

Purnamasari, D., Arianty, R., Susetianingtias, D. T., & Kusumawati, R. D. (2016). Query Rewriting and Corpus of Semantic Similarity as Encryption Method for Documents in Indonesian Language. *Lecture Notes in Electrical Engineering*, *365*, 565–571. https://doi.org/10.1007/978-981-287-988-2_63

Rahman, A., Ahmar, A. S., & Rusli. (2016). The Influence of Cooperative Learning Models on Learning Outcomes Based on Students' Learning Styles. *World Transactions on Engineering and Technology Education*, *14*(3), 425–430. https://doi.org/10.26858/wtetev14i3y2016p6425430

Rahman, M., Bustomi, J., & Waehana, M. (2024). *Multiculturalism, Religious Moderation, and Identity Challenges in Southern Thailand*. Gunung Djati Publishing.

Retnawati, H., Djidu, H., Kartianom, & Apino, E. (2018). Teachers' Knowledge about Higher-order Thinking Skills and its Learning Strategy. *Problems of Education in the 21st Century*, *76*(2), 215–230. https://doi.org/10.33225/pec/18.76.215

Reza, M., Ibrahim, M., & Rahayu, S. (2018). Development of Problem-Based

Learning Oriented Teaching Learning Materials to Facilitate Students' Mastery of Concept and Critical Thinking Skill. *Journal of Physics: Conference Series*, *947*(1), 56–59. https://doi.org/10.1088/1742-6596/947/1/012062

Sasson, I., Yehuda, I., & Malkinson, N. (2018). Fostering the Skills of Critical Thinking and Question-Posing in a Project-Based Learning Environment. *Thinking Skills and Creativity*, *29*. https://doi.org/10.1016/j.tsc.2018.08.001

Setiawan, N. A. (2019). Pengaruh Pelatihan Goal Setting Untuk Meningkatkan Motivasi Belajar Pada Mahasiswa. *American Journal of Psychology*, *2*(1), 101–120. https://doi.org/10.24042/ajp.v2i1.4150

Sheikh, S. U., & Ali, M. A. (2019). Al-Ghazali's Aims and Objectives of Islamic Education. *Journal of Education and Educational Development*, *6*(1), 111–125. https://doi.org/10.22555/joeed.v6i1.2033

Silverstein, M. (2022). *Language in Culture: Lectures on the Social Semiotics of Language*. Cambridge University Press.

Soyusiawaty, D., & Aribowo, E. (2016). Designing and Implementing Parsing for Ambiguous Sentences in Indonesian Language. *Journal of Theoretical and Applied Information Technology*, *84*(3), 339–347. https://www.scopus.com/pages/publications/84959262486

Subekti, A. S. (2018). An Exploration of Learners' Foreign Language Anxiety in the Indonesian University Context: Learners' and Teachers' Voices. *Teflin Journal*, *29*(2), 219–244. https://doi.org/10.15639/teflinjournal.v29i2/219-244

Sugrah, N. (2019). Implementasi Teori Belajar Konstruktivisme dalam Pembelajaran Sains. *Humanika: Kajian Ilmiah Mata Kuliah Umum*, *19*(2), 121–138. https://doi.org/10.21831/hum.v19i2.29274

Sukirlan, M., Mahpul, Setiyadi, B. A., & Hariri, H. (2023). Use of Second Language Communication Strategies to Teach Autonomy in Speaking: A Study of Indonesian EFL Learners' Use of Second Language Communication Strategies. *Theory and Practice in Language Studies*, *13*(8), 2123–2130. https://doi.org/10.17507/tpls.1308.29

Sumarni, W., Wardani, S., Darmin, S., & Gupitasari, D. N. (2016). Project Based Learning (PBL) to Improve Psychomotoric Skills: A Classroom Action Research. *Jurnal Pendidikan IPA Indonesia (JPII)*, *5*(2), 157–163. https://doi.org/10.15294/jpii.v5i2.4402

Susetyarini, E., Nurrohman, E., & Husamah, H. (2022). Analysis of Students' Collaborative, Communication, Critical Thinking, and Creative Abilities through Problem-Based Learning. *Journal of Educational Research and Assessment: E-Saintika*, *6*(1), 33–42. https://doi.org/10.36312/esaintika.v6i1.584

Suwardi, Hariyadi, R., Susapti, P., Billah, A., Kurniawan, W., & Prabowo, S. A. (2025). SCT Tree Model To Integrate Spirituality And Computational Thinking In Science Learning. *Jurnal Pendidikan IPA Indonesia (JPII)*, *14*(3), 443–457. https://doi.org/10.15294/jpii.v14i3.31172

Tan, O. S. (2004). Cognition, Metacognition, and Problem-Based Learning. In *Enhancing Thinking Through Problem-Based Learning Approaches* (pp. 1–15). Cengage Learning. https://doi.org/10.1142/9789812562470_0001

Tegler, H., Bowden, H. M., Skovholt, K., & Sikveland, R. O. (2025). The Effectiveness of the Conversation Analytic Role-Play Method (CARM) on Teachers' and Classroom Assistants' Self-efficacy and Interactional awareness: Identifying and responding to aided-speaking students' questions in whole class interaction. *Teaching and Teacher Education*, *156*(5), 1–9. https://doi.org/10.1016/j.tate.2025.104944

Tholibon, D. A., Nujid, M. M., Mokhtar, H., Rahim, J. A., Rashid, S. S., Saadon, A., Tholibon, D., & Salam, R. (2022). The Factors of Students' Involvement on Student-Centered Learning Method. *International Journal of Evaluation and Research in Education*, *11*(4), 1637–1646. https://doi.org/10.11591/ijere.v11i4.22314

Turner, S., & Harder, N. (2018). Psychological Safe Environment: A Concept Analysis. *International Nursing Association for Clinical Simulation and Learning*, *18*(1), 47–55. https://doi.org/10.1016/j.ecns.2018.02.004

Vaughan - Johnston, T. I., & Jacobson, J. A. (2020). Self - efficacy Theory. In *The Wiley Encyclopedia of Personality and Individual Differences: Models and Theories* (pp. 375–379). https://doi.org/10.1002/9781118970843.ch62

Verma, J.P., & Abdel-Salam, A.-S. G. (2019). *Testing Statistical Assumptions in Research*. https://doi.org/10.1002/9781119528388

Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes. In *Mind of Society*. Harvard University Press. https://doi.org/10.4324/9781315078465

Wahyu, W., Kurnia, & Eli, R. N. (2016). Using Problem-Based Learning to Improve Students' Creative Thinking Skills on Water Purification. *AIP Conference Proceedings*, *1708*. https://doi.org/10.1063/1.4941158

Xiaojing, L. V., Zhou, J., & Ren, X. (2025). The Bidirectional Relationship between Critical Thinking and Academic Achievement is Independent of General Cognitive Ability: A Three-Year Longitudinal Study on Elementary School Children Author. *Journal of Psychology and Education*, *120*(5), 1–10. https://doi.org/10.1016/102666

Yusuf. (2017). The Influence of Technology Learning Facilities and Student Motivation Towards Learning Independence (Empiric Study on Bidikmisi Scholarship Students Regional Office of Universitas Terbuka at Ternate, Indonesia). *International Journal of Civil Engineering and Technology*, *8*(10), 1576–1591. https://doi.org/09766308