

ENHANCING PGMI STUDENTS' MOTIVATION AND SELF-CONFIDENCE THROUGH SOCRATIC TEACHING IN FISHBOWL COLLABORATIVE LEARNING

¹Muhamad Asruri Faishal Alam¹, ²Banu Setyo Adi, ³Anwar Novianto

¹²³Universitas Negeri Yogyakarta

muhamadasrurifaishalalam@gmail.com¹, banu_adi@uny.ac.id², anwarnovianto@uny.ac.id³

ABSTRACT

This study was motivated by the low levels of learning motivation and self-confidence among PGMI students in Islamic higher education, largely due to the dominance of conventional lecture methods. As prospective primary school teachers, PGMI students are required to develop strong affective competencies to support effective teaching practices. Although the Socratic approach and Fishbowl Discussion have been studied separately, their integration as a structured and sustained pedagogical strategy remains underexplored, particularly in the context of Islamic teacher education in Indonesia. This study aims to examine the effectiveness of Socratic teaching integrated with the Fishbowl Discussion method on students' learning motivation and self-confidence. A quantitative approach with a one-group pretest–posttest quasi-experimental design was employed. The intervention was conducted over seven meetings, consisting of two introductory sessions and five full implementation sessions. Data were collected through validated questionnaires from 32 PGMI students and analyzed using paired-sample t-tests. The results showed significant improvements in learning motivation ($p = 0.001$; $d = 0.67$) and self-confidence ($p = 0.003$; $d = 0.57$). These findings demonstrate that the integration of Socratic questioning and Fishbowl Discussion provides an effective and contextually relevant strategy for enhancing affective competencies in prospective primary teacher education.

Keywords: Socratic teaching, fishbowl discussion, learning motivation, self-confidence, PGMI students

INTRODUCTION

In the context of higher education, particularly in Islamic teacher education programs such as Pendidikan Guru Madrasah Ibtidaiyah (PGMI), students' low motivation and lack of self-confidence present serious obstacles to effective learning. These psychological aspects are vital in shaping student engagement, participation, and academic success. (Rosales-Márquez et al., 2025). Without adequate motivation and self-confidence, students tend to exhibit passive behavior, are reluctant to express ideas, and are often disengaged from learning processes that require critical thinking and interaction. (Ryan & Deci, 2000a). This is particularly problematic in PGMI, where students are expected to become future elementary educators who must possess not only content mastery but also communication skills, confidence, and the ability to foster inclusive classrooms. (Loes, 2022).

In real classroom settings at Islamic universities, it is frequently observed that students feel hesitant to speak, unsure of their own voice, and anxious about being incorrect or judged—especially in subjects requiring abstract reasoning or open-ended responses. This condition not only limits their academic development but also affects their readiness as future educators. Preliminary observations indicate that many PGMI students enter their academic programs with

a history of passive learning experiences at the primary and secondary levels. They are used to being recipients of knowledge rather than co-constructors of meaning. Consequently, even those with strong academic abilities may struggle to express themselves confidently or sustain motivation when the learning environment lacks participatory structures.

Traditional lecture-based teaching methods in PGMI are often ineffective in promoting these qualities. As a result, there is a growing call for active learning models that promote student agency, collaboration, and critical inquiry. (Wati & Sari, 2023). One such model is the Socratic teaching approach, which prioritizes dialogic learning, guided questioning, and reflective thinking. (Sutherland et al., 2012). This approach has been widely applied in legal and humanities education and is increasingly relevant in teacher education contexts. (Blatt, 2021).

Recent studies underscore the importance of learning environments that support students' internal drive and sense of competence. For instance, Chamidiyah (2015) found that collaborative and participative learning environments significantly enhance academic motivation. Similarly, affirmed that self-confidence serves as a strong predictor of digital learning skills, indicating its broader relevance in educational success. (Adib & Intania, 2022). In contrast, many previous studies fail to simultaneously analyze both motivational and psychological aspects in relation to innovative pedagogy. A study from the Edukasia Journal by Rohman emphasizes the role of dialogic methods in increasing student learning autonomy, but does not link these methods to emotional outcomes such as confidence. (Rohman & Mukhibat, 2017). This gap suggests the need for a more comprehensive investigation that combines cognitive and affective student outcomes.

To measure this affective outcome, this study refers to the construct of self-confidence as defined by Iswidharmanjaya and Enterprise (2014), which includes indicators such as belief in one's own ability, resilience in facing criticism, and willingness to express opinions in public. These dimensions provide a lens through which the impact of Socratic Fishbowl discussions on students' psychological development can be observed and assessed.

Furthermore, learning motivation is equally critical in the academic development of PGMI students. It acts as the internal engine that drives sustained effort, focus, and persistence in learning activities. According to Sardiman (2016) Motivation is not a monolithic concept, but a multidimensional construct encompassing both intrinsic elements—such as personal interest, curiosity, and a sense of responsibility—and extrinsic ones like reward expectations and social reinforcement (Natalya, 2018; Natalya & Purwanto, 2018). These dimensions guide students' behavior and engagement within the classroom, influencing how they respond to tasks, how resilient they are in the face of difficulty, and how consistently they pursue academic goals. (Ryan & Deci, 2000).

Current studies in the context of Islamic education have also explored how exhibition-based learning media can influence student motivation. A study focusing on PAI students found that the significant correlation between media exhibitions and motivation was partly due to active support from lecturers and peers. This support environment allowed students to innovate, collaborate, and develop confidence in expressing creative educational ideas. The integration of various media types—videos, posters, interactive tools—not only facilitated engagement but also expanded students' enthusiasm and agency in the learning process (Hijriyah et al., 2024).

Building on this perspective, the present study investigates how the integration of Socratic teaching with the Fishbowl discussion method can further enhance learning motivation and self-confidence—two core components of professional teaching identity in PGMI students. Whereas media exhibitions engage students through tangible products, the Socratic-Fishbowl model emphasizes internal transformation through structured dialogue and reflective participation. Both methods share a common thread: the cultivation of intrinsic motivation and collaborative learning. Strengthening self-confidence among PGMI students is not only beneficial for their academic development but also has direct implications for the quality of teaching and learning at the primary school (SD/MI) level. Confident teachers are more likely to facilitate interactive classrooms, encourage student participation, and create supportive learning environments that foster critical thinking and student engagement. Therefore, enhancing these affective competencies during teacher preparation is essential for producing professional educators capable of delivering meaningful and student-centered learning experiences in primary education. This study not only contributes to expanding the theoretical discourse on pedagogical innovation in Islamic education but also offers practical implications for teacher training institutions aiming to develop future educators with strong personal and pedagogical competencies.

LITERATURE REVIEW

Fishbowl discussion is another pedagogical technique that supports active learning. In this model, a small group of students engages in discussion while others observe, with rotating roles to promote comprehensive participation. (Sutherland et al., 2012). Studies show that the Fishbowl method can improve communication skills, critical thinking, and student engagement in diverse educational contexts. (Wati & Sari, 2023). In particular, demonstrated that students taught using the Fishbowl technique showed significant improvement in speaking performance compared to those taught using traditional methods. (Jiang et al., 2024).

The combination of the Socratic method and the Fishbowl discussion may offer synergistic benefits, particularly in developing students' motivation and self-confidence. Both methods emphasize reflection, interaction, and active involvement—elements crucial to improving internal motivation and perceived self-efficacy. (Bandura, 1997). However, existing literature tends to examine these approaches in isolation, and their integrated effect within Islamic education faculties, especially PGMI, remains underexplored.

To operationalize these concepts, this study incorporates three key theoretical foundations. First is Paul's Six Taxonomy of Socratic Questioning (R. Paul & Elder, 2007b, 2007a), which structures the inquiry process through six categories of critical dialogue. These categories are presented in the table below:

Table 1. Six Taxonomy of Socratic Questioning (R. W. Paul & Binker, 1990)

Socratic Questions	Descriptions	Examples
(1) Questions of Clarification	Ask for verification or additional information on one point or main idea.	What do you mean by _____?
(2) Question that Probe	Ask the student for an explanation of or for the	What are you assuming?

Socratic Questions	Descriptions	Examples
Assumptions	reliability of an assumption.	Why have you based your reasoning on _____ rather than _____?
(3) Questions that Probe Reasons and Evidence	Ask for additional examples, reasons for making statements, or the process that leads the student to his or her belief.	What would be an example? Are these reasons adequate? Why did you say that?
(4) Questions About Viewpoints or Perspectives	Ask the student whether there are alternatives to his viewpoint, or for a comparison of similarities and differences between viewpoints.	How could you answer the objection that would make? What might someone who believed _____ think?
(5) Questions that Probe Implications and Consequences	Help the student to describe the implications of what is being done, or the cause-and-effect of an action.	What are you implying by that? When you say _____, are you implying _____?
(6) Questions about the Question	Ask if students understand the given question in itself.	Why is this question important?

Socratic questioning, rooted in the dialogical traditions of classical philosophy, is a pedagogical tool that stimulates deeper intellectual engagement by encouraging learners to reflect critically on their assumptions, reasoning, and conclusions. (R. W. Paul & Binker, 1990). As Richard Paul articulated, the essence of critical thinking lies in disciplined, self-directed inquiry, and Socratic dialogue fosters this process by demanding clarity, probing assumptions, challenging evidence, and drawing out implications. Within the higher education landscape—particularly in Islamic education faculties where hierarchical teacher-centered models still dominate—Socratic questioning offers a transformative alternative. It shifts the learning dynamic from passive reception to active interrogation, a process essential for the development of higher-order thinking (Lee et al., 2014).

For students in Islamic teacher education programs such as PGMI, engaging in Socratic dialogue presents an opportunity to cultivate not only intellectual discipline but also the traits of mind essential to moral and pedagogical leadership. These traits include intellectual humility, empathy, perseverance, and confidence in reason. (R. W. Paul & Binker, 1990). In the context of this study, the Socratic method was operationalized through structured questioning categories adapted from Paul's taxonomy—clarification, assumption, evidence, perspectives, consequences, and meta-questions.

This repeated engagement in rigorous intellectual conversations directly contributes to the development of students' self-confidence and learning motivation. As they navigate defending arguments and responding to peer inquiries, PGMI students build self-assurance and motivation in their reasoning and presentation skills. From the perspective of social cognitive

theory, this development can be understood through the concept of self-efficacy, which influences individuals' behavior and learning outcomes (Bandura, 1997). Students with higher self-efficacy are more likely to actively participate, persist in challenging tasks, and demonstrate confidence in expressing ideas. The integration of Socratic teaching and Fishbowl Discussion facilitates this process through structured dialogue and observational learning, where students learn not only by participating but also by observing peers' performance and reflecting on their own understanding.

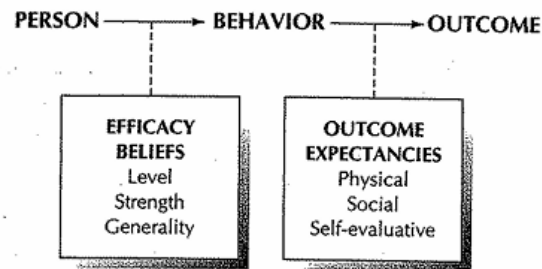


Figure 1. Bandura's self-efficacy model (Bandura, 1997)

For PGMI students as prospective primary school teachers, this development is particularly crucial. Self-confident teachers are more likely to create interactive and student-centered classrooms, encourage pupils to express ideas, and foster a supportive learning environment. Conversely, low self-confidence may result in rigid, teacher-centered practices and limited student engagement. Therefore, strengthening self-confidence during teacher preparation has direct implications for improving the quality of teaching and learning at the SD/MI level, as it equips future educators with the confidence and pedagogical readiness to facilitate meaningful and participatory learning experiences.

METHODOLOGY

An overview of the study approaches is provided in this section, outlining the research design, population and sample, intervention procedures, data collection techniques, and data analysis methods. This structure ensures clarity and coherence in presenting the methodological framework used to evaluate the impact of Socratic Teaching in Fishbowl collaborative learning on students' learning motivation and self-confidence.

This study employed a quasi-experimental design using a one-group pretest–posttest model. Although this design has limitations in internal validity due to the absence of a control group, its use was justified by practical and institutional constraints. The study was conducted within a real classroom context where the researcher was assigned to teach only one class during the teaching practicum (PPL). Institutional regulations did not permit dividing students into experimental and control groups, as each student was required to participate in a single intact class throughout the course. Moreover, the intervention was embedded in a compulsory course, *Konsep Dasar IPS MI/SD*, making it ethically inappropriate to withhold the learning treatment from a subset of students. Therefore, this design was considered suitable for examining changes in students' learning outcomes before and after the intervention in an authentic educational setting. (Creswell & David Creswell, 2018; Sugiyono, 2021).

The population consisted of second-year undergraduate students enrolled in the PGMI at UIN Sunan Kalijaga Yogyakarta. The sample included 32 students from Class 2C, selected through purposive sampling based on their active participation, attendance consistency, and

willingness to complete all stages of the intervention. To ensure confidentiality, each participant was assigned a code ranging from M01 to M32.

The intervention was conducted over seven sessions, consisting of two introductory sessions and five implementation sessions. The introductory sessions were designed to familiarize students with the principles of Socratic questioning and the Fishbowl discussion model. During these sessions, students were introduced to the roles within Fishbowl discussions (inner circle and outer circle), as well as trained to construct and respond to Socratic questions based on Paul's Six Taxonomy, including clarification, assumptions, evidence, perspectives, implications, and meta-questions.

The five implementation sessions were integrated into the *Konsep Dasar IPS MI/SD* course, covering topics such as (1) individuals in socio-cultural relations, (2) youth roles in social dynamics and conflict resolution, (3) social crises and political division, (4) environmental challenges and youth strategies, and (5) conceptualizing individuals within societal contexts. Each session lasted 70 minutes and followed a structured procedure. First, students were divided into groups, and roles were assigned, including four students in the inner circle, one facilitator, and the remaining students as observers. Second, the lecturer provided a contextual trigger question based on current social issues to initiate discussion. Third, the inner circle engaged in the first round of discussion (20 minutes), followed by a second round (20 minutes), while the outer circle observed, documented arguments, and analyzed questioning patterns. Fourth, the lecturer facilitated the process by providing additional Socratic questions when discussions stagnated, supported by pre-prepared question prompts shared in digital format. The most frequently used type of questioning involved exploring viewpoints and perspectives to deepen analysis. Fifth, the session concluded with a 20-minute presentation phase, where students summarized their discussions using mind maps, presentations, or written reports. This structured cycle enabled students to learn through both participation and observation, reinforcing their engagement, motivation, and self-confidence.

Data were collected using two structured questionnaires. The learning motivation instrument consisted of 30 items based on Sardiman's (2016) framework, capturing intrinsic and extrinsic motivational dimensions. The self-confidence instrument included 35 items adapted from Iswidharmanjaya and Enterprise. (2014), focusing on belief in ability, willingness to participate, and resilience in receiving feedback. Both instruments employed a four-point Likert scale.

To ensure validity, content validation was conducted through expert judgment involving two expert judges specializing in educational psychology and pedagogy. (Azwar, 2016). Each expert evaluated the relevance, clarity, and appropriateness of the items. Reliability testing was conducted using Cronbach's Alpha, with a coefficient of $\alpha \geq 0.70$ considered acceptable. (Sugiyono, 2021a).

Data analysis was performed using SPSS version 25. A normality test using the Kolmogorov-Smirnov method confirmed that the data were normally distributed, allowing the use of parametric tests. The paired sample t-test was used to determine the significance of differences between pretest and posttest scores. (Creswell & David Creswell, 2018), while the effect size was calculated using Cohen's d to assess the magnitude of the intervention's impact (Pallant, 2005).

RESULT AND DISCUSSION

This section presents the core findings of the research, covering the validity and reliability of the instruments, results of the normality test, paired sample t-test, and the effect size calculation. The data are described quantitatively and analyzed to evaluate the impact of the Socratic Teaching approach using Fishbowl Discussion on students' learning motivation and self-confidence.

1. Result

a. Validity and Reliability

To ensure the quality and accuracy of the research instruments used to measure students' learning motivation and self-confidence, this study conducted psychometric properties analysis, through content validity and internal consistency reliability test.

Content validity was assessed through expert judgments, involving two academic professionals with deep expertise in educational psychology and pedagogy. The first validator was Dr. Eva Imania Eliasa, S.Pd., M.Pd., a senior lecturer in the Department of Guidance and Counseling at Universitas Negeri Yogyakarta. Her academic background and experience in guidance and counseling are directly aligned with the psychological dimensions measured in this study, particularly learning motivation and self-confidence. The second validator was Unik Ambar Wati, S.Pd., M.Pd., Ph.D., a specialist in primary education and a lecturer in the Development and Quality Improvement of Elementary Education program at UNY. Her deep involvement in pedagogical strategies for foundational learning made her contributions crucial in ensuring the instruments' relevance to elementary teacher education (PGMI).

Both experts evaluated the instruments based on relevance, clarity, and alignment with the constructs being measured. Their evaluations guided revising or retaining items, consistent with the procedure for content validation as outlined by (Azwar, 2016) and (Sugiyono, 2021). Items deemed unclear or ambiguous were refined before final administration.

Table 2 Description of reliability of Learning Motivation and Self-Confidence

Variable	Cronbach's Alpha	N of Items
Learning Motivation	0.794	30
Self-Confidence	0.917	35

The learning motivation instrument achieved a Cronbach's Alpha coefficient of 0.794 across 30 items, while the self-confidence instrument achieved a coefficient of 0.917 across 35 items. According to Arikunto (2013), a Cronbach's Alpha value above 0.70 indicates strong internal consistency, suggesting that the instruments are reliable and appropriate for use in educational research. These results indicate that all items consistently measure their respective constructs, namely learning motivation and self-confidence.

The rigorous validation and reliability procedures employed in this study provide a sound foundation for interpreting the results with confidence. The validated and reliable instruments enable an accurate assessment of how the Socratic Teaching and Fishbowl Discussion approach impacts PGMI students' motivation and self-confidence at UIN Sunan Kalijaga.

b. Normality Test

The normality of the collected data, encompassing both pre-test and post-test scores for Learning Motivation and Self-Confidence among PGMI Students at UIN Sunan Kalijaga, was

assessed. A significance value (sig.) exceeding 0.05 indicated a normal distribution of the data. The outcomes of this normality test are detailed in Table 3.

Table 3. Description of Kolmogorov-Smirnov Test Results

Variable	K-M Test Statistics	Asymp. Sig. (2-tailed)	Interpretation
Pre-Motivation	0.111	0.200	Normally Distributed
Pre-Self-Confidence	0.096	0.200	Normally Distributed
Post-Motivation	0.103	0.200	Normally Distributed
Post-Self-Confidence	0.123	0.200	Normally Distributed

The Kolmogorov-Smirnov test was applied to determine whether the data were normally distributed. For all four variables, Pre-Motivation, Post-Motivation, Pre-Self-Confidence, and Post-Self-Confidence, the p-values were 0.200, exceeding the significance level of 0.05. This indicates that the data met the assumption of normality (Sugiyono, 2021b), allowing the use of parametric statistical procedures.

c. Paired Sample t-Test

This study employed a paired sample t-test to examine the differences between pretest and posttest scores within the same group. This method allows for assessing the extent to which the learning intervention produced a significant impact. The statistical results are presented in Tables 4 and 5, while visual comparisons are illustrated in Figures 2 and 3 to enhance interpretability.

Table 4. Paired Sample T-Test

Variable	Mean	Std. deviation	Skew	Kurt
Pre L. Motivation	86.94	7.758	.742	1.125
Post L. Motivation	90.53	8.343	.393	-.346
Pre Self-Confidence	101.59	10.668	.276	.264
Post Self-Confidence	106.19	13.074	.524	.255

Table 5. Paired Sample T-Test

Variable	Mean Differences	Std. deviation	t	df	Sig. (2-tailed)
Pre L. Motivation Post L. Motivation	-3.594 [-5.523; -1.664]	5.351	-3.799	31	.001
Pre Self-Confidence Post Self-Confidence	-4.594 [-7.507; -1.681]	8.080	-3.216	31	.003

Paired sample t-tests were conducted to analyze whether there were significant differences between pretest and posttest scores. For learning motivation, the mean difference was -3.594 (SD = 5.351), with $t(31) = -3.799$ and $p = 0.001$. For self-confidence, the mean difference was -4.594 (SD = 8.080), with $t(31) = -3.216$ and $p = 0.003$. These results indicate significant improvements in both variables following the intervention.

To provide a clearer visual representation of these improvements, bar charts comparing pretest and posttest mean scores are presented below.

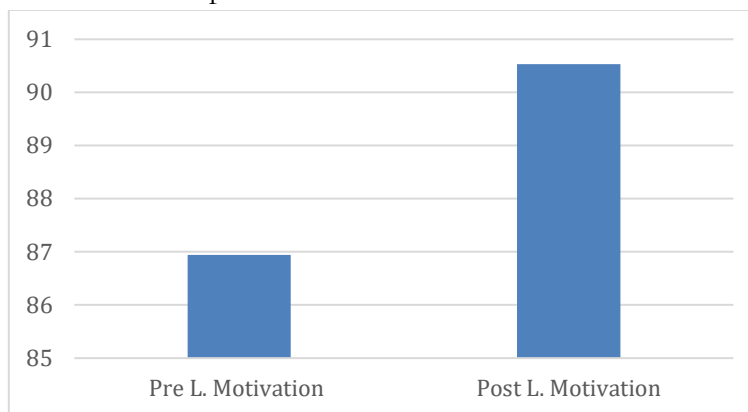


Figure 2. Comparison of Pretest and Posttest Mean Scores on Learning Motivation



Figure 3. Comparison of Pretest and Posttest Mean Scores on Self-Confidence

The bar charts illustrate a consistent increase in mean scores from pretest to posttest for both variables, supporting the statistical findings. Visual representation highlights the magnitude of improvement more clearly, confirming that the Socratic Teaching and Fishbowl Discussion intervention contributed positively to enhancing students' learning motivation and self-confidence.

d. Effect Size (Cohen's d)

To determine the magnitude of the intervention's effect, Cohen's d was calculated by dividing the mean difference by the standard deviation. For learning motivation, $d = 3.594 / 5.351 = 0.67$, and for self-confidence, $d = 4.594 / 8.080 = 0.57$. According to Cohen (1988: 284), effect sizes of 0.5 to 0.8 indicate medium to large effects. Therefore, the intervention had a meaningful impact on both psychological constructs.

The results demonstrate the efficacy of the Socratic Teaching approach using Fishbowl Discussion in enhancing students' motivation and self-confidence. The intervention was designed based on Paul's taxonomy of Socratic questioning, which includes six categories: clarification, challenging assumptions, evidence examination, alternative viewpoints, implications, and questioning the question. Embedding these stages into Fishbowl dialogue enabled students to engage more deeply in reflective and critical discussion.

2. Discussion

The findings of this study provide clear support for the integration of dialogical and cooperative learning strategies in the context of Islamic teacher education. The Socratic Teaching approach, when facilitated through the Fishbowl Discussion method, has shown potential in nurturing two critical aspects of pedagogical development—motivation and self-confidence. These findings offer practical insight into how PGMI students can be prepared to become facilitators of learning, rather than mere transmitters of knowledge.

In many Islamic universities, learning environments are still dominated by transmissive, one-way pedagogies. The typical classroom dynamic places the lecturer as the sole source of knowledge, while students function as passive recipients. This model, while efficient for content delivery, often does little to develop the affective and communicative dimensions essential for future educators. Within the PGMI context, this issue becomes even more critical, as students are being trained to work with young learners who require not only instructional clarity but also emotional support, responsiveness, and dialogic engagement. (Ho et al., 2023). The traditional lecture method fails to simulate the kinds of interactive environments these future teachers will be expected to create.

Against this backdrop, the integration of the Socratic Teaching method emerges as a compelling alternative. Paul's taxonomy of Socratic questioning is particularly powerful because it offers a clear, structured approach to critical thinking that can be practiced, scaffolded, and assessed. (R. Paul & Elder, 2007a, 2009). By embedding this taxonomy into the collaborative Fishbowl format, the study situates philosophical inquiry within a socially interactive and psychologically safe environment. (Ho et al., 2023). The Fishbowl structure, with its rotating roles and visibility of process, helps democratize participation and ensure that reflective thinking becomes a shared endeavor.

Motivation, as a psychological driver of engagement, is strengthened through this design. Unlike conventional strategies that depend on extrinsic rewards, this method cultivates intrinsic interest. When students are asked open-ended questions, challenged to articulate their reasoning, and invited to engage with opposing views, they begin to experience learning as a meaningful, self-directed process. The dialogic structure aligns with the concept of intrinsic motivation as proposed by Ryan and Deci. (2000), which emphasizes the importance of autonomy, competence, and relatedness as fundamental psychological needs that drive sustained engagement in learning.

For self-confidence, the Fishbowl-Socratic integration provides a rare space where students can safely experiment with academic discourse. (R. Paul & Elder, 2007a). In many Islamic education contexts, public speaking remains a significant hurdle due to cultural norms that discourage confrontation and valorize silence in the presence of authority. This model disrupts those norms constructively by distributing the power of speech and normalizing the act of speaking in a group setting. Drawing from Bandura's theory of self-efficacy, this study suggests that repeated opportunities to speak, coupled with positive feedback and peer modeling, contribute to long-term confidence development.

One of the most important contributions of this study is its contextual specificity. While dialogic learning strategies are widely promoted in global pedagogy, their application within Islamic higher education—particularly in teacher training programs—remains underexplored. This study demonstrates that Socratic questioning is not only compatible with Islamic pedagogical values but can enhance them. The emphasis on reflective dialogue resonates with classical Islamic traditions of scholarly debate, particularly *munāẓarah*, which refers to a structured form of intellectual discourse aimed at seeking truth through argumentation, reasoning, and mutual critique. Historically, *munāẓarah* has been practiced in Islamic

educational settings as a means of developing critical thinking, rhetorical skills, and ethical reasoning among learners. (Halstead, 2004; Makdisi, 1981).

In this sense, the integration of Socratic questioning within the Fishbowl model reflects not a foreign pedagogical imposition, but rather a recontextualization of an existing intellectual tradition within a modern classroom framework. Both approaches emphasize dialogue, questioning, and the co-construction of knowledge through respectful exchange. Therefore, the Fishbowl-Socratic model can be seen as culturally aligned with Islamic educational values, while also addressing contemporary pedagogical demands for active and student-centered learning.

The novelty of this study lies in several key aspects. First, it operationalizes an abstract cognitive framework—Paul’s taxonomy—into a tangible classroom method adapted for Islamic teacher training. Second, it applies this method to affective outcomes—motivation and self-confidence—rather than limiting its use to critical thinking or academic performance (Ho et al., 2023). Third, it embeds the practice within a cooperative discussion model that reflects both modern educational priorities and traditional Islamic values of dialogue and consensus-building.

This approach also serves as a low-cost, scalable alternative for institutions that may lack the infrastructure for high-tech innovation. Because it relies on structure, questioning, and participation rather than devices or software, it is accessible to a wide range of learning contexts. This is particularly relevant in Islamic universities across developing regions, where resources may be limited but the need for pedagogical reform is pressing.

Moreover, this model promotes character education in a way that is both subtle and profound. By requiring students to listen actively, respond respectfully, and build on others’ ideas, it fosters humility, patience, and empathy—core values in Islamic education. These affective gains complement the cognitive and practical outcomes, making the method suitable for holistic teacher formation.

In conclusion, the Socratic Teaching approach using Fishbowl Discussion offers a viable, contextually appropriate, and pedagogically sound method for enhancing both learning motivation and self-confidence among PGMI students. Its implementation addresses many of the systemic challenges present in Islamic universities, particularly the overreliance on lecture-based methods and the underdevelopment of students’ dialogical and emotional competencies. By anchoring the method in both modern learning theory and Islamic educational values, this study not only introduces an innovative approach but also contributes to the renewal of pedagogical tradition within Islamic higher education. Future research can expand this model to other faculties, disciplines, and institutional types to assess its broader applicability and long-term impact.

The findings of this study confirm that the Socratic Teaching approach, when integrated with the Fishbowl Discussion method, significantly enhances students’ learning motivation and self-confidence in the context of Islamic higher education. This approach addresses core challenges commonly found in Islamic university classrooms, such as passive learning cultures and limited opportunities for student dialogue. This study indicates that when students are encouraged to engage in structured, reflective discussions guided by Socratic questioning, they develop stronger intrinsic motivation and a heightened sense of self-efficacy—two psychological traits that are essential for future educators (Bandura, 1997; Ryan & Deci, 2000a).

The dialogic and collaborative nature of this method offers a meaningful alternative to lecture-based instruction that still dominates many Islamic education programs. Students not only gain knowledge but also practice important pedagogical values such as mutual respect, clarity in communication, and critical thinking. These outcomes align with previous studies on student-centered and reflective teaching methods, which have consistently shown positive effects on engagement and learning disposition (Hijriyah et al., 2024; Lee et al., 2014).

Moreover, the success of this intervention highlights the compatibility of Socratic principles with Islamic pedagogical traditions. Dialogue, inquiry, and mutual understanding are not foreign to the Islamic intellectual legacy; in fact, they are central to it. Embedding such values into teacher training practices strengthens both the pedagogical and spiritual foundation of prospective educators (Iswidharmanjaya & Enterprise, 2014).

Therefore, it is recommended that higher education institutions—especially those preparing future Islamic teachers—incorporate dialogic models such as the Fishbowl-Socratic framework into their curriculum. This method offers not only cognitive development but also cultivates the affective and interpersonal competencies needed for contemporary teaching roles. Further research is encouraged to explore the method's effectiveness across different academic disciplines and its scalability in diverse learning environments (Loes, 2022; Rosales-Márquez et al., 2025)

CONCLUSION

This study concludes that the implementation of the Socratic Teaching approach through Fishbowl Discussion has a significant positive effect on students' learning motivation and self-confidence in the PGMI program at UIN Sunan Kalijaga Yogyakarta. The findings, supported by statistical analysis, demonstrate meaningful improvements in both variables after the intervention, as indicated by the results of the paired sample t-test and effect size calculations. These results confirm that structured dialogic learning and active student participation effectively enhance both cognitive engagement and affective development.

The implementation of this approach within the context of teaching practicum (PPL) further revealed noticeable changes in classroom dynamics. Students who initially tended to be passive became more actively engaged in discussions, showed greater confidence in expressing their ideas, and demonstrated higher motivation to participate in the learning process. This indicates that the integration of Socratic questioning and Fishbowl Discussion fosters a participatory, reflective, and student-centered learning environment.

Despite these promising findings, this study has several limitations. The use of a one-group pretest-posttest design without a control group limits the ability to fully attribute the observed improvements solely to the intervention, as external variables may have influenced the results. Additionally, the relatively small sample size and the focus on a single class context may limit the generalizability of the findings.

Therefore, future research is recommended to employ more rigorous experimental designs, such as randomized controlled trials (RCT), to strengthen causal inferences. Further studies may also explore the application of the Socratic Fishbowl approach across different subject areas, educational levels, and institutional contexts to examine its broader effectiveness and scalability.

In conclusion, this study emphasizes that meaningful learning extends beyond content delivery to include the development of critical thinking, communication skills, and self-confidence. The Socratic Teaching approach, supported by structured peer interaction, represents a relevant and effective pedagogical strategy aligned with both contemporary educational theory and the needs of Islamic teacher education.

REFERENCE

- Adib, H., & Intania, N. (2022). Analysis of entrepreneurship values in islamic education learning and morals at al alif vocational high school. *Edukasia: Jurnal Penelitian Pendidikan Islam*, 17(1), 157. <https://doi.org/10.21043/edukasia.v17i1.16118>
- Azwar, S. (2016). *Penyusunan Skala Psikologi: IV*. Pustaka Pelajar.
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. W.H. Freeman and Company.

- Blatt, W. S. (2021). The Power of Presence in Socratic Teaching: The Effect of Substituting Videoconferencing for In-Person Classes. In *Journal of Legal Education*, 70(3)
- Chamidiyah. (2015). Pembelajaran Melalui Brain Based Learning Dalam Pendidikan Anak Usia Dini. *Edukasia: Jurnal Penelitian Pendidikan Islam*, 10(2), 279–300.
- Creswell, J. W., & David Creswell, J. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications, Inc.
- Halstead, J. M. (2004). An Islamic concept of education. *Comparative Education*, 40(4), 517–529. <https://doi.org/10.1080/0305006042000284510>
- Hijriyah, U., Baharudin, B., Fiteriani, I., Fitriati, F., & Azizah, N. (2024). Innovative learning media exhibition: cultivating motivation among islamic education students to create engaging learning media. *Edukasia: Jurnal Penelitian Pendidikan Islam*, 19(2), 369. <https://doi.org/10.21043/edukasia.v19i2.28599>
- Ho, Y.-R., Chen, B.-Y., & Li, C.-M. (2023). Thinking more wisely: using the Socratic method to develop critical thinking skills amongst healthcare students. *BMC Medical Education*, 23(1), 173. <https://doi.org/10.1186/s12909-023-04134-2>
- Iswidharmanjaya, D., & Enterprise, J. (2014). *Satu Hari Menjadi Lebih Percaya Diri*. Gramedia.
- Jiang, H.-L., Lu, L.-H., Yuen, T. W., Liu, Y.-L., & Coelho, C. (2024). Can I See Your Answers? Applying the Fishbowl Method in Marketing Analytics Classes. *Journal of Marketing Education*. <https://doi.org/10.1177/02734753241259974>
- Lee, M. Y., Kim, H., & Kim, M. (2014). The effects of Socratic questioning on critical thinking in web-based collaborative learning. *Education as Change*, 18(2), 285–302. <https://doi.org/10.1080/16823206.2013.849576>
- Loes, C. N. (2022). The Effect of Collaborative Learning on Academic Motivation. *Teaching & Learning Inquiry*, 10.
- Makdisi, G. (1981). *The Rise of Colleges Institutions of Learning in Islam and the West*. Edinburgh University Press.
- Natalya, L. (2018). Validation of Academic Motivation Scale: Short Indonesian Language Version. *ANIMA Indonesian Psychological Journal*, 34(1), 43–53. <https://doi.org/10.24123/aipj.v34i1.2025>
- Natalya, L., & Purwanto, C. V. (2018). Exploratory and Confirmatory Factor Analysis of the Academic Motivation Scale (AMS)–Bahasa Indonesia. *Makara Human Behavior Studies in Asia*, 22(1), 29. <https://doi.org/10.7454/hubs.asia.2130118>
- Pallant, J. (2005). *SPSS SURVIVAL MANUAL A step by step guide to data analysis using SPSS for Windows (Version 12)* (Vol. 12). National Library of Australia. www.allenandunwin.com/spss.htm
- Paul, R., & Elder, L. (2007). Critical thinking: The art of Socratic questioning. *Journal of Developmental Education*, 31(1), 34–37.
- Paul, R., & Elder, L. (2009). *The Miniature Guide to Critical Thinking: Concepts and Tools*. The Foundation for Critical Thinking.
- Paul, R. W., & Binker, A. J. A. (1990). *Critical Thinking: What Every Person Needs to Survive in a Rapidly Changing World*.
- Rohman, M., & Mukhibat, M. (2017). Internalisasi nilai-nilai sosio-kultural berbasis etno-religi di man Yogyakarta iii. *Edukasia: Jurnal Penelitian Pendidikan Islam*, 12(1), 31. <https://doi.org/10.21043/edukasia.v12i1.1771>
- Rosales-Márquez, C., Carbonell-García, C. E., Miranda-Vargas, V., Diaz-Zavala, R., & Laura-De La Cruz, K. M. (2025). Self-confidence as a predictor of digital skills: a fundamental pillar for the digitalization of higher education. *Frontiers in Education*, 9. <https://doi.org/10.3389/educ.2024.1515033>
- Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>

- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Sardiman, A. M. (2016). *Interaksi dan Motivasi Belajar Mengajar* (23rd ed.). RajaGrafindo Persada.
- Sugiyono. (2021). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta.
- Sutherland, R., Reid, K., Kok, D., & Collins, M. (2012). Teaching a fishbowl tutorial: sink or swim? *The Clinical Teacher*, 9(2), 80–84. <https://doi.org/10.1111/j.1743-498X.2011.00519.x>
- Wati, S., & Sari, F. (2023). Increasing students' speaking skill through fishbowl. *Didascein : Journal of English Education*, 4(1), 1–9. <https://doi.org/10.52333/djoe.v4i1.61>