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SELF-EFFICACY OF ISLAMIC RELIGIOUS EDUCATION TEACHERS IN IMPLEMENTING DEEP LEARNING-BASED LEARNING

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ABSTRACT

This study aims to analyze the self-efficacy level of Islamic Religious Education (PAI) teachers and identify factors that influence the implementation of deep learning-based learning at Muhammadiyah 1 High School, Ponorogo. The research method used is descriptive qualitative with data collection techniques through in-depth interviews, participatory observation, and documentation studies of eight PAI teachers. Data analysis was conducted using the interactive model of Miles, Huberman, and Saldaña which includes the stages of reduction, presentation, and conclusion drawing. The results show that the level of self-efficacy of Islamic Religious Education (PAI) teachers is in the medium to high category with variations in three main dimensions: learning planning (high), implementation (medium-high), and challenge management (medium). The most dominant strengthening factors are mastery experience through successful experiences and social persuasion through collegial support, while inhibiting factors include administrative burden, limited practice models, and physiological fatigue due to workload. Overall, teacher self-efficacy acts as a catalyst for pedagogical transformation from conventional approaches to contextual, reflective, and character-based deep learning.

Keywords: Deep Learning, Meaningful Learning, PAI Teachers, Self-Efficacy

INTRODUCTION

The rapid social changes are marked by the digitalization of daily life, the flood of information, the increasing polarization of public discourse, and a shift in the way the young generation learns and forms identities, thus encouraging education to no longer focus on short-term cognitive achievements. In the *Education 4.0* landscape, schools are required to build adaptive competencies that enable students to interpret information critically, collaborate,

innovate, and act ethically in both digital and real social spaces. This need is in line with a new pedagogical agenda that emphasizes meaningful and authentic learning through global competency strengthening. Therefore, the issue of reconstructing the learning paradigm is not just a curriculum agenda, but a strategic response to increasingly complex socio-cultural challenges. (Mokmin et al., 2025) (Fullan et al., 2020)

21st Century Education faces disruptive challenges that require a reconstruction of learning paradigms. Globalization and the digital revolution 4.0 require the education system not only to transfer knowledge (*knowledge transmission*) but to equip students with complex competencies in the form of critical thinking skills, creativity, collaboration, and character. In this context, deep learning emerged as an answer to the limitations of (Fullan et al., 2020) *the surface learning* approach that is still dominant in Indonesian educational practices. Deep learning is defined as a learning process that allows learners to internalize knowledge through six global competencies: character, citizenship, collaboration, communication, creativity, and critical thinking. In contrast to deep (Hussin, 2021) (Fullan & Langworthy, 2020) *learning* in the context of artificial intelligence, *deep learning* in education is a pedagogical approach that emphasizes the formation of conceptual understanding, inter-disciplinary relationships, and the application of knowledge in an authentic context. In the domain of Islamic Religious Education, the application of (Fisher et al., 2020) *deep learning* is a strategic need given the characteristics of the subject that not only emphasizes cognitive aspects but also affective and psychomotor aspects. (Hashim, 2022)

Deep learning-based Islamic religious education transforms learning from *textual learning* to *contextual understanding*, from doctrinal understanding to critical spiritual development (Alwasilah, 2021). For example, learning about zakat does not only discuss its terms and rules, but analyzes the socio-economic impact of zakat in overcoming disparities in the digital era. The implementation of *deep learning* faces complex obstacles, especially related to teacher capacity. Studies by show that 65% of Indonesian teachers still struggle to implement differentiated learning, one of the key elements of deep learning. The key factor that determines the success of this pedagogical transformation is the self-efficacy of the teacher, the individual's confidence in his or her ability to plan and execute the actions necessary to achieve a particular outcome. Teacher self-efficacy is a strong predictor in the application of learning innovation. Teachers with high self-efficacy tend to be more resilient, more creative in designing learning, and more persistent in facing challenges. In contrast, teachers with low self-efficacy will avoid pedagogical innovation and revert to conventional methods. Previous research on teacher self-efficacy has generally focused on science and mathematics subjects, while specific studies on PAI teachers' self-efficacy in the context of deep learning have been limited. The literature review shows the importance of the research position to strengthen the self-efficacy of Islamic religious education teachers in deep learning-based learning (Kusumawardhani, 2023) (Bandura, 1997) (Zee & Koomen, 2020) (Fackler et al., 2021) (Wahyudi et al., 2023) (Jailani & Bakar, 2020)

SMA Muhammadiyah 1 Ponorogo is a leading educational institution that is committed to integrating Islamic values with the advancement of modern education. The school has implemented a variety of innovative programs including deep learning-based learning. However, based on preliminary observations, there are variations in the level of deep learning

adoption among PAI teachers, which is strongly suspected to be related to differences in self-efficacy.

Based on these problems and literature studies, this study aims to: (1) analyze the level of *self-efficacy* of PAI teachers in implementing deep learning-based learning at SMA Muhammadiyah 1 Ponorogo; (2) describe how *deep learning* is implemented in PAI learning at the planning, process, and assessment levels; and (3) identify factors that affect the *self-efficacy* of PAI teachers in the context of such implementation, such as successful teaching experiences, collegial support and school leadership, professional development opportunities, and emotional conditions and workloads.

RESEARCH METHODS

This study uses a qualitative approach with a descriptive type. This approach was chosen to understand the phenomenon of teacher self-efficacy holistically and contextually in a natural setting. The descriptive design allows researchers to describe systematically and in-depth the level and factors of PAI teachers' self-efficacy in the application of deep learning. The research was conducted at SMA Muhammadiyah 1 Ponorogo from February to May 2024. The informants consisted of 8 PAI teachers who were selected using purposive sampling techniques based on the following criteria: (1) have at least 3 years of teaching experience; (2) have participated in innovative learning training; (3) willing to participate fully in the research. The characteristics of Informants vary in terms of gender, age, and educational background. (Creswell, 2018) (Scott, 2022)

Interviews are conducted in a semi-structured manner with interview guidance that refers to the four sources of self-efficacy and three dimensions of instructional efficacy. The interview focused on teachers' experiences in designing, implementing, and evaluating deep learning-based learning. Researchers engage in learning processes to observe manifestations of self-efficacy in actual practice, including learning design, instructional strategies, discussion management, response to challenges. Observations were carried out in 12 meetings with a duration of 2x45 minutes each meeting. The documents analyzed included lesson plans, teaching materials, student worksheets, and student worksheets. Document analysis aims to test the consistency between teachers' statements in interviews and actual practice. (Bandura, 1997) (Tschannen-Moran & Hoy, 2020) (Spradley, 2020) (Bowen, 2021)

The data is analyzed using an interactive model through three stages: Selecting, focusing, and simplifying the raw data. The data is categorized based on the dimensions of self-efficacy and the factors that influence it. Present data in the form of matrices, tables, and descriptive narratives to make it easier to identify patterns and relationships between categories. Draw meaning from the data presented through continuous verification and triangulation. The validity of the data is maintained through: (1) triangulation of sources and methods; (2) member check by confirming the interpretation of the data to the informant; (3) diligence of observation to gain in-depth understanding; (4) trail audit through detailed research process documentation. (Miles & Huberman, 2014) (Shenton, 2020)

RESULTS AND DISCUSSION

Results

The results of interviews and observations have found that the majority of teachers (6 out of 8 informants) show high self-efficacy in designing deep learning-based learning. This belief is manifested in the ability to develop a lesson plan that integrates six global deep learning competencies. Teacher A stated:

"I am confident in being able to design learning that not only pursues curriculum targets, but challenges students to think critically about the relevance of Islamic teachings to contemporary issues such as the impact of social media on adolescent morality."

The analysis of the lesson plan shows that 75% of teachers have included indicators of higher thinking (HOTS) and learning activities that involve contextual analysis. However, there is variation in the depth of planning, where senior teachers tend to be more structured in designing learning scenarios. In this aspect, *teachers' self-efficacy* is at a medium to high level. A total of 5 teachers consistently applied student-centered strategies with a variety of methods such as project-based learning, inquiry, and reflective discussion. Observations show that these teachers are skilled at facilitating in-depth discussions on complex themes such as the relationship between science and the Qur'an, or the concept of jihad in the contemporary context. Teacher C explains:

"I use an ethical dilemma approach in learning the faith, where students are invited to analyze contemporary cases from the perspective of monotheism."

However, the other 3 teachers still had difficulty managing productive classroom discussions and tended to revert to the lecture method when faced with student resistance. This dimension shows the most varied level of self-efficacy. Teachers with more than 10 years of experience show high resilience in the face of challenges such as passive students or critical questions. They use differentiation strategies and a personal approach to overcome these barriers. On the other hand, young teachers, namely with less than 5 years of experience despite being enthusiastic in planning, often lack persistence when facing implementation obstacles. Teacher F revealed:

"When students don't respond to provocative questions, I sometimes doubt whether this method is effective for all students."

Mastery Experience is the most dominant source of self-efficacy. Success in implementing deep learning strategies and seeing its positive impact on students' understanding strengthens teachers' confidence. Teacher D narrates:

"After successfully guiding students to make a documentary project about religious harmony in Ponorogo, my belief to implement PBL is getting stronger."

Social Persuasion in the form of collegial support and appreciation of the principal also plays a significant role. The PAI teacher practice community in this school is a forum for sharing experiences and strengthening each other. Teacher B states: (Huda et al., 2023)

"The support of peers and principals gives a sense of security to experiment with new methods."

Vicarious Experience through observation of other teachers who have successfully applied deep learning as a source of motivation, although access to practical models is still limited to the school environment. *High administrative burden* is the main obstacle. Teachers spend significant time completing administrative tasks that reduce the opportunity to prepare for meaningful learning. The limitations of *Vicarious Experience* in looking at best practices from other schools limits the teacher's perspective. The lack of opportunities to observe innovative learning in different contexts makes it difficult for teachers to develop a variety of strategies. *Physiological conditions* such as fatigue due to the load of teaching 24 hours per week affect the stamina and enthusiasm of teachers in implementing learning that requires greater energy.

Discussion

The findings of this study show a consistent pattern: most teachers have high *self-efficacy* at the planning stage, but these levels of confidence become more varied during implementation in the classroom, especially when faced with student resistance, unproductive discussions, and high workloads. This variation indicates that *self-efficacy* does not only function as a personal belief, but rather works as a mechanism that bridges conceptual knowledge about *deep learning* with practical capacity in the classroom (Bandura, 1997; Zee & Koomen, 2020). To explain the relationship between these findings in a more systematic way, this study formulates the flow of relationships between variables as shown in Figure 1 below:

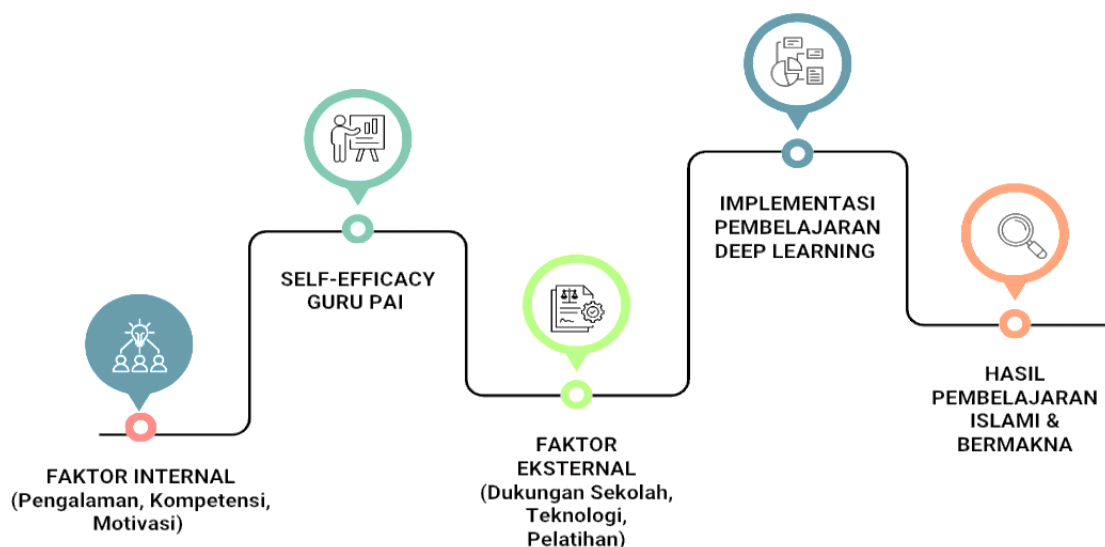


Figure 1. Flow Relationships between variables

As shown in Figure 1, the sources of *self-efficacy*, especially *mastery experience* and *social persuasion*, encourage the formation of teachers' self-confidence in three main areas: planning efficacy, implementation efficacy, and resilience/persistence efficacy in facing classroom dynamics (Bandura, 1997; Zee & Koomen, 2020). In this model, *self-efficacy* then affects the quality of deep-learning-based PAI learning enactment, which is reflected in the choice of *student-centered strategies*, the ability to facilitate reflective dialogue, and the courage to associate PAI material with contemporary issues (Fullan et al., 2020). At the same time, contextual factors such as administrative burden and physiological conditions (fatigue) act as inhibitors that can weaken the consistency of implementation, so some teachers tend to revert to conventional methods when facing obstacles in the classroom (; ; 2023;). Fackler et al., 2021 Kusumawardhani, 2023 Arifin, 2023

The model in Figure 1 helps explain why high *self-efficacy* at the planning stage has not always resulted in stable implementation. Conceptually, this condition emphasizes that the understanding of *deep learning* and the ability to pour it into the lesson plan requires a bridge in the form of repeated success experiences in order to be converted into practical competencies in the classroom (Bandura, 1997; Schunk & DiBenedetto, 2020). The findings on the strong role of community practice and the support of school leaders also show that *social persuasion* and collaborative culture reinforce a sense of security to experiment, in line with the role of *professional learning communities* in teacher capacity building. Thus, strengthening the implementation of (Stoll et al., 2006) *deep learning* in PAI is not enough through technical training, but needs to be accompanied by an institutional strategy to expand *vicarious experience*, strengthen collegial support, and reduce non-instructional burdens that erode teachers' pedagogical energy (;). Fackler et al., 2021 Kusumawardhani, 2023

The complex dynamics behind the level of *self-efficacy* of Islamic Religious Education teachers in implementing deep learning-based learning, where the teachers' professional confidence not only reflects individual abilities, but also illustrates the extent to which the institutional environment provides room for growth for pedagogical innovation. The findings of the study show that teachers with high (Zee & Koomen, 2020) *levels of self-efficacy* tend to be better equipped to transform the learning paradigm from conventional approaches to meaningful learning that demands the cognitive, affective, and spiritual involvement of learners as a whole. (Fullan et al., 2020)

Self-efficacy acts as a driving force that determines the courage of teachers to experiment, face complex classroom challenges, and integrate Islamic values in contextual and reflective learning. However, variations in the level of (Bandura, 1997) *self-efficacy* among teachers show that self-confidence is not formed instantaneously, but is influenced by previous success experiences (*mastery experience*), social support from peers and school leaders (*social persuasion*), and work environment conditions that are conducive to innovative learning practices.

The findings of the study show that the self-efficacy of PAI teachers plays a catalyst for pedagogical transformation towards deep learning. Variations in the level of self-efficacy in three dimensions indicate the complexity of teacher professional development (Fackler et al., 2021). The high self-efficacy in planning but the variability in implementation indicates that conceptual knowledge of deep learning has not been automatically converted into practical capacity (Wahyudi et al., 2023). The dominance of mastery experience as a source of self-

efficacy is in line with Bandura's (1997) theory that success experience is the most powerful predictor for the formation of self-confidence. These findings reinforce Schunk & DiBenedetto's (2020) research on the importance of creating space for teachers to experience success in pedagogical innovation. *Effective social persuasion* through community practice at SMA Muhammadiyah 1 Ponorogo shows the importance of collegial support in building collective self-efficacy. This is consistent with the research of Stoll et al. about the role of professional learning communities in teacher capacity development. The administrative obstacles faced by teachers reflect systemic problems in Indonesian education management (2006) (Kusumawardhani, 2023). High non-instructional workloads eat away at time and energy that could otherwise be allocated to the development of meaningful learning (Fackler et al., 2021).

High self-efficacy allows teachers to transform learning from a dialogical-reflective intermediate doctrinal approach in the context of PAI. Teachers are not afraid to open discussions on controversial issues as long as they remain within the corridor of Islamic values, because they are confident that they can guide the process towards a deep and comprehensive understanding. The practical implications of these findings are the need to develop comprehensive self-efficacy strengthening programs, not only through technical training but also through the creation of a supportive school ecosystem, reduced administrative burden, and expanded access to practical models through inter-school networks. (Kadri et al., 2025)

CLOSING

Based on the results of research on the *self-efficacy of* PAI teachers in implementing deep learning-based learning at SMA Muhammadiyah 1 Ponorogo, it can be concluded that the level of *self-efficacy* of teachers in general is in the medium to high category. Teachers' self-confidence is strongest in the aspect of learning planning which is able to integrate six global *deep learning* competencies, while in the implementation and management of challenges there are still variations between individuals. These findings show that PAI teachers already have a good conceptual foundation, but still need reinforcement at the practical level for learning to truly transform from conventional approaches to deep, reflective, and contextual learning.

Factors that strengthen *teachers' self-efficacy* mainly come from *mastery experience* in applying *deep learning methods* and social support from the practice community and school leaders who encourage the courage to innovate. On the other hand, inhibiting factors include excessive administrative burden, limited opportunities to observe best practices from other schools (*vicarious experience*), and physical and mental conditions due to high workloads. Therefore, strengthening *the self-efficacy* of PAI teachers needs to be carried out through several strategic steps. *First*, strengthening the support of the professional learning community as a space for reflection and collaboration between teachers. *Second*, restructuring the administrative burden so that teachers have more time to design and evaluate meaningful learning. *Third*, open wider access to innovative practices across schools so that teachers can enrich their experiences and strengthen their confidence in applying *deep learning* that is in line with Islamic values and the needs of 21st century education.

This research has several limitations. First, the number of informants was relatively small (8 teachers) and focused on one school, so the findings could not be generalized widely

to the context of other schools with different characteristics. Second, the data is qualitative based on interviews and observations that are vulnerable to *social desirability bias* and researcher subjectivity, although it has been strengthened through the analysis of RPP documents. Third, this study has not explored in depth the impact of the implementation of *PAI deep learning* on student achievement (cognitive, affective, and behavioral), so the causal relationship cannot be concluded. Fourth, the limitations of *vicarious experience* across schools in the context of research make the variety of best practice models observed still narrow.

The researcher suggested that the next researcher conduct a multi-site study with a more diverse sample to test the consistency of the finding pattern, combine qualitative-quantitative methods (e.g. self-efficacy scale and deep learning observation rubric), and add indicators of student learning outcomes. Intervention research such as *coaching*, *lesson studies*, or reducing administrative burdens is also important to test strategies to improve self-efficacy and sustainability of *deep learning* implementation in PAI.

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