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Strengthening the Professional and Pedagogical Competencies of In-service Islamic Education Teachers through Multilateral Collaboration

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Abstract. Islamic education teachers must possess pedagogical, professional, social, personal, and information technology competencies to serve students effectively. In Indonesia, the requirements have not been met by teacher professional education (TPE). Therefore, this study aimed to provide an in-depth description of the implementation of in-service TPE through multilateral collaboration. A post-phenomenological paradigm was used with an interdisciplinary sociological approach. Data collection was conducted through interviews, observations, document analysis, and focus group discussions. The participants were 78 individuals, including deans, program chairs, and secretaries of the Islamic Education TPE program, administrators, collaborative partners, and students. Furthermore, data analysis was conducted thematically using the Miles & Huberman interactive framework. The results showed that the tests fell into the “very good” category, with 878 (89.7%) and 849 (86.8%) participants scoring above 90 on the professional and pedagogical competence scale. The success of in-service professional development for Islamic religious education teachers was due to collaboration with various parties, including in funding, instructional support, expert speakers, learning facilities, regulations, and policies. The strengthening of teachers’ professional and pedagogical competencies was achieved through theoretical and practical learning. Meanwhile, the enhancement of information technology skills was obtained through indirect learning and supplementary programs outside the regular curriculum. This study enriched the discourse on educational partnerships using multilateral partnerships.

Keywords: Islamic Education Teachers; in-service training; multilateral collaboration; professional competence; pedagogical competence; Teacher Professional Education

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1. Introduction

Teachers of Islamic religious education must possess adequate competencies in the 21st century to serve students effectively (Kurata et al., 2025) and adapt to the demands of the times (van Bruggen et al., 2026). In this context, competent teachers are crucial to the quality and outcomes of education (Saada, 2023). UNESCO acknowledges that progress in education depends on the quality of the teachers (López-Martín et al., 2025).

Since 1970, efforts to strengthen competencies in Indonesia have been carried out through training, workshops, seminars, tiered education programs, and working groups. The level of competencies has also been strengthened through Competency-Based Teacher Education (CBTE), Performance-Based Teacher Education (PBTE), and School-based Teacher Education (SBTE). In CBTE, 10 teacher competencies are taught at training institutions and developed into SBTE. However, this model is considered inadequate because the concept is extremely theoretical. SBTE is integrated with PBTE, providing additional practical teaching experience for prospective teachers. The level of education has also been raised from a diploma to a bachelor's degree to improve the quality of teachers (Suyanto, 2019).

Law No. 14 of 2005 on Teachers and Lecturers stipulates that the Indonesian government shall enhance the competencies of in-service teachers through professional education and training, renamed as the Teacher Professional Education (TPE). The TPE curriculum covers the development of pedagogical, professional, social, personal, and technological competencies, as well as teaching practices. TPE is conducted by higher education institutions that qualify as Educational Personnel Training Institutions. This approach enhances competencies to provide high-quality educational services to students.

The Indonesian government is working to improve teacher competence through pre-service and in-service training. Pre-service training aims to prepare teachers with pedagogical, professional, and technological skills, and is conducted through regular classes on campus (Zhang et al., 2024). Meanwhile, in-service teacher education is designed to refresh and expand knowledge and skills in adapting to the demands of the changing times. This is carried out through workshops, clinical supervision, blended learning training, online courses, and collaborative studies (Baldan Babayiğit et al., 2025). However, pre-service and in-service teacher education and training are considered ineffective (Beshah & Anshu, 2024). Some teachers lack the necessary skills to meet the demands of the 21st century, such as global communication, proficiency in information technology, and an understanding of global culture (Kerkhoff & Cloud, 2020).

Workplace stress and burnout are experienced following the difficulty of adapting to work in the modern technological era (Zhang & Jia, 2025), inadequate workplace facilities and information technology equipment, as well as limited training in the advancement of learning modules and ongoing professional development (Murphy-Graham et al., 2026). Partnerships between educational institutions and other organizations are also limited (Sayed et al., 2026). Therefore, this reduces the

development of the knowledge and skills of prospective teachers in addressing various global challenges in the field of education (Oshvandi et al., 2025). UNESCO recommends the improvement of pre-service teacher education and in-service training (Sayed et al., 2023).

Educational Personnel Training Institutions are an essential component of efforts to improve teacher quality. High-quality training is crucial to the quality of the teachers produced (López-Martín et al., 2025). Epstein emphasized the need to manage educational institutions by establishing partnerships with various relevant stakeholders in order to produce high-quality graduates (Crowley et al., 2025; Hadar & Baharav, 2025). According to Godlad, an educational institution that fails to establish partnerships with other organizations may face significant limitations in achieving its institutional objectives. Partnerships with various organizations can address the institution's resource shortages (Maganini et al., 2025; Schwartz et al., 2026).

Several studies show that teacher education partnerships enhance competencies. Linor L. Hadar's study on educational partnerships between universities and schools in the development of teacher professionalism shows improvements in pedagogical, professional, and personal competencies, as well as in learning culture, and has an impact on individual teachers and school organizations (Hadar & Baharav, 2025). Leyton Schnellert's study on in-service training suggests that collaboration among teachers in developing lesson plans, implementing teaching practices, and addressing various classroom issues can enhance greater professionalism in the performance of teachers (Schnellert & Kozak, 2023). Hussein Almalky's study shows that the business sector uses specialized learning and assessment methods in developing the skills of prospective professionals.

Students can participate in community service activities, job training, and internships through the partnership, enhancing social skills, improving character and communication abilities, as well as increasing professional competence and success in life (Almalky & Alqahtani, 2021). Cheri Chan's study on cross-border partnerships in pre-service teacher education showed that pre-service teachers in Hong Kong who transitioned to school-based learning had complex experiences and played a crucial role in meeting expectations. Pre-service teachers are able to connect the theory learned on campus with real-world experiences in schools (Chan, 2019).

The Faculty of Tarbiyah and Teacher Education at the State Islamic University of Salatiga, Indonesia, provides in-service teacher education based on Decision Letter No. 72 of 2021, January 6, 2021. This institution is accredited as "Excellent" based on the Decision of the Independent Education Accreditation Agency No. 618/SK/LAMDIK/Ak/P/VI/2024. The participant completion rate of TPE Educational Personnel Training Institutions at the Faculty is shown in Figure 1 based on the data administrator's document 2025 for the past three years.

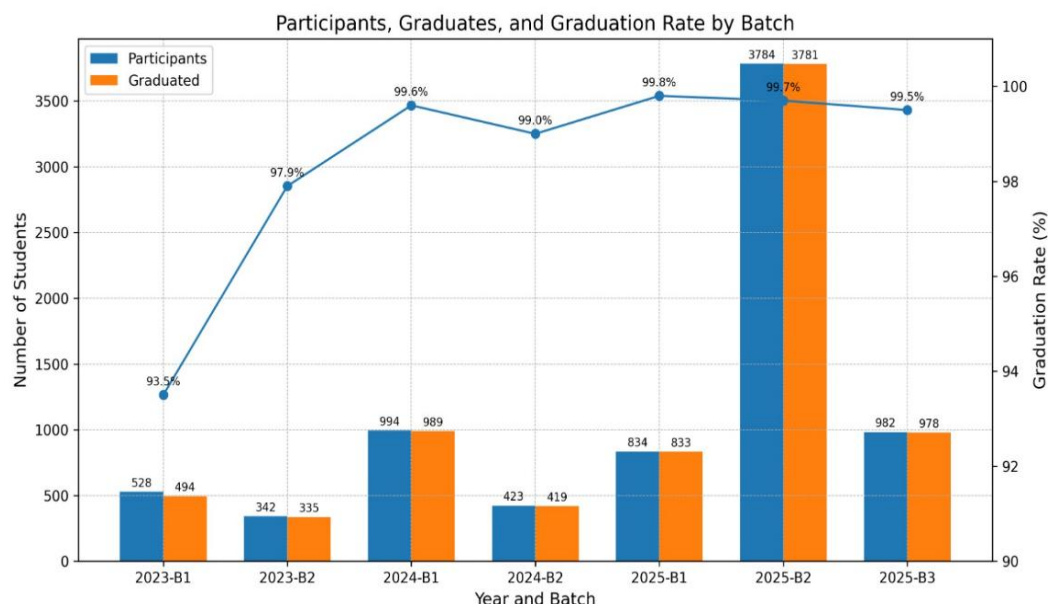


Figure 1: Participant completion rate of TPE Islamic education teachers in-service training year 2023 – 2025

The graduation rate for in-service training TPE participants in Islamic religious education over the past three years has been high, at over 90%. This shows that the implementation of the TPE program has been highly successful. This study provides an in-depth analysis of the strengthening of professional and pedagogical competencies among Islamic religious education teachers through multilateral collaboration using a post-phenomenological paradigm and an interdisciplinary sociological approach.

The three issues discussed are as follows: 1) How are the pedagogical and professional competencies of in-service Islamic education teachers strengthened through information technology-based multilateral collaboration? 2) What is the role of each partner educational institution in in-service training for Islamic education teachers? 3) What are the factors supporting the success of strengthening the pedagogical and professional competencies of Islamic education teachers through multilateral collaboration? 4) What challenges are faced in TPE of Islamic education teachers through information technology-based multilateral collaboration?

The novelty is in the implementation of in-service teacher education in Islamic Education to strengthen pedagogical and professional competencies through information technology-based, multilateral collaboration, spanning recruitment, partner engagement, and evaluation. A recommendation for administrators is the need for innovation in implementing education through multilateral collaboration. Educational programs must incorporate innovations directed to the specific circumstances and conditions of the students. In-service TPE requires additional activities beyond the regular curriculum, such as guidance on the use of information technology, in-depth study and enrichment of course material, as well as preparation for competency exams.

2. Literature Review

Educational partnerships between universities and stakeholders can improve teacher performance. Yusuf Sayed's work on university-school collaborations showed that teachers in Brazil, India, and South Africa were able to enhance pedagogical competencies through teaching and learning practices guided by university faculty. This was supported by effective partnership management, the quality of the relationship, and the availability of resources (Sayed et al., 2026). Stevie Jae Hepburn's study on promoting positive partnerships between schools and parents to enhance professional development in teaching reported that educational partnerships could improve understanding of roles and responsibilities in children's education, as well as teachers' teaching skills and interpersonal competencies (Hepburn et al., 2025).

Linor's study on educational partnerships showed that schools and universities played an equal role in improving the quality of education. Schools and universities need to develop joint investigations to generate innovations that improve the quality of education (Hadar & Baharav, 2025). Hadar Kimchi's analysis on collaboration between universities, kindergartens, and the community suggested that improving the quality of education must consider the social context of parents and the community. The political and cultural dynamics of the community contribute to educational innovation efforts that are sustainable, inclusive, and transformative (Kimchi-Yahav et al., 2026).

However, multilateral educational partnerships have weaknesses, including a lack of coordination among parties, which results in slow bureaucratic processes (Mutiarin et al., 2024), unsustainable cooperation (Shirley et al., 2020), and the fact that new ideas from collaborative partners are sometimes not contextually relevant to local conditions (Zaman et al., 2026). Several studies on university-education partnerships include collaborative partners, such as parents, schools, or the community. No research on multilateral partnerships in Islamic teacher education has been found. This study examines partnerships between universities and various education stakeholders, such as the central and local governments, schools, alumni, government agencies, and private institutions.

3. Methodology

3.1 Data Collection and Analysis

This study used a post-phenomenological paradigm with an interdisciplinary sociological approach. Post-phenomenology shows that humans have become integrated with technology, influencing perspectives or perceptions of life (Legaard, 2025; Shaw et al., 2020). An interdisciplinary sociological approach holds that examining an issue must include various perspectives from the social sciences, namely economics, education, culture, religion, social strata, and social entities (Alwaqaa, 2020). This study was conducted in three stages, namely preparation, data collection, and analysis. During the preparation stage, the instruments were prepared, including interview guidelines, observation guidelines, document study guidelines, and focus group discussion materials. After being validated by education experts, the draft instruments were revised according to the experts' suggestions.

Data collection was conducted through interviews with administrators and collaborative partners. A review was conducted of documents related to the implementation of in-service TPE for Islamic Education Teachers at the State Islamic University Salatiga, Indonesia. Observations were made of the online learning process, and focus group discussions were held with supervising lecturers, partner institutions, and participants in the in-service Islamic education TPE program. Data collection was conducted through interviews with administrators and collaborative partners.

Furthermore, a review was conducted of documents regarding the implementation of the in-service Islamic education TPE. Observations were made of the online learning process, and focus group discussions were held with supervising lecturers, partner institutions, and participants in the in-service TPE for the Islamic Education Teacher program. The subsequent step was data analysis, which comprised reduction, presentation, and conclusion. Data verification was performed at this stage and during the collection process.

3.2 Subject

The subjects were the dean of the faculty, the chair and secretary of the study program, the organizing committee, supervising lecturers, partner institutions, and participants in the in-service TPE program for Islamic Education Teachers. The willingness to serve as participants and provide the information required was expressed before data collection. The characteristics of the participants are shown in Table 1.

Table 1: Study Participants

No	Participants	Total
1	Dean of the Faculty of Tarbiyah and Teacher Education	1
2	Chair and Secretary of the Teacher Education Professional Program	2
3	Organizing committee	5
4	Advisor	10
5	Partner organizations	10
6	Participants in the in-service professional development program for Islamic Education teachers	50
Total		78

3.3 Data collection and validation

Study data were collected through interviews, document analysis, observation, and focus group discussions. Interviews were conducted with the dean, the head of the study program, and administrators (January 19–24, 2026) to identify the policies and implementation processes of in-service professional education for Islamic Education teachers. Document analysis comprised reviewing records related to the implementation of in-service professional development for Islamic Education Teachers, including participant data, learning activity schedules, evaluation results, MoU's with partner institutions, learning modules, the 2025 academic guidelines, and data on supervising faculty members (February–March 2026). Observations were made of the Islamic Education Teacher in-service TPE

learning process (October–December 2025). Meanwhile, a focus group discussion was held with supervising faculty members (January 26, 2026) to understand the mentoring process for participants. A focus group discussion with Islamic Education TPE participants (January 28, 2026) was held to gain detailed insights into the implementation of the learning process, experiences, and the outcomes achieved during participation. A focus group discussion with partner organizations (February 2, 2026) was conducted to assess the contributions and level of inclusion in the TPE program.

During data collection, validity was verified by comparing information obtained through interviews, observation, and document review. Data verification was also performed by comparing information obtained from different sources. Furthermore, data collection was halted once no further information was obtained.

3.4 Data Analysis

Data analysis was conducted using thematic analysis, which comprised analyzing information according to clusters of thematic issues (Heriyanto, 2018). This stage of the analysis included data coding, thematic analysis, matching, presentation, and concluding (Petrovic et al., 2022). The coding stage comprised labeling and coding the raw data collected according to the themes. The thematization stage consisted of grouping the data in line with the themes. The matching stage included cross-referencing data from interviews, observations, document reviews, and focus group discussions. Data triangulation was performed during the matching stage. The data presentation stage comprised narrating the available information in accordance with the study focus. The final stage was drawing conclusions, which comprised formulating conclusions based on the collected data, presentation, and analysis.

3.5 Ethical considerations

This study included human participants as a data source. Therefore, ethical considerations regarding human subjects were observed. Before data collection, the objectives were explained, and the participants consented to the publication of the information derived from interviews, focus group discussions, document analysis, or observations. The participants were identified by initials rather than actual names. The data were reviewed by the Research Ethics Commission of the State Islamic University Salatiga to ensure the validity of the information and to confirm the prevention of harm to any party (B-015/Un.29/L1/PN.03.1/05/2026). The results were also reviewed and approved by TPE program organizers (B-2273/Un.29/D1/PP.01.5/04/2026).

4. Results

4.1 Implementation

The following data were obtained based on the results of interviews, document reviews, observations, and focus group discussions with the participants. In-service professional development for Islamic Education Teachers is known as the Transformative TPE. This short-term, efficient, and flexible in-service teacher certification program is delivered entirely online through a Learning

Management System (LMS) to guide student learning, with each session lasting 49 days (Direktorat Jenderal Pendidikan Islam, 2025). The TPE Transformative program for Islamic Education Teachers is held annually in two to three sessions. TPE students are required to complete 36 credit hours.

According to the participants, this transformative model is highly beneficial because the concept is short, conducted online, allows teachers to continue teaching, and is cost-effective due to the availability of scholarships. However, the program is perceived as burdensome because participants must cover a large amount of material and complete various coursework assignments within a short timeframe, leading many participants to become exhausted or ill.

"This transformative TPE program is short, sir, hence we teachers can still carry out our teaching duties at school...but we have much work to do, sir." P-1

"This TPE course is online, and I'm really happy because it's simple and practical – I don't have to go to Salatiga; hence it's efficient... but there's much material; it's making my head spin." P-2

"If I had to pay for it myself, I couldn't afford it, sir. Thankfully, there's a government scholarship." P-3

"I'm from Magelang [Central Java]. My TPE program is funded by Baznas (National Zakat Agency) in Magelang City; there are four of us in total... but there's much work to do, sir. When I have to work on assignments late into the night, I end up feeling really exhausted." P-4

"This transformative TPE program is short, sir, but there are many assignments... I actually got sick doing all those assignments, sir." P-5

The selection of prospective students for the professional teacher education program is conducted by the District/Municipal Office of the Ministry of Religious Affairs, based on the local government's financial capacity and the candidates' years of service. Funding for the program is fully covered by the central and local governments, as well as the National Zakat Agency.

"Regarding participants, the selection of candidates for the TPE program is conducted by the central Ministry of Religious Affairs; the faculty merely receives a participant quota." D

"Considerations for selecting TPE participants are based, among other factors, on the teachers' financial capacity and length of service." Cs

"I registered for the TPE program collectively through my school... and subsequently received a notification to participate in the program." P-3

The transformative teacher education program is conducted online through self-paced learning using a Learning Management System.

"The TPE program has long been conducted online via an LMS, meaning participants study independently from their respective homes with guidance from lecturers." D

"The TPE coursework is conducted online via an LMS; we monitor the system daily from morning until 4:00 PM to ensure that participants have filled it out correctly." Oc

"That's correct, Sir; the TPE coursework is indeed conducted online via an LMS; hence the participants need to be able to operate a laptop and the relevant applications." Sc

"The TPE coursework is indeed conducted online via an LMS; we monitor the system daily from morning until 4:00 PM to ensure that the participants have filled it out correctly." A-2

"We are on standby every day – from morning until late afternoon – to assist participants as they work through the online LMS; the entire process, from registration and implementation to evaluation, is conducted online." A-1

In the Academic Guidelines for In-Service TPE, the Ministry of Religious Affairs details the course activities in Table 2.

Table 2: Independent learning activities of in-service students in the Islamic education teacher training program

No	Activities	Description
1	Video Tutorial	Students watched a video explaining the comprehensive learning activities considered during the in-service teacher professional development program.
2	Pretest	A pretest is administered for each topic, allowing students to take eight batches per module. The purpose of the pretest is to assess initial proficiency before studying the module.
3	Reading the Module	Students read and understand the course modules available on the LMS. Each module consists of 8 learning topics. The modules that must be read include pedagogical modules, instructional design modules, and professional modules.
4	Educational Video	The students watched two videos containing educational content
5	Videos, Articles/PowerPoint presentations	Students study the material through videos, articles, or PowerPoint presentations available on the LMS.
6	Independent Assignment	Students create a summary of the material for each module typed directly into the LMS.
7	Reflection Assignment	Students write a reflection on each module that explores the connection between the course material and the real-world problems experienced daily.
8	Reflection Video	Students create videos acting as presenters to explain the essential material covered in the learning module. Students create instructional videos for performance-based exams.
9	Module Final Exam	Students take the final module exam as a prerequisite for proceeding to the next module. A score of 75 means that students may proceed to the next module.

The schedule of activities for the Transformative TPE program was established by the Ministry of Religious Affairs at the central level. The educational personnel training institutions implement the instructions, including the student assignment templates standardized by the central Ministry.

"We received the TPE activity schedule from headquarters and simply had to carry it out." D

"That is absolutely correct, Sir; the schedule for PPG activities is created by the central Ministry of Religious Affairs." Cs

The professional development curriculum for in-service Islamic Education Teachers includes theoretical and practical components. The theoretical component focuses on deepening pedagogical and professional competencies, as well as instructional materials, based on modules published by the Central Ministry of Religious Affairs. Meanwhile, the practical component includes developing teaching modules, practicing the use of instructional media, and conducting teaching demonstrations.

"The coursework comprises both theory and practice; students must study modules and then create summaries, while the practical component requires them to develop teaching modules and instructional media." Cs

"That's right, Sir; there is both theory and practice—for instance, creating module summaries and lesson modules, micro-teaching practice, and actual classroom teaching practice." A-3

In the Teaching module for participants in the Ministry of Religious Affairs' TPE Transformative program, the content of the professional, pedagogical components and teaching material consists of 8 topics as shown in Table 3.

Table 3: Breakdown of Professional Module Content

Number	Topic
1	Uncovering the essence of the muhkamat and mutasyabihat verses
2	Criteria for the authenticity of hadith
3	Belief in the Day of Judgment and divine decree
4	The Development of Good Character
5	Contemporary Islamic jurisprudence
6	The Transformation of Islamic Civilization.
7	Values education and character education.
8	Religious moderation

Table 4: Breakdown of Pedagogical Module Content

Number	Topic
1	Problem-Based and Project-Based Learning Approaches: Problem-Based Learning (PBL) and Project-Based Learning (PjBL)
2	Differentiation-Based Learning (DBL) Approach
3	The Technological Pedagogical and Content Knowledge (TPACK) Approach
4	Deep Learning-Based Learning Approaches (Mindful Learning, Meaningful Learning, and Joyful Learning)
5	Approaches and Strategies in Guidance and Counseling Services for Clinical Supervision
6	Educational Approach for Children with Special Needs (Inclusive Education)
7	Characteristics and Learning Styles of Gen Z and Gen Alpha Students
8	Professional Teachers in the Digital Age and the Era of Artificial Intelligence (AI)

Table 5: Breakdown of the content of the instructional materials development module

Number	Topic
1	Analysis of Learning Outcomes and Development of Learning Objectives
2	Development of Instructional Materials
3	Development of Learning Approaches, Methods, and Strategies
4	Development of Teaching Aids, Media, and Learning Technologies
5	Development of Learning Assessments
6	Development of Learning Assessment
7	Course module
8	Project Module

Students received training on developing educational materials, creating teaching modules (lesson plans), preparing Recognition of Prior Learning (RPL) documents, taking practice knowledge tests, reviewing course outlines, learning how to use LMS, using the performance assessment website, using the knowledge test website, and testing the system outside of regular classes.

"We have added several programs beyond the regular activities to help them maximize their participation in the TPE program, covering both technical aspects and subject matter content." **D**

"We do have additional activities, such as learning how to operate the LMS, taking practice exams, reviewing exam topic outlines, using the knowledge assessment website, video editing, and more." **Cs-1**

During the teacher professional development program, students used various information technology-based applications. These include Microsoft Word, PowerPoint, Excel, PDF, Convert, video editing, Safe Exam Browser (SEB), image editing, voice dubbing, CapCut, Zoom Meetings, document scanning, photo editing, Canva, Adobe Flash, artificial intelligence, and Word Arabic.

"The transformative PPG program requires proficiency in various software applications – such as video, photo, and image editing tools, Canva, Safe Exam Browser (SEB), Zoom Meeting, AI tools, CapCut,

voice dubbing, PowerPoint, document scanning, file conversion, and others; hence, we have added training sessions outside of regular class hours to enable students to use these application." **Oc**

"During the PPG, we took the program online using various technology applications and an LMS... yes, for example, Excel, MS Word, video editing, photo editing, PDF conversion, and others." **P-3**

In delivering professional development programs for Islamic Education Teachers, the faculty collaborates with various stakeholders. These stakeholders comprise representatives from ministries, district and city education offices, partner schools, teachers, and faculty members.

"We are collaborating with various parties in this PPG program, from the national to the local level." **D**

"The TPE program at the Faculty of Tarbiyah and Teacher Education at UIN State Islamic University Salatiga has numerous partnerships, including with the central Ministry of Religious Affairs, Baznas (National Zakat Agency), alumni, local governments, the Ministry of Finance, mentor teachers, and others." **(Oc)**

"This year, we awarded scholarships to four teachers to participate in the TPE program as part of the collaboration between Banas (National Zakat Agency), Magelang Regency, and State Islamic University Salatiga." **(Po)**

Based on the document from the organizing committee, Table 6 reports the partners considered in the professional development programs for Islamic education teachers.

Table 6: List of collaborating partners for the in-service TPE for Islamic Education Teachers in 2025

Number	Collaborating partner	Total
1	Ministry of Religious Affairs (Headquarters)/Directorates within the Ministry of Religious Affairs	3
2	Ministry of Finance/Education Fund Management Agency	1
3	Regency/City Government	14
4	District/Municipal Department of Education, Youth, and Sports	14
5	National Zakat Agency	2
6	Partner schools	3457
7	Supervising teacher	51
8	Regular alumni	27
9	Graduates of teacher education programs	51
10	Advisor	11

The recruitment process for collaborative partners took place one year before the implementation of the activities. The organizers of the TPE program proposed a collaboration in in-service professional development for Islamic Education Teachers to support the completion of the teacher certification program. The

strategies and rationale for selecting the Faculty of Tarbiyah and Teacher Education, State Islamic University Salatiga, as a collaborative partner are outlined in Table 7.

Table 7: Strategies, reasons for selecting collaboration partners

Collaboration partners	Reasons and strategies
Directorate at the Ministry of Religious Affairs headquarters	a. Availability of funds for the activity b. The number of teachers under the Directorate who are not yet certified c. Consistency of prospective students' needs with the academic programs at the Faculty of Tarbiyah and Teacher Education State Islamic University Salatiga, Indonesia d. Communication approach
City and Regency Governments, Department of Education, National Zakat Agency	a. The large number of teachers in the region who are not yet certified b. Local financial capacity c. Personal approach, communication
Partner schools, mentor teachers	a. Proximity of participants' locations e. The mentor teachers are alumni of the Faculty of Tarbiyah and Teacher Education, State Islamic University Salatiga, Indonesia b. Personal approach, communication
Advisor	a. Relevance to the field of study b. Information technology skills c. Personal approach, communication

TPE collaborators play a crucial role in the success of the program.

"We receive financial support from the central government, local governments, and the district/city BAZNAS (National Zakat Agency)."

D

"Mentor teachers play a crucial role in helping TPE participants understand learning tools, learning media, and teaching modules." Cs

The roles and contributions of in-service teacher education collaborators can be summarized in Table 8.

Table 8: The Role of Collaborative Partners in the Implementation of In-Service TPE for Islamic Education Teachers

Partners	Role description, contributions
Ministry of Religious Affairs/Directorates within the Ministry of Religious Affairs	1. Establishing standards for TPE management 2. Developing a national plan for the implementation of the TPE 3. Allocating TPE participant quotas nationwide 4. Coordinating the overall implementation of the TPE 5. Serving as a resource person for the TPE 6. Monitoring and evaluation of the implementation of the TPE
Ministry of Finance/Education Fund Management Agency	1. Providing funding 2. Monitoring the implementation of the TPE

District/Municipal Government	<ol style="list-style-type: none"> 1. The decision-maker responsible for setting the TPE participant quota in their jurisdiction 2. Allocating a professional development budget for teachers in their jurisdiction 3. Providing facilities and resources to coordinate TPE participants in their region 4. Monitoring the implementation of TPE
Department of Education, Youth, and Sports	<ol style="list-style-type: none"> 1. The body responsible for determining the TPE participant quota in its region 2. Helping participants overcome difficulties in participating in the TPE 3. Monitoring the implementation of TPE 4. Monitoring the performance of Islamic Education Teachers after completing the TPE program
National Zakat Agency	<ol style="list-style-type: none"> 1. Assist in funding the TPE program for Islamic Education teachers in their area of jurisdiction 2. Monitor the implementation of TPE
Partner schools	<ol style="list-style-type: none"> 1. Assist TPE participants in conducting study 2. Monitor TPE participants in their area of responsibility 3. Provide a location for teaching practice 4. Provide the necessary tools and learning materials for TPE participants 5. Provide internet access for TPE participants at their school
Mentor teacher	<ol style="list-style-type: none"> 1. Assist participants in completing in-service teacher professional development 2. Evaluate the work of TPE participants 3. Serve as a performance evaluation assessor
Advisor	<ol style="list-style-type: none"> 1. Assist TPE participants in understanding the teaching modules 2. Assist participants in using the LMS 3. Assist participants in preparing teaching module assignments 4. Assist participants in preparing for the knowledge test 5. Assist participants in preparing for performance evaluations 6. Assist participants in uploading documents for daily assignments and exams 7. Assist participants in overcoming various challenges they face while participating in the TPE

After completing the course series, students took a knowledge assessment covering professional and pedagogical competencies. Based on a document from the TPE organizing committee, the results of the knowledge assessment for the 2025 Batch 3 in-service TPE program for Islamic Education Teachers are shown in Figure 2.

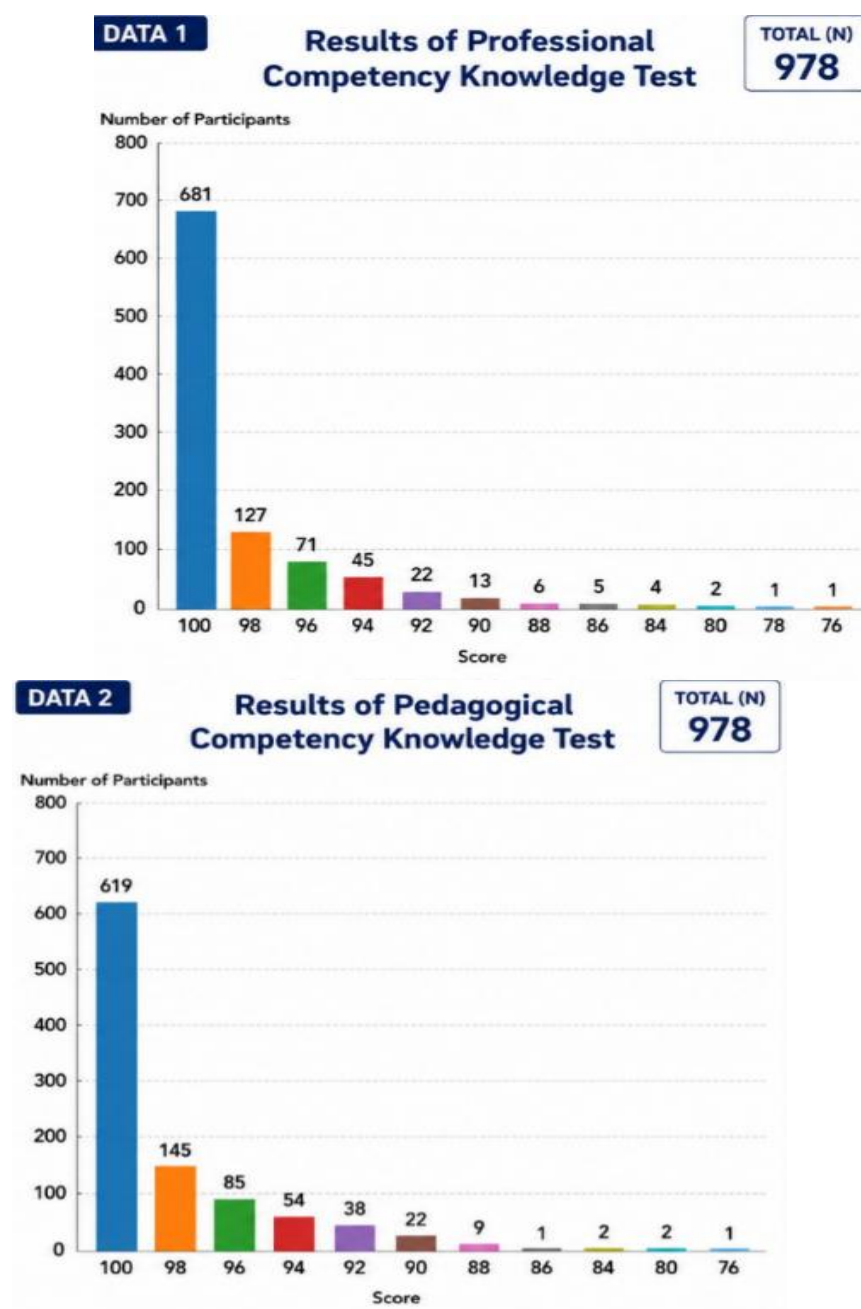


Figure 2: The results of the knowledge assessment for the 2025 Batch 3 in-service

5. Discussion

TPE programs for Islamic Education Teachers are conducted independently through the LMS. The independent learning model is particularly suitable for adults (Schiller et al., 2023) but requires guidance from lecturers (Schiller et al., 2023). Mentoring for adult learning is needed to overcome the problems faced, specifically those related to the use of information technology devices and lecture materials.

The implementation of Islamic education TPE has established partnerships with various parties to realize quality education (Mak et al., 2025). Educational partners can come from government agencies, institutions, alumni, community organizations, and industry. Intense and transparent communication is essential to establishing partnerships, ensuring mutually beneficial partnerships, building long-term commitments to collaboration with partners (Jeffers et al., 2025), and maintaining mutual trust (Ettinger et al., 2025). Educational institution stakeholders, comprising diverse social elements and dynamic assets, must be leveraged in management. According to Bourdieu, establishing strong relationships with professionals across sectors assists institutions in achieving quality education (McCartney & Forbes, 2023).

The role of collaborative partners in the implementation of in-service Islamic Education TPE includes funding, learning assistance, technology assistance, policy/regulation makers, resource persons, implementation standardization, monitoring and evaluation, provision of educational facilities and infrastructure, and assessment. Collaboration with various parties is helpful in meeting learning needs (Walldén & Winlund, 2025), improving the quality of human resources (Maganini et al., 2025), addressing the shortage of human resources in education (Kulesa et al., 2026), improving the welfare of teachers and employees (Crowley et al., 2025), as well as strengthening the quality of learning, curriculum development, learning resources, and capacity development of both parties (Maganini et al., 2025).

Cooperation with the central and regional governments is necessary because the bodies have a strategic role as education policymakers, academic guides, curriculum developers, human resource developers, and funding sources (Abbas et al., 2024). A government with high revenues can allocate substantial funds to the development of human resources in education. This collaboration is a concrete manifestation of shared responsibility in realizing quality education (Muzakir & Widiyanto, 2025). University collaboration with alumni is very important because of the possession of actual skills in the workplace that can be taught to students (Björck et al., 2025). Alumni contribute to university education through funding, traditional learning, study, institutional development, and out-of-class learning assistance (Thapa et al., 2025). These groups also desire a strong connection with the alma mater, opportunities to contribute to the university, and intensive communication with the system (Polidoro, 2025).

Strengthening pedagogical and professional competencies is carried out through in-depth module study and practical assignments. Details of the TPE learning activities for Islamic Education Teachers and the types of competencies achieved are reported in Table 9.

Table 9: Learning Activities and Types of Professional Competencies Achieved

Learning activity			Types of professional competencies achieved
Theory	Practice		
Reading the module, watching instructional videos, and reading articles about learning materials	Creating expert interviews and teaching demonstration videos		Mastering the course material
Reading the module, watching instructional videos, and reading articles about learning materials	Creating expert interviews and educational videos		Organizing lesson materials
Reading the module, watching instructional videos, and reading articles about learning materials	Independent assignment, reflective assignment		Utilization of various learning resources
Reading the module, watching instructional videos, and reading articles about learning materials	Independent assignment, reflective assignment		Understanding the curriculum
	Independent assignments, self-reflection assignments, and Classroom Action Research training		Classroom action study

Table 10: Learning Activities and Types of Pedagogical Competencies Achieved

Learning activities			Types of pedagogical competencies achieved
Theory	Practice		
Reading the module, watching instructional videos, and reading articles about learning strategies	Developing lesson plans, teaching practices		Understanding the learning process
Reading the module, watching instructional videos, and reading articles about learning strategies	Developing lesson plans, teaching practices		Ability to manage a classroom, teaching methods, organize the learning environment, and manage a diverse student body

Reading the module, watching instructional videos, and reading articles about the learning medium	Developing lesson plans, teaching practices, and instructional media training	Developing educational materials
Reading the module, watching instructional videos, and reading articles about learning evaluation	Developing lesson plans, teaching practices	Evaluating learning and following up on evaluation results

Teachers are expected to be proficient in information technology to support work at school (Mohebi & ElSayary, 2026). Students in the Islamic Education Teacher training program primarily acquire the skills through indirect learning and are expected to use information technology tools. Since most students are not familiar with information technology, the concept must be learnt independently to operate the various software applications. This expands knowledge and skills in the field of information technology (Kassaw & Demareva, 2023), increasing the level of enthusiasm (Seng et al., 2023) of teachers (Berlinski et al., 2023).

The information technology skills acquired by students in the Islamic education professional education program are indirectly limited to operator skills. Mastery of other information technology application programs is acquired through training outside of the classroom (Bariqi, 2018). Students are very enthusiastic about learning information technology since the skills are needed to work (Wang, 2025). Various application programs used during in-service TPE are listed in Table 11.

Table 11: Types of information technology applications used by students in the TPE programs

Type of Activity	Programs and applications used
Video Tutorial	Learning Management System, YouTube
Pretest	Safe Exam Browser (SEB), Learning Management System
Reading module	Microsoft Word, Learning Management System
Educational video	Sound dubbing, CapCut.
Video, Article/Power Point Presentations	YouTube, Microsoft Word, PowerPoint, Excel, PDF
Independent assignment	Microsoft Word, PowerPoint, Excel, PDF, Convert, Adobe Flash, image editing, Word Arabic, artificial intelligence, Learning Management System
Reflection assignment	Microsoft Word, PowerPoint, Excel, PDF, Convert, Adobe Flash, document scanning, Learning Management System
Reflection video	Editing video, sound dubbing, CapCut, artificial intelligence, Learning Management System
Final test module	Safe Exam Browser (SEB), Learning Management System

Islamic education teachers should master several information technology applications, including Learning Management Systems (Microsoft Teams for Education, Google Classroom, Edmodo/Quipper), applications for creating content and interactive learning materials (Canva, Kahoot/Quizizz, Edpuzzle, Prezi, Assemblr EDU), Artificial Intelligence productivity tools (Teachy.ai/Humata AI, Grammarly, Lumen5), communication and collaboration tools (Padlet, Zoom/Google Meet, Spreadsheet), and administration and assessment tools (ClassDojo, Google Forms) (Pujiati, 2024). Students are encouraged to learn various applications after completing in-service teacher training.

Information technology greatly assists participants in the In-Service TPE at the Faculty of Tarbiyah and Teacher Education. Participants use information technology throughout the entire process, from registration and program implementation to evaluation and follow-up activities. Smartphones and laptops connected to the internet are used in TPE activities. Individual activities are inseparable from the internet (Chen, 2024). For TPE administrators, the completion of tasks is facilitated by technology and the internet. The registration, implementation, evaluation, and reporting of TPE activities are carried out using information technology and the internet. These tools are extremely helpful in supporting human work.

The third batch of in-service TPE for Islamic Education Teachers was attended by 982 participants, with a pass rate of 99.5% (978 participants). Based on the data from the management, the results of the knowledge assessment are shown in Figure 3.

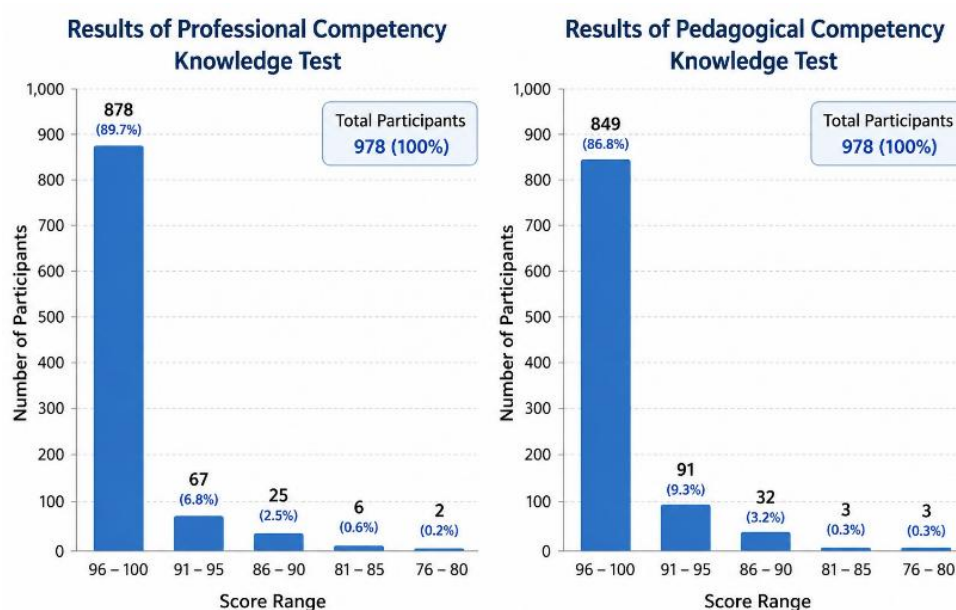


Figure 3: Results of the Professional and Pedagogical Competency Knowledge Test

The data shows that the overall graduation rate exceeds the Minimum Passing Standard, which is 80% (Rasma et al., 2025). The students achieved a passing grade of 75 (Direktorat Jenderal Pendidikan Islam, 2025). The graduation rate for in-service professional development programs for Islamic religious education teachers falls into the “Very Good” (A) category (Dewi, 2023) at 99.5% (978 participants) when measuring classroom learning outcomes.

Table 12: Guidelines for Class Learning Achievement Levels

Proficiency level	Standard score	Category
90% - 100%	A	Very good
80% - 89%	B	Good
70% - 79%	C	Pretty good
60% - 69%	D	Not very good
< 59%	E	Not good

The assessment of students in the teacher education program incorporates self-assessment, which includes self-reflection on academic activities, instructional innovations, professional development, community service, achievements, and solutions to classroom challenges they have implemented. This is necessary to understand the teachers’ track record at school before enrolling in the TPE program. Self-assessment serves as a valid graduation assessment tool because teachers are trusted adult students (Chang & Tseng, 2025).

The success of the TPE program is supported by high motivation to learn, the program administrators’ dedication, and ongoing monitoring. However, there are factors affecting the implementation, namely the teachers’ economic backgrounds, ages, and dual roles. TPE participants are highly motivated and can complete assignments on time through the LMS, work diligently on assignments, actively ask questions, and respond quickly to information. This shows that motivation is an important factor in learning success (Pham & Ngo, 2026).

The Organizing Committees take the management of the TPE very seriously and are available to assist participants during and outside of regular business hours. The administrators have formed a team of faculty members tasked with helping participants complete the TPE program and resolving academic or technical issues. The committee has also added activities outside the regular schedule to provide more in-depth coverage of the material and technical training (Schiller et al., 2023).

Monitoring by the Ministry of Religious Affairs, local governments, and the National Zakat Agency is conducted to ensure that TPE activities are carried out in accordance with regulations. This covers the curriculum, financial management, and participant attendance. Furthermore, monitoring is an important part of ensuring that the objectives of the program are achieved (Mok & Staub, 2021). The process takes place from the signing of the MoU through implementation, evaluation, and post-activity reporting conducted offline and online. In addition to the supporting factors, economic circumstances also pose a challenge to the program. Some teachers cannot afford to buy a laptop or set up a connection at home and must go to school or visit other people’s homes to access

the internet. Currently, information technology devices and internet access support the success of a teacher's tasks (Alt & Oved, 2026).

Age affects individual performance (Yaqoob et al., 2026) since aged teachers mostly have difficulty operating information technology devices. Some struggle to understand and operate devices and the various software applications used in TPE even under faculty guidance. The In-Service TPE program requires teachers to continue teaching every day. The volume of assignments and the demands of complex teaching duties have left TPE participants overwhelmed with work. Therefore, fatigue resulting from social media use affects the learning process and outcomes (Tian et al., 2026).

6. Conclusion

In conclusion, the success of the Islamic Education TPE program includes various stakeholders as collaborative partners who serve as policymakers, funders, providers of resources, and learning facilitators. The participation of various parties has proven effective in helping educational institutions achieve success. TPE program is also supported by a high level of motivation, dedication of the program administrators, and ongoing monitoring. The factors affecting the implementation include economic circumstances, age, and the dual workload of teachers.

The strengthening of the professional and pedagogical competencies of Islamic religious education teachers is achieved through theoretical and practical learning. Islamic education teachers participating in the TPE program who take self-paced courses using LMS need to be proficient in various applications. This requires mastery of applications, independently or with guidance from the administrators. TPE administrators provide supplementary activities such as seminars, workshops, and training sessions outside the regular schedule. The 49-day transformative program has high competency requirements. These additional activities address time constraints and enrich the knowledge and skills of participants.

The theoretical contribution of this study is to enrich the theory of educational partnerships by including alumni in the delivery of education. Administrators of educational institutions need to track alumni, identify professions and expertise, and include the various bodies in improving the quality of education. Informal communication patterns in a family-like atmosphere should also be promoted. This study is limited to the enhancement of professional and pedagogical competencies. Further investigations must examine the enhancement of personal and social competencies among serving Islamic Education Teachers.

7. Conflict of Interest

The author declares that there is no conflict of interest with any party regarding the preparation and publication. This study and the publication are intended solely for academic purposes.

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9. Declaration on the Use of Artificial Intelligence

The author used artificial intelligence-based tools to write this manuscript to improve the quality of the language, and ChatGPT to help generate figures. Grammarly was used to check grammar and edit the manuscript. All AI-generated content was carefully reviewed to ensure the accuracy of the information presented. The author did not use any other artificial intelligence tools in the data analysis or interpretation of the results.

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