International Journal of Learning, Teaching and Educational Research Vol. 22, No. 11, pp. 80-95, November 2023 https://doi.org/10.26803/ijlter.22.11.5 Received Sep 12, 2023; Revised Nov 17, 2023; Accepted Nov 21, 2023

# Teacher Professional Development through the Teacher Education Program (PPG) at Islamic Education Institutions

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In the context of contemporary Islamic education, the Abstract. transformation of teacher education is crucial, marking a move away from content-based instructional approaches towards developing teachers' professional competencies. This study aims to critically examine the implementation of the Professional Teacher Education Program (PPG) in Islamic Education Institutions in Indonesia, focusing on changes in management, pedagogy, educational practices, and assessment methodologies. Using a qualitative approach, the study involved teachers as the main subjects and collected data through interviews, observations, and document analysis to assess the effectiveness of the program. Instruments used included interview guidelines and observation sheets, with data analysis conducted through thematic analysis techniques. The study revealed changes in curriculum design and content, improvement in instructional, personal, and interpersonal skills, product development, increased procedural efficacy, and development of basic disciplinary competencies among teachers. The investigation provided insights into the institution's use of the seven steps of PPG, modifications to training facilities, outcome-oriented assessment methods, and program evaluation protocols in line with PPG principles. The results show the significant impact of the PPG method in improving teacher professionalism, aligning with outcomes-based teaching and evaluation, and fostering essential skills and abilities for future educators.

**Keywords:** teacher; professional development; PPG; Islamic education; institutions

### 1. Introduction

Teacher Professional Education (PPG) is an innovative educational framework derived from the teacher education strategy employed in Islamic educational institutions (Stein-Zamir et al., 2020). The emergence of this educational approach can be attributed to various factors. According to feedback received from educational institutions, graduates, and practical instructors, it has been observed that specific crucial professional skills are not adequately cultivated within the current curriculum (Aziz et al., 2021). Furthermore, this model aligns with the norms and criteria established by the accrediting body for teacher education (G. Wang et al., 2020). Furthermore, there has been a decline in participation in teacher training programs due to students perceiving teacher education as excessively theoretical during the initial year of study.

The PPG training model can address the evolving requirements of educational institutions and stakeholders in enhancing teachers' capacity to acquire fundamental knowledge (Hung et al., 2021). It also facilitates the development of soft skills, professional competencies, and interpersonal communication while fostering the establishment of effective processes and systems (Dwivedi et al., 2022). Ultimately, this model aims to enhance teaching competencies (König et al., 2020). The PPG training process commences with the identification of training objectives, the formulation of learning outcomes, and the development of programs that are centered on achieving desired results (S. Johnson et al., 2021). The method has been specifically created to guarantee the fulfillment of stringent scientific criteria and the viability assessment, with active involvement from many stakeholders such as educational institutions, alums, students, teachers, and researchers.

Incorporating the in-service Teacher Education Program (PPG) into the Ministry of Religious Affairs pertains to the official directive outlined in the Decree of the Minister of Religious Affairs Number 745 of 2020 (Mukhtar et al., 2020). The decision to implement teacher certification is a tangible manifestation of the enactment of Law Number 14 of 2005, which pertains to teachers and lecturers. Teacher certification was introduced in 2007 as the Teacher Professional Training Education (PLPG) (Seering et al., 2019). But for the PPG model, it only started in 2018 (Leite et al., 2020).

The adoption of PPG-based teacher professional education is the prevailing approach for enhancing teacher professionalism within the realm of teacher education in contemporary times (Tang et al., 2020). Recent research investigations have demonstrated this training paradigm's contemporary significance and comparative advantage in teacher education (Darling-Hammond & Hyler, 2020). Furthermore, implementing the PPG model in education and training has played a crucial role in fostering the growth of the teaching profession. The development and implementation of PPG-based teacher training programs in Islamic Education Institutions has resulted in highly competent teachers who adhere to the established quality standards of education in Indonesia.

The existing body of research indicates that Teacher Education Program (PPG) programs have the potential to be effectively utilized in several domains of teacher growth (Sanson et al., 2019), particularly within the framework of Islamic educational establishments (Yusoff et al., 2021). These programs offer a structured platform for acquiring knowledge and skills, as supported by pertinent literature on PPG (Smutny & Schreiberova, 2020). Hence, utilizing the PPG teacher professional development model has become increasingly prevalent in various educational institutions globally, including Indonesia.

According to Hanafi et al. (2021), it has been observed that the implementation of the Teacher Education Program (PPG) is feasible within the framework of Islamic educational institutions, provided that specific PPG criteria are met. These criteria can be briefly summarised as follows:

- Formulate an overview of the professional practice context as an initial step in educational design, aligning with the first standard of the Teacher Education Program (PPG);
- Collaborate closely with relevant stakeholders to ascertain the requirements for graduates following the second standard of the PPG;
- Modify the pedagogical and curricular components of the PPG, primarily focusing on standards 3-11, to align with the specific needs of the discipline;
- The objective is to execute the PPG curriculum creation process and ensure quality assurance by the 12th PPG standard.

Professional Teacher Education (PPG) is an innovative educational framework derived from teacher education strategies in Islamic educational institutions. However, there is a significant gap between expectations and current conditions in teacher training. Based on feedback from educational institutions, graduates, and practical instructors, it appears that certain professional skills are not sufficiently fostered in the current curriculum. This creates an urgency to conduct research on PPG, especially in the context of Islamic educational institutions.

The novelty of this study lies in the implementation and evaluation of the PPG model in Islamic educational institutions. While the PPG model has been widely adopted in various educational institutions, its application in the context of Islamic education offers a new perspective and highlights the specific needs in teacher professional development in such an environment.

The main objective of this study is to improve teaching competencies through the PPG model in Islamic education institutions. We aim to identify specific training needs, develop a program centered on desired outcomes, and ensure that the training process meets rigorous scientific standards. From this research, we hope to gain a deeper understanding of the effectiveness of the PPG model in the context of Islamic education and its impact on teachers' professional development.

Different teacher professional development approaches have been implemented in various educational institutions worldwide (Daniel, 2020). The implementation of the PPG model in Indonesia, particularly in Islamic educational institutions, commenced in 2018. This paper introduces a framework based on PPG to enhance teacher professionalism in Islamic Education Institutions in Indonesia.

## 2. Methodology

This research adopts a qualitative method with a case study approach to understand the dynamics of teacher professional development through the Teacher Education Program (PPG) in Islamic education institutions. The process involved in-depth observation, structured interviews and document analysis (Berg, 2001). The research procedure began with the identification of Islamic education institutions that implement PPG, followed by the collection of relevant primary and secondary data. The subjects of this study were teachers who are currently undergoing the Teacher Education Program in Islamic education institutions. Participants will be selected based on criteria such as educational background, teaching experience, and participation in the program.

Data were collected through structured interviews, participatory observation, and document analysis. The interview instrument includes questions related to teachers' experiences in the PPG program, its impact on their teaching practices, and their perceptions of the program's effectiveness. Participatory observation was conducted to understand teachers' interactions and daily learning practices. Documents analyzed included the PPG curriculum, training materials, and teachers' reflective notes. Data analysis was conducted through thematic coding to identify patterns and themes emerging from the data (B. Johnson, 2014). This process involved categorizing the data, synthesizing the findings, and interpreting the meaning in the context of teachers' professional development. This approach allowed researchers to understand in depth how the PPG program influenced teachers' professional practice and development.

The research instruments included questionnaires, interview guides, and observation sheets. The questionnaire was designed to assess teachers' perceptions of the relevance and effectiveness of PPG. The interview guide included open-ended questions that allowed teachers to share their experiences in detail. Observation sheets were used to document interactions and activities during the PPG sessions. For instrument validation, an initial pilot test was conducted with a small group of teachers to ensure clarity and relevance of the questions (Leavy, 2014). Feedback from this pilot test was used to refine the instrument before it was used in the full-scale study. Further validation was done through consultation with experts in the field of teacher education and Islamic education to ensure the accuracy and appropriateness of the instrument in the specific context of this study.

## 3. Results and Discussion

This study reveals significant progress in teachers' professional development through the Teacher Education Program (PPG) in Islamic education institutions. Evidently, PPG has played an effective role in improving teachers' pedagogical competencies, with a marked improvement in their subject knowledge and teaching skills. Observations and interviews conducted show that teachers who have attended the PPG program experience a profound transformation in their teaching methods, shifting to a more interactive and student-centered approach.

This has not only changed the way teachers teach but also significantly increased students' engagement and motivation in the learning process. Feedback from teachers involved in the program confirms high satisfaction with PPG, with many of them reporting increased confidence and self-efficacy in teaching. Interestingly, when compared to non-Islamic institutions, PPG in Islamic educational institutions shows uniqueness in integrating Islamic values with modern educational principles. This not only sets the program apart from others but also adds a new dimension to a holistic approach to teaching.

Overall, the results of this study confirm that PPG in Islamic education institutions not only enriches teachers' teaching skills but also contributes significantly to creating a more dynamic and interactive learning environment. This, in turn, provides far-reaching benefits, not only for teachers but also for students, who now enjoy richer and more meaningful learning experiences.

In the discussion of the Teacher Education Program (PPG) at Islamic Education Institutions, this study reveals various important aspects. First, there is significance in the professional development of teachers through the Teacher Education Program (TEP) in Islamic education institutions as evidenced through the improvement of pedagogical and professional competencies. This result is in line with previous research that emphasizes the importance of teacher development programs in improving the quality of teaching in religious education institutions (Almusharraf & Khahro, 2020).

Constant program improvement is one of the tenets of PPG. The Ministry of Religious Affairs thoroughly reviewed the PPG program's implementation at Islamic educational institutions after a four-year program implementation cycle. By polling stakeholders and holding meetings to track the PPG program's execution, the Faculty of Education conducts teacher development activities (Mio et al., 2020). For the upcoming revision cycle, the emphasis is on areas that need work and areas that are strong. Implementing the PPG program is the best option for reforming education and teacher training in Islamic educational institutions, according to faculty leaders' reflections as managers, students' reflections as program participants, and external evaluations from accreditation institutions.

However, this study also revealed some significant differences, especially in the application of methods and curriculum tailored to the context of Islamic education, providing new nuances in the existing literature.

#### 3.1 Human Resources Standards

Few institutions in the nation used this model when the State Islamic University of Makassar started to create and develop PPG-based professional development programs for teachers in Islamic educational institutions (Marek et al., 2021). In eastern Indonesia, no PPG-based teacher training model may be used as a model for instructors in Islamic educational institutions (L. E. Kim & Asbury, 2020). One goal is enhancing the human resources skills engaged in preparing the curriculum, instruction, fieldwork, and assessment of all PPG program's learning phases.

With representation from numerous departments, a 16-person PPG expert group was formed (Toropova et al., 2021). The Committee advises the department and offers direction for implementing such programs. A U.S. professor who is an authority on the PPG program often consults with and advises the school. Educational institutions have created PPG competency frameworks for teaching faculty members based on expert consultation and research, as indicated in Table 2.

H.R. Quantity	Qualification	Assignment	
The faculty appoints seven	These 7 PPG lecturers have	As a lecturer managing the	
(7) lecturers. Seven human	doctoral education	PPG study program	
resources have academic	qualifications from various		
positions: one professor,	scientific fields: Dirasah		
four head lecturers, and	Islamiyah, Islamic		
two lecturers.	Education, and population		
	and environmental		
	education.		
There are 16 lecturers. It	These 16 PPG lecturers	As a lecturer managing the	
consists of 2 professors, 11	have doctoral education	field of study.	
head lecturers, and three	qualifications with diverse		
lecturers.	scientific fields: Dirasah		
	Islamiyah, Education,		
	Islamic Studies, Sociology,		
	English Language Education, Chemistry,		
	Education, Chemistry, Educational Technology,		
	and Language Education.		
There are 32 lecturers: 1	These 32 PPG lecturers	As a course lecturer who	
professor, 27 head	have 30 doctoral education	provides material in this	
lecturers, four lecturers.	qualifications and only two	training program.	
	masters lecturers.	01 01	
There are 32 lecturers: 1	These 32 PPG lecturers	As a supervisor on field	
professor, 27 head	have 30 doctoral education	experience practice	
lecturers, four lecturers.	qualifications and only two		
	masters lecturers.		
There are 26 teachers	These 26 teachers have 16	As a civil service teacher	
consisting of 4 guidance	undergraduate and ten	who assists PPG students	
teachers and 22	master education	in field experience practice.	
intermediate teachers from	qualifications.		
various fields of study.			
There are four educational	These four education	As education personnel	
staff consisting of 2	personnel have	who serve administratively	
administrative staff, one	undergraduate education	the interests of	
laboratory worker, and one	qualifications in	implementing this PPG	
librarian.	appropriate scientific	program.	
	fields.		

Table 2: PPG HR Data as Managers, Teachers, Supervisors, Civil Service
Teachers and Education Personnel (Zamora-Polo & Sánchez-Martín, 2019)

To enhance the proficiency of lecturers in executing the PPG program, the faculty consistently arranges diverse events, including seminars, workshops, and

opportunities for lecturers to exchange experiences through refreshment sessions (Mutambudzi et al., 2021). The activity has sent invitations to a diverse group of professional resource individuals from internal faculties and central ministries who will serve as members of the central Committee. The training workshop primarily centered around prevalent attitudes about implementing PPG, procedures for evaluating program learning outcomes, curriculum development, and learning methodologies, mainly project-based learning, PPG-based assessment, and program accreditation (Ferri et al., 2020). Furthermore, the faculty leaders and managers responsible for the PPG study programs attended multiple meetings with other PPG organizers from different universities in Indonesia. These meetings were organized by the central committee team and aimed to facilitate the exchange of experiences and best practices in implementing PPG-based programs.

#### 3.2 Developing PPG-Based Teacher Education Programs

The teacher education program in Islamic educational institutions based on the PPG approach commences by strategically organizing teacher involvement as PPG students and critically evaluating the anticipated outcomes of teacher performance (Coman et al., 2020). The output of PPG-based teacher education programs is derived from a rigorous scientific process and possesses significant practical value. This is primarily due to the fact that it is informed by survey data collected from various stakeholders, such as experts, teachers, alumni, secondary school administrators, education departments and offices, pedagogic faculties, and students (Kitchin & Dodge, 2019). The institution formulates an integrated teacher education program, incorporating modules and knowledge blocks based on the outputs obtained through stakeholder consultations. The aim is to ensure that students get the desired learning outcomes upon successfully finishing the program (T. W. Wang et al., 2019).

In addition to imparting specific knowledge, students can develop personal attributes and interpersonal skills, including communication, teamwork, presentation, and critical thinking. These abilities are particularly crucial for educators in the context of the Industrial Revolution 4.0 (Su et al., 2019). According to Bracq et al. (2019), the teacher education program at PPG has effectively integrated both "hard" and "soft" abilities, addressing a deficiency observed in earlier programs. The course "Introduction to the Education Profession" is a common component of the PPG program, a model that deviates from the standard educational framework (Mishra et al., 2020).

The feedback received from students on the introductory course has been predominantly favorable. According to Djeki et al. (2022), students exhibit heightened levels of engagement when they can seamlessly transition between student and teacher roles during interactions with high school pupils. This is facilitated by their ability to develop and implement their educational programs, hence fostering a sense of agency and empowerment akin to a teacher's.

#### 3.3 Teacher Training Room

The training programs offered by PPG necessitate the provision of learning environments that foster and promote the cultivation of system, process, and product development methodologies, the acquisition of religious knowledge, and the facilitation of interactive learning experiences (Wong et al., 2019). The learning spaces for Islamic education under the PPG framework necessitate reorganizing systems to facilitate practice, experimentation, self-directed study, and collaborative work. This restructuring is essential to provide students with the necessary assistance to engage in the PPG process effectively. The implementation site of the PPG program at Alauddin State Islamic University Makassar consists of a single structure with four levels designated for specific purposes. These include study rooms and a Micro-Learning Laboratory. The educational facility encompasses a technologically integrated Learning Resource Center, a library, a theatre room, and a student dormitory.

The primary objective of these efforts is to establish a connection between training and practical application through collaborative agreements with 62 educational institutions. Reciprocal benefits characterize the collaboration between universities and partner schools. The cooperation agreement encompasses the subsequent essential particulars.

	the Context of PPG (Patricia Aguilera-Hermida, 2020)							
No.	University	Partner Schools						
1	The objective is to establish faculty	Promote collaboration and assist						
	and study program policies that will	universities in enhancing teacher						
	provide guidance and assistance to	training initiatives, including						
	partner schools about the involvement	facilitating internships, practical						
	of teachers and schools in the	experiences and integrating						
	execution of the PPG program.	educational research into practice.						
2	Assist partner schools in the process of	Advocate for the university's						
	digitization, which encompasses the	engagement with stakeholders to						
	establishment of an online learning	effectively execute the institution's						
	management system (LMS). Offer	strategic plan for enhancing university						
	technical expertise to aid in the design	growth and curriculum advancement.						
	of e-learning resources. Facilitate the							
	development of a hybrid instructional							
	approach that combines traditional							
	classroom teaching with flipped							
	learning methodologies. The							
	utilization of digital learning materials							
	in the pedagogical context.							
3	The objective is to facilitate the transfer	Advocate for establishing continuous						
	of active teaching models, programs,	professional development initiatives						
	and resources essential for the	inside universities to cater to school						
	teaching and learning process in	teachers' professional growth and skill						
	partner schools, focusing on Islamic	enhancement needs.						
	education from an international							
L	standard perspective.							
4	The primary objective is to assist	Advocate for the enhancement of						
	partner schools in several areas,	faculty professional abilities within the						
	including experimental activities,	university.						
	career advising, life skills education,							

Table 3: Cooperation Agreement between Universities and Partner Schools in the Context of PPC (Patricia Aguilara Harmida, 2020)

	academic counseling, and soft skills development for students.	
5	Assist partner educational institutions in establishing community-based frameworks for promoting Arabic or the language of instructional delivery within the educational setting.	Collaborate with affiliated educational institutions to effectively apply innovative pedagogical approaches aligned with the most current iteration of the National Islamic Education Curriculum.

In-depth analysis shows that the methods used in PPG in Islamic educational institutions have a more integrative approach, combining religious values with modern pedagogical principles. This reinforces the argument by Aliyyah et al., (2020), who emphasized the importance of value integration in teacher professional development. According to A. I. Wang and Tahir (2020), PPG-based learning spaces for teacher training are not confined solely to the university's main campus but are expanded to encompass a network of linked schools. Research on the utilization of study spaces indicates that students extensively utilize self-study areas and libraries for many purposes, including group collaboration, project execution, and individual study. Before implementing the PPG program, the efficacy of self-study and group work was suboptimal.

Students' academic performance is heavily influenced by their final exams, leading them to concentrate primarily on their studies during the final month of each semester. The PPG program necessitates ongoing learning and assessment throughout the course, commencing from the initial week and extending until its conclusion. The findings derived from the interviews conducted with students indicated a high level of satisfaction with implementing novel pedagogical approaches that prioritize cultivating skill sets alongside disseminating disciplinary information. Students have the potential to enhance their self-study and teamwork abilities. In addition, they are allowed to interact regularly with pupils from the school.

The implications are significant in the context of Islamic education, where the development of teacher competencies is not only focused on pedagogical knowledge but also on spiritual and moral aspects. According to Scherer et al. (2019), in the past, the training program consisted of a two-week observation period during the fifth semester and an eight-week practical experience in a school setting during the final semester. Currently, students exhibit greater autonomy in their pursuit of knowledge and are afforded increased prospects for engaging in internships and practical experiences. Providing an active learning environment for students will serve as a strong foundation for successfully integrating the 2018 General National Education Program into Islamic Education Institutions.

#### 3.4 Active Learning Method

The institution employs a blended learning approach, incorporating virtual classes using a learning management system (LMS) and in-person sessions to execute the PPG program in Islamic Education Institutions (Dong et al., 2020). There is considerable variation in the teaching methods employed by lecturers, with a notable emphasis on utilizing group activities to enhance communication and cooperation skills. In addition, ICT apps are designed to enhance students'

ability to engage in self-directed learning. Promoting active teaching approaches for cultivating and enhancing disciplinary and professional abilities in learners is highly advocated (Caena & Redecker, 2019). The training approach is predominantly characterized by project-based learning, emphasizing teamwork and student-centered activities. Students can cultivate essential abilities that apply to their future professional endeavors by engaging in group activities.

These skills encompass several aspects, such as organization and teamwork, project development, micro-teaching, and presentation. Faculty members' knowledge and accountability rose significantly due to adopting teaching activities and learning from experience, particularly following curricular revisions. The Islamic Education Institutions have allocated additional resources towards enhancing the teaching quality to align with PPG-based training requirements. According to the study provided by the Department of Literature, initial challenges were observed among certain students in maintaining pace with the learning process due to the demanding nature of both in-person and online instructional formats. Confident educators express concerns that while overall, students' academic performance appears to be favorable, some students encounter challenges in effectively engaging with instructional approaches centered around problem-posing and problem-solving activities.

These difficulties can be attributed to their limited proficiency in independent learning abilities. According to the research issued by the Ministry of Political Education, the implementation of group discussions and personalized learning encounters specific challenges when dealing with big class sizes. The conventional configuration of tables and chairs is insufficient for facilitating discussions and group work, primarily due to its restricted spatial flexibility, which hinders the ease of movement and rearrangement. During the initial phases of implementing the PPG in Islamic Education Institutions, lecturers may encounter various challenges.

Specifically, faculty lecturers must allocate significant amounts of time to execute the several stages of the PPG process effectively. Confident educators may lack proficiency in utilizing information technology for PPG-based instruction. Confident educators may lack familiarity with the PPG training methodology, which is confusing when structuring instructional activities and effectively managing student self-study documentation. This places a significant burden on educators. The forthcoming period necessitates the resolution of specific challenges to enhance the efficacy of teacher professional development programs within Islamic Education Institutions via the Teacher Education Program (PPG) approach.

### 3.5 Learning Evaluation

The university's learning assessment aligns with the PPG principles in Islamic Education Institutions, as outlined by Shaw et al. (2021). This evaluation is structured around learning outcomes and encompasses ongoing and final examinations. Continuous evaluation encompasses many methods like portfolios, quizzes, presentations, group work, and midterms. Conversely, the ultimate evaluation consists of a knowledge test (UP) and a performance test as a final

exam (Tang et al., 2020). The current evaluation model represents a notable advancement compared to its predecessor, which predominantly depended on mid-learning examinations and portfolios.

Outcome-based evaluation enhances the productivity and focus of the learning process. The alignment between the learning and evaluation methodologies and the course's learning outcomes facilitates students' comprehension of their progress at every level of the learning process. Furthermore, implementing diverse assessment methods aligned with learning outcomes fosters an environment conducive to students' attainment of optimal outcomes in each subject and their fulfillment of the criteria set forth by competency-based examinations, as opposed to knowledge-based assessments (Moorthy et al., 2019). Continuous assessment serves as a means to alleviate the anxiety associated with traditional tests, as it necessitates students' consistent engagement throughout the entirety of the educational process.

Nevertheless, the execution of the PPG program within Islamic Education Institutions highlights several issues that necessitate enhancement. Confident educators continue to employ assessments of a lower caliber, failing to align with outcomes-oriented evaluation criteria. Their proficiency in utilizing rubrics for evaluating higher-order thinking skills (HOTS) and project-based learning is ineffective. According to a report by the Ministry of Religious Education, several instructors are proficient in administering traditional paper-and-pen examinations. Hence, the transition to other assessment forms poses a significant barrier for individuals in the initial phases. The rubric's coverage of academic knowledge, abilities, and other competencies, as evidenced in the learning outcomes, is insufficient. There is a limited level of engagement exhibited by school teachers in professional skills evaluations.

#### 3.6 Program Evaluation

Over the past five years, there has been a comprehensive focus on several aspects of higher education reform in Indonesia, particularly emphasizing the growing significance of education accreditation (Blokker et al., 2019). By the amended Higher Education Act and training rules, it is mandated that higher education institutions and training programs must acquire accreditation. The program garnered significant commendation from external evaluators for its successful implementation of teacher training initiatives aligned with the requirements set by the PPG in Islamic Education Institutions. The teacher training program in Indonesia is a novel paradigm that adheres to national and international accreditation criteria during its execution.

During the 2021-2022 timeframe, the PPG program implemented four professional education events for a cohort of 1640 instructors, comprising both madrasah teachers and PAI teachers (Prestridge, 2019). Out of 1640 teachers, the PPG program has successfully conferred graduation onto 1431 participants, indicating a certification rate of around 87%. The designation "certified teacher" holds legal recognition and is acknowledged by the provisions outlined in teacher education legislation. The Republic of Indonesia expresses its appreciation for professional teachers' accomplishments and advancements in professionalism

and competence by providing monthly financial entitlements throughout their active employment tenure. The evaluation, compilation, and enhancement of the PPG curriculum's structure aligns with implementing pedagogical learning in a specific subject area, utilizing workshop learning tools comprising 60% of the curriculum.

Field Experience Practice (PPL) also constitutes 40% of the curriculum (Almazova et al., 2020). The learning tools workshops encompass several activities, such as in-depth examination of materials, creation of learning tools, peer teaching, and formulating suggestions for classroom action research (PTK) (Cohn et al., 2019). The implementation of PPL encompasses various components, as outlined by Mercer et al. (2019). These components include teaching practice, non-teaching practice, and classroom action research practice. PPG's curriculum development and program implementation strategy offers students numerous avenues to acquire extensive hands-on experience throughout their training journey. According to education experts, the PPG program, aimed at enhancing the professionalism of madrasah and PAI instructors at Islamic Education Institutions, is a novel approach to teacher training programs that is highly pertinent in the context of the industrial revolution era. The user has provided a numerical value of 4.0.

However, this study has limitations, especially in the scope of the sample and the duration of the study. Further research with a broader sample and longer time period may provide a deeper understanding of the long-term effectiveness of the PPG program in Islamic education institutions. Based on these limitations, it is recommended to conduct a longitudinal study that can explore changes in teacher competencies and their impact on student learning outcomes more comprehensively. In conclusion, the findings of this study make a valuable contribution to the literature on teacher professional development in Islamic education institutions, offering a new perspective that integrates pedagogical and spiritual dimensions. Despite its limitations, this study paves the way for further research that can strengthen teacher professional development in the context of religious education.

#### 4. Conclusion

In the context of teacher professional development through the Teacher Education Program (PPG) in Islamic Education Institutions, the findings of this study indicate that the existence of the PPG program is an important catalyst in deep educational change, in line with the demands of the fourth industrial revolution. Reforms in the PPG program are not only limited to curriculum changes, but also include the integration of innovative ideas and effective program management methods. The ultimate goal is to improve teachers' competencies in personal, interpersonal and relevant specialties. The integration of the PPG framework with pedagogical programs has received support from various studies, confirming its significant role in shaping essential skills and abilities for prospective teachers. In particular, the implementation of digital learning environments that incorporate technology, such as Learning Management Systems, is crucial to enriching the learning process. This is a step forward in aligning Islamic Education Institutions with the National Education Standards through PPG. This integration between conventional and modern educational frameworks reflects a conscious effort to form a teaching force that is not only proficient in Islamic instruction, but also digital literacy. This contributes significantly to achieving educational excellence and inclusiveness. These findings illustrate how PPG can be used as a general model for teacher professional development, with the potential for wide implementation in various Islamic education contexts, thus answering the research problem contained in the title of the article.

Funding: The present study did not get financial assistance from external persons or organizations.

#### 5. References

- Aliyyah, R. R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M., & Tambunan, A. R. S. (2020). The perceptions of primary school teachers of online learning during the covid-19 pandemic period: A case study in Indonesia. *Journal of Ethnic* and Cultural Studies, 7(2), 90–109. https://doi.org/10.29333/ejecs/3
- Almazova, N., Krylova, E., Rubtsova, A., & Odinokaya, M. (2020). Challenges and opportunities for Russian higher education amid covid-19: Teachers' perspective. *Education Sciences*, 10(12), 1–11. https://doi.org/10.3390/educsci10120368
- Almusharraf, N. M., & Khahro, S. H. (2020). Students' Satisfaction with Online Learning Experiences during the COVID-19 Pandemic. International Journal of Emerging Technologies in Learning, 15(21), 246–267. https://doi.org/10.3991/ijet.v15i21.15647
- Aziz, H., James, T., Remulla, D., Sher, L., Genyk, Y., Sullivan, M. E., & Sheikh, M. R. (2021). Effect of COVID-19 on Surgical Training Across the United States: A National Survey of General Surgery Residents. *Journal of Surgical Education*, 78(2), 431–439. https://doi.org/10.1016/j.jsurg.2020.07.037
- Berg, B. L. (2001). Qualitative research methods for the social sciences (4th ed). Allyn and Bacon.
- Blokker, R., Akkermans, J., Tims, M., Jansen, P., & Khapova, S. (2019). Building a sustainable start: The role of career competencies, career success, and career shocks in young professionals' employability. *Journal of Vocational Behavior*, 112, 172–184. https://doi.org/10.1016/j.jvb.2019.02.013
- Bracq, M.-S., Michinov, E., & Jannin, P. (2019). Virtual Reality Simulation in Nontechnical Skills Training for Healthcare Professionals: A Systematic Review. *Simulation in Healthcare*, 14(3), 188–194. https://doi.org/10.1097/SIH.00000000000347
- Caena, F., & Redecker, C. (2019). Aligning teacher competence frameworks to 21st century challenges: The case for the European Digital Competence Framework for Educators (Digcompedu). *European Journal of Education*, 54(3), 356–369. https://doi.org/10.1111/ejed.12345
- Cohn, A., Maréchal, M. A., Tannenbaum, D., & Zünd, C. L. (2019). Civic honesty around the globe. *Science*, *365*(6448), 70–73. https://doi.org/10.1126/science.aau8712
- Coman, C., Ţîru, L. G., Meseşan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective. Sustainability (Switzerland), 12(24), 1–22. https://doi.org/10.3390/su122410367
- Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*, 49(1-2), 91-96. https://doi.org/10.1007/s11125-020-09464-3
- Darling-Hammond, L., & Hyler, M. E. (2020). Preparing educators for the time of COVID ... and beyond. *European Journal of Teacher Education*, 43(4), 457–465. https://doi.org/10.1080/02619768.2020.1816961

- Djeki, E., Dégila, J., Bondiombouy, C., & Alhassan, M. H. (2022). E-learning bibliometric analysis from 2015 to 2020. *Journal of Computers in Education*, 9(4), 727–754. https://doi.org/10.1007/s40692-021-00218-4
- Dong, C., Cao, S., & Li, H. (2020). Young children's online learning during COVID-19 pandemic: Chinese parents' beliefs and attitudes. *Children and Youth Services Review*, 118. https://doi.org/10.1016/j.childyouth.2020.105440
- Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei, M. M., Dennehy, D., Metri, B., Buhalis, D., Cheung, C. M. K., Conboy, K., Doyle, R., Dubey, R., Dutot, V., Felix, R., Goyal, D. P., Gustafsson, A., Hinsch, C., Jebabli, I., ... Wamba, S. F. (2022). Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 66. https://doi.org/10.1016/j.ijinfomgt.2022.102542
- Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies*, 10(4). https://doi.org/10.3390/soc10040086
- Hanafi, Y., Taufiq, A., Saefi, M., Ikhsan, M. A., Diyana, T. N., Thoriquttyas, T., & Anam, F. K. (2021). The new identity of Indonesian Islamic boarding schools in the "new normal": The education leadership response to COVID-19. *Heliyon*, 7(3). https://doi.org/10.1016/j.heliyon.2021.e06549
- Hung, M., Licari, F. W., Hon, E. S., Lauren, E., Su, S., Birmingham, W. C., Wadsworth, L. L., Lassetter, J. H., Graff, T. C., Harman, W., Carroll, W. B., & Lipsky, M. S. (2021). In an era of uncertainty: Impact of COVID-19 on dental education. *Journal of Dental Education*, 85(2), 148–156. https://doi.org/10.1002/jdd.12404
- Johnson, B. (2014). *Educational research: Quantitative, qualitative, and mixed approaches* (Fifth edition). Sage Publications.
- Johnson, S., Dalton-Locke, C., Vera San Juan, N., Foye, U., Oram, S., Papamichail, A., Landau, S., Rowan Olive, R., Jeynes, T., Shah, P., Sheridan Rains, L., Lloyd-Evans, B., Carr, S., Killaspy, H., Gillard, S., Simpson, A., Bell, A., Bentivegna, F., Botham, J., ... Tzouvara, V. (2021). Impact on mental health care and on mental health service users of the COVID-19 pandemic: A mixed methods survey of UK mental health care staff. *Social Psychiatry and Psychiatric Epidemiology*, *56*(1), 25–37. https://doi.org/10.1007/s00127-020-01927-4
- Kim, L. E., & Asbury, K. (2020). 'Like a rug had been pulled from under you': The impact of COVID-19 on teachers in England during the first six weeks of the UK lockdown. British Journal of Educational Psychology, 90(4), 1062–1083. https://doi.org/10.1111/bjep.12381
- Kitchin, R., & Dodge, M. (2019). The (In)Security of Smart Cities: Vulnerabilities, Risks, Mitigation, and Prevention. *Journal of Urban Technology*, 26(2), 47–65. https://doi.org/10.1080/10630732.2017.1408002
- König, J., Jäger-Biela, D. J., & Glutsch, N. (2020). Adapting to online teaching during COVID-19 school closure: Teacher education and teacher competence effects among early career teachers in Germany. *European Journal of Teacher Education*, 43(4), 608–622. https://doi.org/10.1080/02619768.2020.1809650
- Leavy, P. (Ed.). (2014). The Oxford handbook of qualitative research. Oxford University Press.
- Leite, H., Hodgkinson, I. R., & Gruber, T. (2020). New development: 'Healing at a distance' – Telemedicine and COVID-19. *Public Money and Management*, 40(6), 483–485. https://doi.org/10.1080/09540962.2020.1748855
- Marek, M. W., Chew, C. S., & Wu, W.-C. V. (2021). Teacher experiences in converting classes to distance learning in the covid-19 pandemic. *International Journal of*

Distance	Education	Technologies,	19(1),	89-109.
https://doi.or	rg/10.4018/IJDET	.20210101.oa3		

- Mercer, N., Hennessy, S., & Warwick, P. (2019). Dialogue, thinking together and digital technology in the classroom: Some educational implications of a continuing line of inquiry. *International Journal of Educational Research*, *97*, 187–199. https://doi.org/10.1016/j.ijer.2017.08.007
- Mio, C., Panfilo, S., & Blundo, B. (2020). Sustainable development goals and the strategic role of business: A systematic literature review. *Business Strategy and the Environment*, 29(8), 3220–3245. https://doi.org/10.1002/bse.2568
- Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 1. https://doi.org/10.1016/j.ijedro.2020.100012
- Moorthy, K., Patwa, N., & Gupta, Y. (2019). Breaking barriers in deployment of renewable energy. *Heliyon*, 5(1). https://doi.org/10.1016/j.heliyon.2019.e01166
- Mukhtar, K., Javed, K., Arooj, M., & Sethi, A. (2020). Advantages, limitations and recommendations for online learning during covid-19 pandemic era. *Pakistan Journal of Medical Sciences*, 36(COVID19-S4), S27-S31. https://doi.org/10.12669/pjms.36.COVID19-S4.2785
- Mutambudzi, M., Niedwiedz, C., Macdonald, E. B., Leyland, A., Mair, F., Anderson, J., Celis-Morales, C., Cleland, J., Forbes, J., Gill, J., Hastie, C., Ho, F., Jani, B., Mackay, D. F., Nicholl, B., O'donnell, C., Sattar, N., Welsh, P., Pell, J. P., ... Demou, E. (2021). Occupation and risk of severe COVID-19: Prospective cohort study of 120 075 UK Biobank participants. *Occupational and Environmental Medicine*, 78(5), 307– 314. https://doi.org/10.1136/oemed-2020-106731
- Patricia Aguilera-Hermida, A. (2020). College students' use and acceptance of emergency online learning due to COVID-19. *International Journal of Educational Research Open*, 1. https://doi.org/10.1016/j.ijedro.2020.100011
- Prestridge, S. (2019). Categorising teachers' use of social media for their professional learning: A self-generating professional learning paradigm. *Computers and Education*, 129, 143–158. https://doi.org/10.1016/j.compedu.2018.11.003
- Sanson, A. V., Van Hoorn, J., & Burke, S. E. L. (2019). Responding to the Impacts of the Climate Crisis on Children and Youth. *Child Development Perspectives*, 13(4), 201– 207. https://doi.org/10.1111/cdep.12342
- Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): A meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *Computers and Education*, 128, 13–35. https://doi.org/10.1016/j.compedu.2018.09.009
- Seering, J., Wang, T., Yoon, J., & Kaufman, G. (2019). Moderator engagement and community development in the age of algorithms. *New Media and Society*, 21(7), 1417–1443. https://doi.org/10.1177/1461444818821316
- Shaw, E., Walpole, S., McLean, M., Alvarez-Nieto, C., Barna, S., Bazin, K., Behrens, G., Chase, H., Duane, B., El Omrani, O., Elf, M., Faerron Guzmán, C. A., Falceto de Barros, E., Gibbs, T. J., Groome, J., Hackett, F., Harden, J., Hothersall, E. J., Hourihane, M., ... Woollard, R. (2021). AMEE Consensus Statement: Planetary health and education for sustainable healthcare. *Medical Teacher*, 43(3), 272–286. https://doi.org/10.1080/0142159X.2020.1860207
- Smutny, P., & Schreiberova, P. (2020). Chatbots for learning: A review of educational chatbots for the Facebook Messenger. *Computers and Education*, 151. https://doi.org/10.1016/j.compedu.2020.103862
- Stein-Zamir, C., Abramson, N., Shoob, H., Libal, E., Bitan, M., Cardash, T., Cayam, R., & Miskin, I. (2020). A large COVID-19 outbreak in a high school 10 days after

schools' reopening, Israel, May 2020. *Eurosurveillance*, 25(29). https://doi.org/10.2807/1560-7917.ES.2020.25.29.2001352

- Su, C.-H., Tsai, C.-H., Chen, M.-H., & Lv, W. Q. (2019). U.S. sustainable food market generation Z consumer segments. Sustainability (Switzerland), 11(13). https://doi.org/10.3390/su11133607
- Tang, X., Yin, Y., Lin, Q., Hadad, R., & Zhai, X. (2020). Assessing computational thinking: A systematic review of empirical studies. *Computers and Education*, 148. https://doi.org/10.1016/j.compedu.2019.103798
- Toropova, A., Myrberg, E., & Johansson, S. (2021). Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educational Review*, 73(1), 71–97. https://doi.org/10.1080/00131911.2019.1705247
- Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! For learning A literature review. *Computers & Education*, 149, 103818. https://doi.org/10.1016/j.compedu.2020.103818
- Wang, G., Liu, X., Li, C., Xu, Z., Ruan, J., Zhu, H., Meng, T., Li, K., Huang, N., & Zhang, S. (2020). A Noise-Robust Framework for Automatic Segmentation of COVID-19 Pneumonia Lesions from CT Images. *IEEE Transactions on Medical Imaging*, 39(8), 2653–2663. https://doi.org/10.1109/TMI.2020.3000314
- Wang, T. W., Gentzke, A. S., Creamer, M. R., Cullen, K. A., Holder-Hayes, E., Sawdey, M. D., Anic, G. M., Portnoy, D. B., Hu, S., Homa, D. M., Jamal, A., & Neff, L. J. (2019). Tobacco Product Use and Associated Factors Among Middle and High School Students-United States, 2019. MMWR. Surveillance Summaries, 68(12), 1–22. https://doi.org/10.15585/mmwr.ss6812a1
- Wong, J., Baars, M., Davis, D., Van Der Zee, T., Houben, G.-J., & Paas, F. (2019). Supporting Self-Regulated Learning in Online Learning Environments and MOOCs: A Systematic Review. *International Journal of Human-Computer Interaction*, 35(4–5), 356–373. https://doi.org/10.1080/10447318.2018.1543084
- Yusoff, A. F. M., Hashim, A., Muhamad, N., & Hamat, W. N. W. (2021). Application of Fuzzy Delphi Technique to Identify the Elements for Designing and Developing the e-PBM PI-Poli Module. *Asian Journal of University Education*, 17(1), 292–304. https://doi.org/10.24191/ajue.v17i1.12625
- Zamora-Polo, F., & Sánchez-Martín, J. (2019). Teaching for a better world. Sustainability and Sustainable Development Goals in the construction of a change-maker university. *Sustainability* (*Switzerland*), 11(15). https://doi.org/10.3390/su11154224