Impact of Professional Development Program on Pedagogical Competence of Teachers at MI Az Zahro' Pagar Alam
Rita Yulia Anggraini¹*, Muhammad Uyun²

Abstract
The goals of this research are to provide a historical context for the evolution of the teaching profession, to characterize the current state of teacher performance, and to identify the factors that have an impact on teachers' professional effectiveness. This study focuses on the professional growth of experienced instructors, although previous research has mostly ignored this topic. A survey strategy is used. In order to gather information for this study, researchers filled out questionnaires. Twenty-one teachers from MI Az Zahro' Pagar Alam were interviewed for this study. Simple regression was used to evaluate the data. The findings demonstrated that (1) teacher professional development is at an acceptable level, and (2) professional development has a beneficial effect on teacher performance.

Keywords: professional development program, pedagogical competence, teacher

Introduction
To develop national education, teachers (educators) are needed to guarantee quality standards of competence and professionalism (Mustofa, 2012; Disas, 2017; Nidawati, 2022). If we want to have enough qualified educators to move the needle on national education reform, we need to invest in a system of ongoing, personalized professional development for everyone of them (Adnan, 2019). All teacher-related elements must support this process towards experienced teachers (Been, 2021). All of these parts put together can create a system that helps develop enough qualified educators (Arfan, 2015).

Teacher professional empowerment is carried out in accordance with government policy as stated in Article 7 of Law No. 14 of 2005. This requires teachers to engage in self-development that is democratic, equitable, non-discriminatory, and sustainable, all while protecting and promoting human rights, religious values, cultural values, national pluralism, and professional codes of ethics (Yunita et al., 2022). In addition, Article 20 mandates that educators keep their skills and knowledge current with the advancement of science, technology, and the arts as part of their professional responsibilities (Sangi, 2012; Apriliyani, 2022).

It is crucial to incentivize and equip teachers to be more professional given the importance and difficulty of constructing education (Rahimah, 2022). The only purpose of this is to strengthen educational foundations and push toward ever-higher standards of competence (Hazrullah, 2023). The professionalism of teachers and education staff is still inadequate, especially in their scientific fields (Inayah, 2020). For example, a Biology teacher may teach Chemistry or Physics. Social studies teachers can teach Indonesian. The quality and professionalism of teachers are not in line with expectations. Many of them are not qualified and deliver the wrong material, so they are not or less able to present and organize truly quality education (Dahrin, 2000).

Multiple studies, including the results of the reading, mathematics, and science exam known as PISA (Program for International Student Assessment), have cast doubt on the
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In 2018, Indonesia ranked 10th lowest out of 78 countries, with 371 for reading, 379 for mathematics, and 396 for science. The Political and Economic Risk Consultant (PERC) ranked Indonesia’s educational system dead last among 12 Asian nations. The poor caliber of Indonesia’s teaching force is a major contributor to the country’s subpar educational system. The UKG or Teacher Competency Test results from 2012 to 2015 show that around 81% of teachers in Indonesia did not even reach the minimum score. UKG itself is one of the evaluations to measure teacher competence, and what is assessed is the mastery of academic competence, professional competence, teacher ability to prepare learning strategies for students and manage classes, understanding of the subjects taught, and the power of teachers to evaluate learning. Poor human resource management throughout the teacher recruiting process is a major contributor to Indonesia’s subpar education system.

In addition, according to the results of research conducted by the World Bank (World Bank) in 2020, the quality of teachers in Indonesia has been low due to the COVID-19 pandemic in Indonesia for the last 1.5 years. The low rate of teachers is the competence and ability to teach teachers. Teachers in Indonesia during the COVID-19 pandemic should have many opportunities to develop their abilities. They were especially developing the ability to teach in class to be more interactive and motivating for students. Based on these data, researchers researched professional development’s impact on teacher pedagogical competence at MI Az Zahro’ Pagar Alam.

Professional development program on pedagogical competence of Madrasah Ibtidaiyah teachers is a professional development program that aims to improve teachers’ pedagogical skills in Madrasah Ibtidaiyah (Mufidah, 2019; Sahruli, 2019). The program is designed to provide teachers with the knowledge and skills necessary to create a compelling and engaging learning environment for their students (Sopian, 2016; Abidin, 2019). By participating in this program, teachers will be equipped with innovative teaching strategies and techniques to help improve student learning outcomes and the overall quality of education in Madrasah Ibtidaiyah (Aisyah et al., 2023). The program will also focus on incorporating Islamic values and teachings into the curriculum, ensuring students receive a well-rounded education aligned with their faith (Syafri et al., 2022). In addition, the program will provide ongoing support and guidance to teachers, enabling them to continuously improve their skills and stay up-to-date with the latest educational practices (Amka, 2020). Ultimately, the program aims to empower teachers to catalyze positive change in Madrasah Ibtidaiyah, benefiting students and society.

By incorporating Islamic values and teachings into the curriculum, students will gain knowledge in various subjects and develop a solid moral compass rooted in their faith (Aprilia Hayatun Nufus, 2021; Hamzah et al., 2023). This will enable them to make decisions based on Islamic principles and contribute positively to society. In addition, the ongoing support and guidance provided to teachers will enhance their pedagogical abilities and instill a sense of purpose and passion in their profession. Ultimately, the program will not only transform the educational experience for students but also empower teachers to shape the next generation of Muslim leaders.

By equipping students with a solid foundation in their faith, they will be better equipped to navigate the challenges and opportunities that lie ahead. The program recognizes the importance of holistic development, ensuring that students excel academically and develop character and leadership skills. By instilling a sense of purpose and passion in teachers, they can inspire and guide students to become compassionate and responsible individuals who contribute positively to society. Ultimately, the program aims to create a generation of Muslim leaders who are not only highly educated but also grounded in their faith and committed to making a difference in the world.

Through a comprehensive curriculum that integrates Islamic teachings with modern education, students will gain a solid foundation in religious and secular knowledge (Arifudin et al., 2016; Dalimunthe & Pohan, 2023; Kurniasih et al., 2023). Community service and other
leadership development opportunities will be made available to pupils as part of the curriculum in an effort to cultivate in them a sense of civic duty and compassion. By teaching pupils the right attitudes and techniques, the program will empower them to navigate the world's challenges while staying true to their faith and positively impacting their communities.

In addition, pupils will be challenged intellectually in an effort to foster their ability to think critically and solve problems. The program aims to cultivate well-rounded individuals who are knowledgeable in their religious teachings and well-versed in various fields of study. Through educational and character development, graduates of this program will be prepared to excel in their chosen profession while upholding their religious beliefs and contributing to the betterment of society.

Method

The method in this research uses the survey method. This method is done by collecting factual information using questionnaires as a tool (Sugiyono, 2019). The respondents of this study were 21 teachers of MI Az Zahro' Pagar Alam. Thus, this study is a population study. The method of data collecting is a three-part questionnaire. The first section is a questionnaire designed to gauge how respondents feel about teachers' professional development, which is described from six indicators such as teachers' participation in a variety of scientific activities, the creation of multiple learning models, the publication of scholarly papers, the creation of teaching aids/media, their participation in qualification education, and their involvement in the development of curricula. There are 13 things total in this area.

The second part is a questionnaire to measure respondents' perceptions of teachers' pedagogical competence, translated into indicators. This descriptive statistical survey is a data collection tool in the form of a questionnaire distributed to teachers at MI Az Zahro' Pagar Alam as its unit of analysis, totaling 21 permanent teachers, which is used to obtain an overview of the level of respondents' perceptions of teacher pedagogical competence and teacher professional development. Meanwhile, if viewed based on research objectives, this research is included in verification research, which aims to test a phenomenon with existing theories (Tatang et al., 2011).

This research focuses on teacher pedagogical competence, which is influenced by teacher professional development. Research on teachers' pedagogical competence is exciting because it achieves a high level of employee competence, a common goal for many organizations (Yvonne et al., 2014). Based on the literature review as described above, the theoretical framework can be described as follows:

![Teacher Professional Development Program (X)](Teacher-Professional-Development.png) → ![Pedagogical competence of teachers (Y)](Pedagogical-Competence.png) → ![Other factors affecting Y (ε)](Other-Factors.png)

**Figure 1.** Research Variable Relationship Model (Wiyono, 2007)
Information:
X: Teacher Professional Development Program
Y: Pedagogical Competence of Teachers
ε: Other factors affecting Y

Based on Figure 1, the research hypothesis follows:
H₀: There is no significant effect between development programs and teacher professionals
towards the pedagogical competence of teachers in MI Az Zahro' Pagar Alam.
H₁: There is a substantial influence between professional development programs
and the pedagogical competence of teachers in MI Az Zahro' Pagar Alam.

Results and Discussion
Teacher Professional Development

The appendix lists the frequencies and percentages that were calculated from the
teacher professional development data to get the teacher professional development variables.
The following is a summary of the calculated results of the replies from respondents about
teacher professional development:

1. Table 1.

<table>
<thead>
<tr>
<th>Teacher Professional Development Measures</th>
<th>Category Option</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Ineffective</td>
<td>1</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>Ineffective</td>
<td>2</td>
<td>40</td>
<td>14.7</td>
</tr>
<tr>
<td>Quite Effective</td>
<td>3</td>
<td>145</td>
<td>53.1</td>
</tr>
<tr>
<td>Effective</td>
<td>4</td>
<td>63</td>
<td>23.1</td>
</tr>
<tr>
<td>Highly Effective</td>
<td>5</td>
<td>23</td>
<td>8.4</td>
</tr>
<tr>
<td>Sum</td>
<td></td>
<td>273</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Respondent's answer processing score

The picture of teacher professional development illustrated in the table and diagram
above shows that 53.10% of all respondents stated that it was pretty effective. Thus, it is
empirically known that teacher professional development is quite effective. Based on the data
processing obtained, teacher professional development at MI Az Zahro’ Pagar Alam is quite
effective. This is evidenced by the calculation of the percentage of questionnaire answer
frequency from 21 respondents, which showed results of 53.1%. The calculation results obtained
based on questionnaire answers regarding teacher professional development in indicators
regarding teacher professional development can be illustrated in the diagram.
According to the author’s field research, the highest score is on the indicator of keeping up with news about the progress of science and technology (3.31), while the lowest is on the indicator of putting pen to paper (3.17). Field evidence shows that this indicator closely tracks the progress of science and technology, earning it the best possible data score. That is, educators are relentless in their pursuit of new methods to leverage scientific and technological advances in service of student learning.

Meanwhile, the lowest score (3.17 on the indicator of writing scientific articles) indicates that, in actuality, professors' writing skills remain inadequate. Furthermore, instructors seldom write scientific publications and often lack the necessary expertise to do so. Data analysis shows that professional development for educators has a positive impact on student achievement.

**Teacher Performance**

Teacher performance in this study was measured using five indicators. Teacher performance variable descriptions are obtained through frequency and percentage calculations of teacher performance variable data. Based on calculations, results are obtained as shown in the following table:

<table>
<thead>
<tr>
<th>Creativity Measures</th>
<th>Category Option</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>1</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Low</td>
<td>2</td>
<td>31</td>
<td>13.4</td>
</tr>
<tr>
<td>Quite High</td>
<td>3</td>
<td>126</td>
<td>54.5</td>
</tr>
<tr>
<td>Tall</td>
<td>4</td>
<td>60</td>
<td>26.0</td>
</tr>
<tr>
<td>Very High</td>
<td>5</td>
<td>13</td>
<td>5.6</td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td><strong>231</strong></td>
<td></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Respondent's answer processing score

The picture of teacher performance level illustrated in the table and diagram above shows that teacher performance amounted to 54.5% of the total respondents studied, which is
relatively high. The picture of teacher performance levels seen from each indicator can be more clearly illustrated in the following diagram:

![Diagram showing teacher performance indicators]

Source: Respondent Answer Score

Figure 3.
Recapitulation of Teacher Performance Variable Data Calculation

Based on these five indicators, the indicator of learning program implementation has the highest value of 3.38. This means that the performance of learning programs has been said to be good because of the standard procedures, thus requiring an educator to carry out learning programs. The lowest indicator is on the evaluation analysis indicator, with a score of 3.10, because teachers tend to conduct evaluation analyses of students.

The Effect of Teacher Professional Development on Teacher Performance

According to the consensus of educational experts, "teacher professional development" entails "teacher activities in the practice of science and knowledge, technology, and skills to improve quality," in terms of both the classroom experience and the competence of other educators (Tanang & Abu, 2014; Tampang & Wonggo, 2018; Anwar & Mubin, 2019; Ratnasari, 2020; Sugiyanto et al., 2021; Rahmah & Kadi, 2022). Improvements in teaching and learning quality as well as the competence of teachers and other education professionals via the use of scientific and technological knowledge and abilities (Siregar, 2014; Adha et al., 2018; Karmila & Eliza, 2022). At the same time, a teacher's performance is the end product of the teacher's labors (Robinson & Kay, 2010; Remesh, 2013; Ghavifekr & Rosdy, 2015; Indrawati & Octoria, 2016; Kim et al., 2019; Darling-Hammond et al., 2020; Abdulrahman et al., 2020; Haleem et al., 2022). Therefore, improving teacher performance must be supported by factors that influence it.

The calculation of the research results by simple regression between teacher professional development and teacher performance variables then obtained the regression equation Ŷ = 5.576 + 0.817. The equation means that if the variable of teacher professional development is influential, the level of teacher performance is high. From the regression model obtained (a) of 5.576, it means that the positive regression direction shows the relationship between the independent variable and the dependent variable goes one way, where every
increase or decrease in the independent variable (teacher professional development) will be followed by an increase/decrease in the dependent variable (Teacher Performance).

The calculation of hypothesis testing obtained $F_{calculate} = 5.2474$ while $F_{table}$ with an error rate of $\alpha = 0.05$ and $df_{reg} = 1$ and $df_{res} = n - 2 = 21 - 2 = 19$ of 4.3248 means that $F_{calculate} > F_{table}$ is 5.2474 > 4.3248, then $H_0$ is rejected, and $H_1$ is accepted, so it can be concluded that "there is a positive influence of teacher professional development on teacher performance.

**Based on the value of the coefficient of determination in this study, the variable**

Teacher Professional Development on teacher performance as intended for the calculation was obtained by 21.6%. This means that teacher professional development affects teacher performance by 21.6%. Other factors influence the remaining 78.4% of teacher performance. How well someone does their work depends on how well they know the relevant science, skills, knowledge, and conduct (Kartika & Sugianto, 2016; Krisnawati & Bagia, 2021; Aulia, 2021; Kasi et al., 2022). Teachers with high performance will strive and try to improve their competence in planning, implementation, and assessment so that optimal results are obtained according to Mulyasa’s view (Mulyasa, 2017).

**Conclusion**

Indicators for gauging educators’ progress throughout their careers Here is some data on how numerous scientific endeavors have contributed to the advancement of the profession: Creating a variety of paradigms for learning, Producing scholarly articles, Creating educational materials, The further curriculum development actions after qualifying education fall into the category of very successful. Teacher performance is measured through indicators of the preparation of learning programs, implementation of learning programs, implementation of evaluation, evaluation analysis, implementation of improvement, and enrichment. The five hands are in the reasonably high category.

Professional growth has a major impact on how well educators do their jobs. Therefore, the key to improving education is helping teachers become more self-reliant so they may reach their full potential in the classroom. There will be a corresponding rise in teaching quality as the number of educators grows. Concern has been raised about ongoing efforts to improve the teaching profession. Education, in both its delivery and its outcomes, stands to benefit from a rise in the caliber of its teaching staff.

**Reference**


Inayah, R. S. (2020). PROFESIONALITAS GURU DALAM MENINGKATKAN MUTU PENDIDIKAN MADRASAH DI ERA GLOBALISASI. Molecules.


