

Original Article

Evaluation of the Effectiveness of Professional Education Programs for Teachers

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Abstract

The purpose of this research is to determine how effective the professional education program is for elementary school teachers. Improving the pedagogical, professional, social, and personal abilities of teachers is the goal of this professional education program. We collected data from a number of elementary school teachers who participated in the program for this research through a survey method, which is a quantitative approach. This study involved one hundred elementary school teachers from various regions in Indonesia. The research used a questionnaire based on teacher competency standards and the goals of the professional education program. The questionnaire consisted of several sections measuring teachers' perceptions of program effectiveness, the competency improvements they felt, and the program's impact on their teaching practices. Descriptive and inferential statistical analysis was conducted to identify patterns and correlations in the collected data.

Keywords: *Effectiveness Evaluation, Professional Education, Elementary School Teachers*

INTRODUCTION

Basic education is an important foundation in a country's education system. The quality of primary education is strongly influenced by the competence and professionalism of the teachers who teach. Competent and professional teachers are able to provide effective learning, create a conducive learning environment, and inspire and motivate students to learn. Therefore, improving the quality of teachers through professional education programs is one of the priorities in efforts to improve the quality of basic education. Professional education programs for teachers are designed to improve their pedagogical, professional, social and personality competencies. Pedagogical competencies include teachers' ability to plan, implement and evaluate the learning process.

Professional competence relates to mastery of subject matter and continuous professional development. Social competence includes teachers' ability to interact with students, colleagues, parents and the community. Meanwhile, personality competence includes attitudes, ethics and morals that must be possessed by a teacher.



In the Indonesian context, various professional education programs have been launched by the government and various educational institutions to improve the quality of primary school teachers. These programs include training, workshops, seminars and continuing professional development tailored to teachers' needs. However, although various programs have been implemented, there are still challenges in ensuring the effectiveness of these programs. Some studies show that many teachers still experience difficulties in implementing new knowledge and skills that are often found in teaching practice.

This study aims to evaluate the effectiveness of professional education programs for primary school teachers in Indonesia. This is important to do in order to identify the extent to which professional education programs have succeeded in improving teachers' competencies and how they impact on their teaching practices. In addition, the study aims to identify the challenges teachers face in applying the knowledge and skills from professional education programs. The results of the study are expected to provide a comprehensive picture of the effectiveness of professional education programs for primary school teachers in Indonesia. In addition, the findings are expected to provide a basis for developing more effective policies and programs to improve the quality of primary education in Indonesia.

Ongoing evaluation and continuous improvement in the implementation of teacher professional education programs are essential to put into practice so that teachers receive the appropriate support as educators; professionals who are able to face the challenges of 21st century education. Thus, the findings of this study hope to make a significant contribution to efforts to improve the quality of basic education in Indonesia through improving teacher competence and professionalism. Furthermore, the research results can provide insights for policy makers, education practitioners, and researchers in designing more effective education programs that are relevant to teachers' needs.

LIBRARY REVIEW

Professional education programs for teachers are a crucial element in improving the quality of education, as they enable the continuous development of pedagogical, professional and personal competencies amidst the demands of the digital era and curriculum changes. In Indonesia, programs such as Teacher Professional Education and Training (PLPG) and Continuing Professional Development (CPD) are designed to improve teaching skills, material mastery and technology adaptation, but evaluating their effectiveness is often a challenge due to the lack of comprehensive metrics. This study aims to evaluate the effectiveness of these programs through a systematic approach, focusing on the impact on teacher performance and student learning outcomes. Different from previous literature reviews that highlight the risks of online learning-such as technical, pedagogical, and psychosocial challenges-this paper emphasizes the evaluation of offline and hybrid teacher professional development programs, which are more oriented towards long-term competency improvement than pandemic emergency adaptation.

The study by Arikunto (2019) shows that evaluation of primary school teacher training programs is effective in improving teaching skills, although limited by factors such as resource availability and daily monitoring. At the primary school level, research on Thematic PLP (2025) revealed a positive impact on prospective teachers' pedagogical competencies, with up to 40% improvement in skills through an integrative thematic

approach. Internationally, Darling-Hammond et al. (in Learning Policy Institute, n.d.) identified features of effective programs, such as ongoing collaboration and school support, based on 35 empirical studies showing a positive relationship between professional development and student achievement. Guskey (2002) proposed a five-level evaluation model-reaction, learning, organization, use, and outcomes-that has been applied to measure the impact of programs on teacher efficacy and classroom practice. In Indonesia, evaluation through the teachers' working group (KKG) showed effectiveness in professional development, although only 40% of teachers were satisfied with the learning community program. Other research emphasizes the role of evaluation in improving the quality of education, focusing on professional competencies such as learning strategies and strengthening material mastery.

Although the literature is rich with analysis of teacher development programs, both at the school and university level, the main focus tends to be on implementation rather than holistic evaluation of effectiveness. No study has specifically conducted an in-depth evaluation of "Evaluating the Effectiveness of Professional Education Programs for Teachers" as a comprehensive review in the Indonesian context, integrating both quantitative and qualitative metrics. This title is an original contribution that has not been researched in depth by others, so this research is expected to develop an evaluation framework that can be applied to improve teacher professional education programs, supporting the improvement of national education quality.

RESEARCH METHOD

This study used a quantitative approach with a survey method. The instrument used was a questionnaire designed based on teacher competency standards and professional education program objectives. The questionnaire measured teachers' perceptions of program effectiveness, competency improvement, and impact on teaching practice. The data collected were analyzed using descriptive and inferential statistics to identify patterns and relationships between variables. This study aimed to evaluate the effectiveness of the professional education program and identify challenges in its implementation.

RESULTS AND DISCUSSION

Research Results

This study aimed to evaluate the effectiveness of professional education programs for primary school teachers. From the 100 primary school teachers who participated in the survey, data were collected and analyzed to understand their perceptions of the effectiveness of the program, their perceived competency improvement, as well as the impact of the program on their teaching practices, the following results will be presented:

1. Teachers' Perception of Program Effectiveness

Table 1. Teachers' Perception of the Effectiveness of the Professional Education Program

Criteria	Very Ineffective	Not Effective	Moderately Effective	Effective	Very Effective
Improvement Pedagogical Competence	2%	5%	15%	55%	23%

Improvement Professional Competence	1%	4%	20%	50%	25
Improvement Social Competence	3%	6%	18%	53%	20
Improvement Personality Competence	2%	5%	17%	52%	24

Most teachers reported that the professional education program was quite effective to very effective in improving their competencies in various aspects. More than 70% of teachers felt that the program was effective or very effective in improving their pedagogical, professional, social and personality competencies.

2. Improved Competencies Perceived by Teachers

Table 2: Teachers' Competency Improvement after Participating in the Program

Competency Aspect	No No Improvement	Small Improvement	Medium Improvement	Large Increase
Competence Pedagogic	4%	12%	44%	40%
Professional Competence	3%	10%	45%	42%
Social Competence	5%	15%	43%	37%
Personality Competence	4%	11%	46%	39%

Teachers reported significant improvements in their competencies after attending the professional education program. More than 80% of teachers reported moderate to large improvements in their pedagogical, professional, social and personality competencies.

3. Program Impact on Teaching Practice

Table 3. Program Impact on Teachers' Teaching Practices

Aspect Teaching Practice	No No Impact	Minor Impact	Medium Impact	Large Impact
Innovation in Teaching Methods	3%	10%	50%	37%
Use of Technology	4%	12%	48%	36%
Classroom Management	5%	13%	47%	35%
Learning Evaluation	3%	11%	49%	37%

Professional education programs have a positive impact on teachers' teaching practices. More than 80% of teachers reported moderate to large impacts on innovations in teaching methods, use of technology, classroom management and learning evaluation.

4. Challenges in Implementing New Knowledge and Skills

Table 4. Challenges in Implementing New Knowledge and Skills

Challenges	Not Challenge	Minor Challenge	Medium Challenge	Big Challenge
Support from the School	20%	25%	30%	25%
Time Limitations	10%	20%	35%	35%
Lack of Supporting Facilities	15%	20%	33%	32%
Personal Barriers	25%	30%	25%	20%

This study identified some of the main challenges teachers face in implementing new knowledge and skills from professional education programs. The main challenges include lack of support from the school, time constraints and lack of supporting facilities.

5. Factors Affecting Program Effectiveness

Table 5. Factors affecting program effectiveness

Factor	No Influence	Small Influence	Medium Influence	Large Influence
Background Teacher Education Background	5%	10%	40%	45%
Teaching Experience	3%	12%	42%	43%
Intrinsic Motivation	2%	8%	38%	52%

The results show that the effectiveness of professional education programs is influenced by teachers' educational background, teaching experience and intrinsic motivation. Teachers with higher educational backgrounds, longer teaching experience and strong intrinsic motivation tended to report greater benefits from the program.

Discussion

This study sheds light on the following points, among others:

1. Evaluation of the Professional Development Program for Primary School Teachers

Discussing the effectiveness of professional development programs for primary school teachers is important given their impact on the quality of education and student achievement. Based on research conducted in recent years, several key factors have been found to influence the effectiveness of these programs, including collective support, teacher *self-efficacy*, and the integration of technology in teaching.

1.1 Teacher *Self-Efficacy*

Teachers' *self-efficacy*, or belief in their own ability to influence student learning outcomes, determines the success of professional development programs. Teachers with high *Self-Efficacy* tend to create richer and more complex learning experiences and boost their students' *Self-Efficacy*. This suggests that teachers' beliefs in their own abilities

contribute directly to the effectiveness of classroom teaching and learning (Bandura, 1993; Guskey, 1987).

An effective professional development program should be able to improve teachers' *Self-Efficacy* by providing appropriate training and support. According to Donohoo (2017a), teachers with high *Self-Efficacy* take more responsibility for student achievement and continuously adapt their teaching methods to achieve better results.

1.2 Collective Support and Teacher Collective Efficacy

The effectiveness of professional development programs is also influenced by collective efficacy or shared beliefs among teachers within a school. Collective efficacy reflects shared perceptions and judgments regarding their ability to positively influence student performance. Goddard et al. (2000, 2004) found that collective efficacy had a greater impact on student achievement than students' socioeconomic status. This suggests that collaboration and support among teachers is critical to the success of professional development programs.

According to research, teachers who work in environments with high collective efficacy are more likely to adopt innovative and effective teaching practices. They are also more likely to support each other in facing teaching challenges and improving their competencies together (Usher & Pajares, 2008; Morris et al., 2017).

1.3 Integration of Technology in Teaching

One important aspect of professional development programs is the integration of technology in teaching. Research shows that the success of technology integration largely depends on the training and support received by teachers. Teachers who feel competent and confident in using technology tend to be more effective in implementing it in their teaching (Margot & Kettler, 2019; Landwehr et al., 2021). However, many teachers still face challenges in integrating technology into their curriculum. These include a lack of technology content knowledge, technical support, and time to plan and implement technology-based instruction (Suwarma & Kumano, 2019). A successful professional development program should address these challenges by providing comprehensive and continuous training, as well as adequate technical support.

1.4 Self-Regulated Learning (SRL) Strategies

The development of Self-Regulated Learning (SRL) strategies is also an important focus in professional development programs. SRL includes cognitive, metacognitive, motivational and behavioral strategies that help students regulate their own learning. Research shows that SRL instruction integrated into the curriculum is more effective than separate instruction (Boekaerts & Corno, 2005; Dignath & Büttner, 2008). Teachers need to be trained to integrate SRL strategies in daily teaching and explain explicitly how they can be applied. This will help students to develop independent learning skills that will be useful throughout their lives (Harris & Graham, 2009).

2. Implications and Recommendations

From the results of the study, the researcher explained some findings to be used as recommendations in improving the effectiveness of primary school teachers' professional development programs:

1. Improving Teacher *Self-Efficacy*: Training programs should focus on improving teachers' self-efficacy through reflective practice and constructive feedback.
2. Collective Support: Encourage collaboration and support among teachers through learning groups and communities of practice.
3. Technology Integration: Provide comprehensive and ongoing training in the use of educational technology.
4. SRL Instruction: Integrate SRL strategies into the curriculum and provide explicit instruction to students on the use of these strategies.

By implementing these recommendations, it is hoped that professional development programs can be more effective in improving the quality of teaching and learning in primary schools.

CONCLUSION

This study shows that the professional education program for primary school teachers is generally considered effective by the teachers. The program succeeded in improving teachers' pedagogical, professional, social and personality competencies and had a positive impact on their teaching practices. However, some challenges such as lack of support from the school, time constraints and lack of supporting facilities still need to be addressed to improve the effectiveness of the program. In addition, educational background, teaching experience and intrinsic motivation are important factors that influence the extent to which teachers can apply the new knowledge and skills they acquire. The results of this study are expected to serve as a basis for developing more effective policies and programs to improve the quality of basic education in Indonesia. Continuous evaluation and continuous improvement in the implementation of professional education programs are necessary to ensure that teachers get the support they need to become better educators and are able to face the challenges of education in the 21st century.

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