



Certified Interdisciplinary Teachers' Perception of The Implementation of Teacher Certification Program

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Background:

The implementation of teacher certification programs (TCPs) has been a topic of interest in education research. Previous studies have primarily focused on student and teacher outcomes, with limited attention given to teachers' perceptions of TCPs. This study aims to address this gap by exploring the perception of certified interdisciplinary teachers regarding the implementation of a TCP in Indonesia. By understanding teachers' perspectives, this research contributes to the evaluation and improvement of TCPs, ultimately enhancing the quality of education.

Methodology:

This study adopts a qualitative research design, specifically a multiple case study approach. Five certified senior high school teachers from public schools in East Kalimantan, Indonesia, were selected as participants. Data collection methods included semi-structured interviews and document analysis of the teachers' lesson plans. Thematic analysis was conducted using NVivo 12 software.

Findings:

The findings of the study reveal two primary emerging themes. Firstly, teachers' motivation and expectations regarding the TCP were explored. Secondly, the study examined the perceived benefits of the program. The teachers reported improvements in pedagogical knowledge, curriculum understanding, content knowledge, lesson planning, and teaching performance. The TCP also enhanced their awareness of students' characteristics and needs, fostering stronger teacher-student relationships.


Conclusion:

The study highlights the importance of purposeful, continuous, and systematic professional development in enhancing teachers' competencies. It emphasizes the need for sustained professional development and regular evaluation of teachers' practices. The findings provide valuable insights for the organizers of TCPs, contributing to program evaluation and improvement.

Originality:

This study fills a gap in knowledge by exploring the perception of certified interdisciplinary teachers regarding the implementation of a TCP in Indonesia. It contributes to the limited research on teachers' perspectives of TCPs and emphasizes the significance of teacher perception and motivation in professional development programs.

Keywords: teacher certification program; pendidikan profesi guru; teacher performance; thematic analysis; content analysis

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1. INTRODUCTION

It is widely agreed that the quality of education which teachers' quality and the learning the students experience contemplated as remarkably vital elements significantly affect the quality of the students (Andersson et al., 2011; Harris & Sass, 2011; Kunter et al., 2013) then, contributes to students' faculty to endure and to prosper many aspects of life; social, economic, cultural etc. (Nurhattati et al., 2020). Under this pretext, it brings much attention to the quality of teachers across the globe. Plenty of efforts are made to accommodate this issue including implementing a strict lengthy teacher training, namely teacher certification program.

Globally, teacher certification program (TCP) has been initiated not only in Indonesia but also in other countries. For example, US teachers are certified by achieving National Board Certification through a series of knowledge of content and pedagogy assessments, the assessment on the capabilities using exceptional teaching, assessment skills and participation in professional activities (NBPTS, 2004a cited in Cavalluzzo, 2004). Three large studies indicate that the certification program is likely to be effective to improve students' achievement (Cavalluzzo, 2004; Goldhaber & Brewer, 2000). Moreover, a study investigating National Board Certified (NBC) teachers' effectiveness in terms of classroom environment, attitude and achievement among secondary science students suggests that NBC teachers are able to create a slightly better learning environments and the students also reported to have a slightly better learning attitude than those taught by non-NBC teachers (Helding & Fraser, 2013).

In Sweden, certification is also a status obtained by teachers after completing a rigorous education initiative and/or examination without any professional allowances. In addition, a study conducted by Andersson et al. (2011) reported a significant effect of certification on student's GPA which means that students taught by certified teachers achieved better than those taught by non-certified teachers. Yet, teachers' experiences may also contribute to the teachers' performance. Hence, this study implies that there was an urge to take appropriate measures to improve teachers' quality.

Cheng et al. (2013) noted that many professionals including teachers are certified through testing in Canada. Different states employ different forms of testing such as multiple choice and performance assessments. Those who passed the test are admitted being internationally educated professionals. Even though the study shows that this certification process is demanding in terms of the application process and the certification testing itself, the outcome can be optimized by preparing those internationally educated professionals as soon as they arrive in Canada.

In Indonesia alone, teacher certification program was enacted in 2005 (Kusumawardhani, 2017). It aimed to standardize teachers' qualifications which allows the enhancement of education quality. Since then, TCP has experienced remarkable changes throughout the years. At the initial years of TCP enactment, it mostly relied on portfolio review where the qualified teachers submitted a collection of documents showing that they have performed effective teaching process. These documents must cover four competences: pedagogical, personal, social, and professional. If the documents were incomplete, they were allowed to complete them. In the meantime, if the documents showed less qualified teachers to be certified, they followed the remedial training called Pendidikan dan Latihan Profesi Guru (PLPG). Unfortunately, portfolio review was incapable of improving teachers' quality due to some possibilities to manipulate the documents.

Then, TCP underwent another change where portfolio review was eliminated from the enrollment process. The government then obliged noncertified teachers to take a competence test. The teachers who passed the test as well as met the other requirements were asked to follow TCP. The program ran for about ten days. After the PLPG ended, they took another competence test. Those who passed the competence test were admitted as certified teachers, while those who failed retook the competence test. Sadly, some studies demonstrate that TCP did not contribute significantly on both teachers' quality and students' achievements (Fahmi et al., 2011; Kusumawardhani, 2017). A study by Pugatch (2017) measuring the effectiveness of TCP in several developing countries, previous research findings in China, Gambia, Chile, and Indonesia have been scrutinized in this study. The inconvenient finding reveals that the program insignificantly affects the students' performance in these countries. At the end, he asserts that it is important for many stakeholders, especially policy makers, to reevaluate TCP. Thus, it can be an effective tool to enhance teachers' quality (Pugatch, 2017) which seems to remain lower compared to other jobs in Indonesia or teachers from the nearest countries (Chang et al., 2013).

Eventually in 2018, TCP underwent another development in which the government prolong the program and added more activities allowing the participants to learn more comprehensively and deeply as well as having more chances to practice. At least, these are the expectations implied in the curriculum of Pendidikan Profesi Guru (PPG). Obviously, PPG lasts longer than PLPG. Ultimately, the number of certified teachers continues to increase. As a result, the government invests relatively more money to run the program and to pay teachers'

professional allowance. Pugatch (2017) reported that most of the Indonesian government's budget on education is spent for teachers' salary and professional allowances which is estimated two thirds of the budget is devoted for the salaries and incentives.

However, there is still a lack of studies to investigate the effect of PPG on students' gains as well as teachers' perception. Because this study merely focuses on eliciting teachers' perception, it is expected that it will develop a meaningful explanation on how teachers as the participants truly perceive the implementation of TCP and the merits they obtained in this program. Thus, this study may strengthen the link between the content of PPG and the teachers' performances. Moreover, if the teachers convey positive thoughts and believe that they have benefited from their involvement in the program. Even though it is not conclusive, it probably ascertains that PPG fairly successful to enables the participants to improve professionally. While if the teachers show reversed perceptions, it can be used as a groundwork for further researchers or the organizer of the program to scrutinize the effectiveness of the program.

The study focuses on exploring the perceptions and benefits experienced by certified interdisciplinary teachers participating in the teacher certification program. The research seeks to understand their perceptions of program implementation and the benefits derived from it. Specifically, this investigation examines the "Pendidikan Profesi Guru" (PPG) program conducted in 2019 by Mulawarman University, limited in scope to this specific program. The study comprised teachers of English, Indonesian, and mathematics from public high schools in East Kalimantan who took part in the 2019 PPG program.

Theoretically, the research is expected to provide valuable insights into certified interdisciplinary teachers' perceptions of the teacher certification program, how the PPG may influence their attitudes and beliefs, and the extent of benefits they receive. On a practical level, the study can be useful for TCP organizers at Mulawarman University by providing them with insight into participants' perceptions and program benefits to aid in program improvement. Furthermore, it offers valuable input to the government to improve its understanding of TCP effectiveness and make necessary adjustments for better outcomes. Lastly, the study can serve as a valuable resource for educators, encouraging both certified and non-certified teachers to utilize TCP for their professional development and improvement.

2. METHODOLOGY

This study uses a qualitative research approach to examine the perceptions of certified senior high school teachers in East Kalimantan, Indonesia, regarding the implementation of Pendidikan Profesi Guru (PPG). The research consists of five participants, including those who joined PPG in 2019, teach in public schools in East Kalimantan, and have at least five years of teaching experience. The study aims to provide a deep understanding of the teachers' perspectives on the implementation of PPG and their experiences in improving their teaching performance. The participants represent three regencies and one city in East Kalimantan, allowing for comprehensive data collection through certified interdisciplinary teachers. The study aims to provide valuable insights for the government and other stakeholders in the field.

This research aims to understand the perception of certified teachers regarding the implementation of Teacher Professional Development (TPD) and its benefits. Semi-structured interviews were conducted to gather data on the teachers' perspectives and the benefits they gain from the program. The researcher collected teachers' portfolios, which included two lesson plans created before and after their participation in PPG. Interview data were collected through a WhatsApp Group administrator, and the participants were interviewed in Bahasa Indonesia. The interviews were transcribed and analyzed thematically using Nvivo 12, a tool that helps analyze large sets of data and yield clear, well-organized reports.

The study involved six steps to analyze interview data, including familiarizing with the data, creating initial codes, developing themes, reviewing themes, and reporting findings. Content analysis was used to examine lesson plans submitted by participants, focusing on clarity, coherence, and assessment methods. The researcher used a lesson plan assessment form to examine lesson plans and compared them to strengthen the findings. Data triangulation was employed, combining interview transcription and documents to support the findings of research question two, which relates to the benefits participants received. The study complied with ethical considerations, including participant consent, confidentiality, and the use of Indonesian interviews. The study aimed to ensure participants understood the questions and expressed their point of view, and participants were rewarded for completing interviews candidly and submitting lesson plans.

3. FINDINGS

Teachers' Perceptions of the implementation of Pendidikan Profesi Guru (PPG)

The teachers' general perspectives of PPG will be discussed in two primary emerging themes. The first theme is teachers' motivation and what they expect from PPG while greatly beneficial sessions perceived by the teachers will be the second theme.

Teachers' Motivation and Expectations on PPG

Teachers were driven to participate in PPG because of their perception of it as an essential element of their professional growth. They expected that PPG would improve their teaching abilities and meet the changing requirements of their students. As one teacher aptly put it, "it can be regarded as training which is continuously needed by the teachers to enhance their performance." The participants were confident that, although they already had knowledge and expertise, PPG would equip them with the necessary resources to effectively handle the constantly changing requirements of the classroom.

Most Beneficial Sessions in PPG

Participants in the Pendidikan Profesi Guru (PPG) program found various activities valuable. Teaching practice emerged as one of the most beneficial sessions. Participants working in suburban areas with limited resources appreciated the opportunity to teach in urban schools with better facilities and higher-achieving students. They found this challenging but believed it helped them adapt to new environments and interact with students of diverse characteristics. *"This activity enables me to meet and deal with students with different characteristics." (Participant 2).*

In addition to teaching practice, participants engaged in peer-teaching activities, which expanded their theoretical knowledge and facilitated discussions about common teaching issues. Peer-teaching activities allowed them to learn from one another and receive valuable suggestions and feedback.

"This activity allows me to watch other teachers' performance and reflect on my own teaching." (Participant 1).

Merits of Pendidikan Profesi Guru (PPG)

Socio-Economic Merit of PPG

After becoming certified professional teachers through PPG, participants received professional allowances, which enhanced their socio-economic well-being. The amount of allowance varied, but it positively impacted their lives.

"Professional allowance should benefit both the teachers and the students. The teachers can use some money from the allowance to foster better learning." (Participant 2).

Professional Merits of PPG - Cognitive Development

PPG promoted pedagogical betterment and comprehensive understanding of teaching elements. Participants gained knowledge on teaching competencies and character qualities, enabling them to better design lesson plans.

"I believe I will be more creative in designing lesson plans due to the substantial explanation as well as exemplary lesson plan examples provided during the workshop." (Participant 1).

Participants also developed their expertise in various subjects, beyond their initial teaching roles.

"I did not only expand my knowledge to teach math in the classrooms, but also developed my expertise to lead the students in science competitions." (Participant 3).

Psychomotor Development

Participants improved their lesson planning skills, emphasizing the importance of updated teaching approaches, teaching methods, and inclusive lesson planning. PPG workshops provided clear explanations and guidance in developing lesson plans.

"Synchronizing [teaching strategies and teaching media] enables teachers to facilitate meaningful learning." (Participant 2).

Teachers' Improvement on Lesson Planning

Participants recognized the significance of lesson plans and learned to consider the students' capabilities, cultural values, and differentiation in planning.

"The teachers should include local cultural values in the learning activities." (Participant 5).

Teachers Developing More Effective Teaching Performances

PPG enabled participants to develop creative and innovative teaching methods, emphasizing the importance of ICT use, active learning, and student-centered teaching.

"The students should be given plenty of opportunities to discover the knowledge and develop their understanding." (Participant 2).

Affective Development

Participants shifted their perspectives on teaching and learning, recognizing the importance of practical skills, teacher-student interaction, and student-student interaction.

"Learning which empowers the students to acquire more practical skills makes learning more fruitful." (Participant 3).

Teachers' Needs for Future Professional Development

The teachers' needs for future professional development were a significant focus in this study. Two major themes emerged from the participants' perspectives.

Follow-Up Training

The first and most prominent theme mentioned by all participants is the need for follow-up training. Despite gaining pedagogy and professional skills during their participation in Pendidikan Profesi Guru (PPG), the participants expressed concerns about the rapidly changing landscape of education. This includes frequent changes in curriculum and the evolving use of technology in education. Participant 1 pointed out the challenge of adapting to these changes and meeting the expectations of the Ministry of Education and Culture. The teachers believe that follow-up training is essential to help them keep up with these developments and effectively implement them in their teaching practices.

"The government needs to establish training not only to disseminate these progressing curricula and instruction but also to support the teachers to manifest these into actual yet effective teaching practices." (Participant 1).

"Another effective way to promote the updated enhancement of curriculum and pedagogy is to enact training which can be held by Teachers' Community and/or by the local Ministry of Education and Culture." (Participant 2).

Other participants also stressed the importance of workshops and training that focus on pedagogy to address the changing needs and expectations of 21st-century students. They believe that such training will enhance school resources and positively impact students' learning.

Continuous Evaluation and Support

The participants emphasized that training alone may not be sufficient to elevate teachers' practices. They underscored the need for continuous evaluation and support from trainers and local superintendents. This evaluation process would involve assessing teachers' performance and supervising them to ensure they can contextualize the knowledge gained during training.

"The successful enactment of the changing curriculum and educational policy in teaching practices can be examined through an assessment of teachers' performance." (Participant 4).

"The trainers and superintendent will supervise the teachers to contextualize the learning they gained during the training. Thus, they will understand their strengths as well as gain constructive feedback." (Participant 2).

Additionally, participants suggested that teacher evaluation should be conducted at least once or twice a year. They believed that meaningful evaluation, carried out by qualified supervisors, would help maintain and even improve certified teachers' performances.

"Meaningful evaluation maintains certified teachers' performances and may even develop their practices." (Participant 3).

"All teachers' performances can be regularly systematically evaluated by the principals and other certified teachers who teach equivalent subjects." (Participant 1).

The teachers in this study expressed the urgent need for follow-up training to keep pace with educational changes and emphasized the importance of continuous evaluation and support to help them effectively apply their training to their teaching practices.

4. DISCUSSION

Teachers' perceptions of the implementation of the Professional Certification Program for Teachers (PPG) are critical to grasp their motivations and expectations within the program. According to Cumberland et al. (2018), teachers' motivations mirror their needs as in-service educators. Favorable perception of PPG as a substantial element of their professional development is closely linked to their intrinsic drive to join the program. Hsu & Yancey (2015) discovered that employees are inclined to pursue certification as a means of enhancing their professionalism.

Regarding PPG, teachers express diverse motivations and expectations. One of their principal expectations is the improvement of their professional growth, which aligns with PPG's objective of producing highly qualified educators, as set forth in the National Education Standards (Directorate General of Teaching Learning and Student Affairs, 2018). Furthermore, educators anticipate improving their personal and professional knowledge and skills, which are indispensable for exemplary teaching practices (Cumberland et al. 2018).

Moreover, instructors acknowledge the importance of integrating Information and Communication Technology (ICT) into their teaching methodologies in accordance with the necessity for students to acquire ICT literacy (World Economic Forum, 2015). Mishra & Koehler (2006) emphasize the significance of Technological Pedagogical Content Knowledge (TPACK) in teaching. This encompasses the ability to effectively use diverse technologies. PPG participants aim to enhance their competencies in utilizing technologies like whiteboards and digital educational tools.

The program's certification provides extrinsic motivation by recognizing teachers' professionalism, as noted by Ryan & Deci (2002). The certificate that teachers receive upon program completion represents their recognition.

Peer-teaching activities and teaching practice in appointed schools are the two sessions within PPG that significantly contribute to their development as professional educators. These

sessions enhance their theoretical and practical knowledge of pedagogy, curriculum, and assessment. Moreover, these activities enable teachers to apply theoretical knowledge in practice and reflect on their experiences to improve their teaching practice, in line with the objectives of PPG (Directorate General of Teaching Learning and Student Affairs, 2018).

The research indicates that PPG has positive socio-economic benefits for teachers, including increased compensation and professional allowances (Syafar, 2018). Increasing teacher salaries can decrease their reliance on secondary employment (Kusumawardhani, 2017) ultimately boosting teacher retention rates (Hendricks, 2014).

PPG significantly enhances teachers' professional competencies, particularly in the areas of pedagogy and professionalism. The effectiveness of teachers is closely tied to the quality of their training (Nurhattati et al., 2020). The program empowers teachers to design effective lesson plans, manage classrooms, engage students, and deliver lessons creatively. These results are in line with the objectives of effective instruction and student-centered education (Jordan et al., 2014).

Moreover, PPG has a beneficial impact on teachers' perspectives regarding teaching and learning, leading to a transition from a teacher-focused methodology to a student-centered one, which proves more effective in modern education (Jordan et al., 2014). Furthermore, teachers display their dedication to offering superior education and exhibit qualities of self-leadership (Goldsby et al., 2021).

Based on the positive perceptions, it is clear that PPG helps bridge the gap between teachers' theoretical and practical knowledge and prepares them to meet the complex challenges of 21st century education (Vidergor & Eilam, 2010).

5. CONCLUSION

The Pendidikan Profesi Guru (PPG) is an Indonesian teacher certification program that aims to enhance education quality, particularly among teachers. The study collected semi-structured interviews and lesson plans to examine the viewpoints of certified educators on their motivations for participating in the program, as well as their experiences and accrued benefits. The participants emphasized the increasing demand for additional professional training and workshops, viewing PPG as a valuable catalyst for cultivating exceptionally skilled educators. Furthermore, they underscored the program's socio-economic benefits, including enhanced understanding of pedagogy, curriculum, and content knowledge, as well as financial improvement.

The participants stressed the significance of establishing robust relationships between instructors and learners and maintaining a steady adherence to professional work ethics and performance standards. They proposed further training and workshops to sustain performance

levels and advance knowledge and practices, given the rapid evolution of pedagogy, learning, and curriculum. To ensure conformity with the Ministry's educational directives, they also endorsed routine supervision by school leaders and qualified supervisors.

The integration of TPACK into PPG has facilitated teachers in meaningfully integrating ICT in their classrooms. However, the curriculum specifies the introduction of TPACK principles. It is recommended to achieve a balance between theoretical and practical components while learning TPACK. To upgrade education quality and benefit both teachers and students, regular and thorough evaluation of the teacher certification program is also suggested.

The study recommends that forthcoming researchers incorporate a wider range of data sources to gain a more comprehensive comprehension of the responsibilities of PPG and the efficacy of accredited educators' methodologies. Encouraging autonomous professional growth should be emphasized since it aligns with the initial and seventh tenets of educational professionals outlined in Law No.14 of 2005.

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