



# Teacher Professional Education Program to Improve the Quality of Education: Lesson Learned from International Practice

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**Abstract.** This review paper examines Indonesia's professional teacher education program by exploring similar practices from an international perspective. This study elaborates on the model of teacher education programs worldwide and the current trends in teacher education following the reform agenda in the education system in many countries. The teacher professional education (TPE) program has been implemented as part of the teacher reform agenda in Indonesia. Although the pre-service TPE program has been implemented for several years, there is a gap in the body of literature on the policy and practice of professional teacher education. Therefore, the analysis of this study scrutinizes on the international literature on teacher education programs by including the lesson learned from the practice in other countries. The findings of the study endeavour to fill the literature gap in professional teacher education to inform policy and practice in Indonesia.

**Keywords:** Teacher Professional Education. Quality. Education. International.

## 1 Introduction

Professional teacher education is a teacher training program to improve the quality of teachers in addition to additional qualifications and credentials to be eligible to teach. Generally, the program requires a 3-4 years undergraduate degree level of education to be admitted, regardless of the educational background. Globally this program comes with different labels and names worldwide; nevertheless, it aims for the same purpose: creating a professional teacher with both teaching qualifications and professional competencies. Indonesia named the program a teacher professional education program (TPE) or commonly known as Pendidikan Profesi Guru (PPG). This training program is intended for pre-service and in-service teachers, which is historically inseparable from the policy of teacher certification programs. The teacher certification program itself is an education policy landmark of the teacher reform agenda in Indonesia [1].

In Finland, the program is called a professional teacher education program which provides pedagogical qualifications to teach in Finland. Following the teacher education reform in 2016, the program intends to bring more expertise with a solid knowledge base of the content subject and pedagogy and who can generate educational innovation

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in their teaching context [2], [3]. The program is intended for both teachers and professionals in their field who are interested in becoming a teacher in the future. This program is famous for subject teachers at the secondary level and vocational school teachers, and the curriculum emphasizes participatory pedagogy and exploratory learning. In other countries such as Singapore, professional teacher education comes in different terms; however, referring to a similar concept. Since ‘the quality of teachers is one of the most frequently cited factors explaining the quality of an education system’ [4, p. 567], it is paramount to conduct a study on the teacher education program as it is an inseparable part of ‘producing’ good quality teachers [5].

This article describes a professional teacher education program that mainly focuses on the Indonesian context while drawing on studies exploring teacher education policy and practice in well-developed countries, such as Finland and Singapore. These countries are high-achieving countries in the latest PISA, in addition to showing a solid structure of teacher education programs for quality teaching [5]. Finland and Singapore offer best practices of student-teacher recruitment and design in their teacher education curriculum, in addition to firm control and monitoring for maintaining the quality of the teacher education program to meet the needs of the vision of their education system. According to Darling-Hammond, ‘the teaching challenges posed by a higher expectation for learning and greater diversity of learners around the globe will be better met if nations can learn from each other about what matters and what works in different contexts’ [6, p. 307]. I argue that there is a strong need to conduct a study on the new field of teacher professional education to better understand its effectiveness by looking at it from international perspectives and practices. This paper explores the international literature on current issues in teacher education research to support the arguments.

The research aims to unfold the overarching question of what we can learn from international practices regarding the teacher professional education program. The underpinning research questions are: (1) How does teacher professional education (TPE) or PPG Program for pre-service teachers practice from the perspectives of the education stakeholder, (2) What constitute a professional teacher education program in international practices and how it can inform future practice for Indonesia’s context. This study intends to add the narrative of literature in the teacher professional education field in Indonesia to inform policy and practice.

## **2 Literature Review**

### **2.1 MODELS OF TEACHER EDUCATION PROGRAM**

The two models of initial teacher education known worldwide are a concurrent and a consecutive teacher education program [7]. Generally, a concurrent teacher education program refers to a 3 to 4 years education program that combines subject-specific focus and pedagogy at the same time. Meanwhile, consecutive teacher education program

focus on pedagogical content for students who have previously graduated from the disciplinary content program. The typical initial teacher education program in many countries follows the concurrent model, in which students have been trained for both content-led and pedagogical aspects. However, the current trend shows consecutive models attract graduates with more experience and expertise in teaching [7].

Singapore and Finland employ concurrent and consecutive models for their teacher education program model [3], [8]. To become a teacher in Finland, several pathways are available for students to choose from, although mainly one needs to hold a master's degree in education to teach in Finland. In the first track, students can enter a four years teacher education program focused on content knowledge and pedagogical content knowledge with a school practicum embedded in the program. The second path is for those with a bachelor's degree in their subject, and they need to do a one-year professional teacher education program emphasizing subject-specific pedagogical content knowledge. While in Singapore, becoming a teacher has several requirements, such as qualifications and credentials linked to the teacher education program they chose. Since teacher employment is the government's authority, the teacher education program is strictly monitored thoroughly from the student recruitment process to the content curriculum [8], [9]. Likewise, Finland experiences a similar situation in which the Ministry of Education and Culture regulates the structure and content of the program to maintain the quality of its graduates [2].

In the Indonesian context, the teacher education program follows both concurrent and consecutive models. The commonly known initial teacher education model in the university is a 4-year concurrent model in which students graduate from the program having both skills and knowledge to teach in schools since content knowledge subjects and pedagogy are trained at the level. As other countries practice, the initial teacher education program includes subject-specific knowledge-based theory and practice in teaching and school placement for teaching practice in the actual context. However, the current policy in teacher employment the law states that teachers must follow a one-year consecutive teacher education program to qualify to teach at primary and post-primary education levels [10]. The program is labelled as a pre-service teacher professional education (TPE) program, in which students undertake two semesters of 36-40 credits consisting of in-class workshops and school placement, which entails the graduates of the program to hold professional certificates and privilege for a financial incentive from the government once they are active in the profession. Further discussion on the teacher professional education program focuses on several features that highlight the program in global practice. The main focal points are the recruitment process of prospective candidates and their admission criteria, the pathways to becoming a teacher, and the curriculum of the program.

## **2.2 PROFESSIONAL TEACHER EDUCATION PROGRAM WORLDWIDE**

The professional teacher education for this section took the practices of Singapore and Finland as a benchmark for a high-quality teacher professional education program and how Indonesia can understand effective programs without trapping in the isomorphic mimicry phenomenon [11]. Sahlberg [12] argues that policy borrowing led to a wrong direction of the solution adopted from one country to another, which he unravels in his work on 'Facts and Myths about Finish School'. He strongly asserts that there are many Finish education fallacies and warns against the transfer of the model without considering the social, economic, and cultural aspects. In Singapore, the fact that it is a small city-state with strict government control towards the system [13] is a fact that other countries might have a different context which should be even more cautious about adapting instead of borrowing the system.

The teacher education program in Singapore is a highly effective and carefully crafted system by the stakeholders in education that started with recruiting the top one-third of the cohort to undertake a fully funded and job-guaranteed teacher training program. In Singapore, the National Institute of Education (NIE) is the only institution to conduct a teacher training program appointed by the government and to maintain the quality of teachers post-education and during the in-service stage, which includes their professional teaching and professional learning [8][9]. The collaborative framework of policy, teacher preparation program, and school partnership is effectively aligned that the international bodies acknowledge 'no other education system is tied together with such interdependent synergies as the Singapore system'[9, p. v], which means that one action of the education stakeholder will impact the whole system. There are several pathways that students can choose for teacher education programs, and the main ones are the undergraduate track and the postgraduate diploma in education. The former path is for the high achiever high school graduate to take the 4-year teacher education program. Meanwhile, the latter is for those who hold university graduate in a specific discipline to do their one-year training to become secondary or junior college teachers. As the quality of teacher education program is carefully maintained and monitored, graduates of the teacher education program are automatically certified as a professional teacher, therefore, there is no additional examination or certification process they have to go through upon completing their study [9]. Since the recruitment of teacher education students are based on the quota system, the graduates are guaranteed a job teaching position right after they completed the study. In Singapore, the whole system is of recruitment, preparation and deployment is managed meticulously to maintain and improve the quality of education.

In Finland, the teacher education program is exceptionally competitive, with strict selection criteria including strong academic performance, personal suitability, and strong motivation to work in the field [4]. One prominent feature of Finland's teachers is that they must hold a minimum of a master's degree to teach at the primary and secondary levels. For subject-specific teachers, in particular, the teacher candidate can choose two pathways from [3]. First, completing their master's degree in a subject-specific major and take a one-year subject teacher education program, which is called a professional teacher education program. In comparison, the second pathways are to take the teacher education program for their bachelor's degree subject-specific directly and continue to

a master's degree program with the same discipline. The program ensures that the teacher candidate has an advanced mastery of subject-specific before they undertake the pedagogical content knowledge. Another important quality of the professional teacher education program is its strong roots of research content in its curriculum since Finland designs its teacher education program to shape teachers as a researcher [4]. The most exciting part of the teacher as a profession in Finland is the 'culture of trust,' Sahlberg [14] elaborates that the teachers are given autonomy and trust to bring the best education possible for the children, who are trained and firmly committed to this principle. Finally, the teacher education program in Finland is very competitive, with below 3% admission and high retention in the profession since the job is highly respected in society [4], [15], in addition to equality with the other occupations, both financial gain and career trajectory

### 3 Findings and Discussion

#### TEACHER PROFESSIONAL EDUCATION PROGRAM IN INDONESIA AND WHAT WE LEARNED FROM INTERNATIONAL PRACTICE

The recent longitudinal study on pre-service teacher professional education (TPE) programs in Indonesia concurred that the program is not giving added value to improving the quality of teachers in Indonesia [16], [17]. In addition, the findings also reveal that only 12 % of the pre-service TPE graduates perceived that they have adequate mastery of teaching literacy and numeracy. Most of these teachers felt incompetent and less confident in teaching professionally. The published research findings were intriguing, to say the least, and a wake-up call for the Indonesian education stakeholder. The fact that statute draft of Teacher Professional Education in Indonesia lacks a robust argument on the rationale and significance of conducting professional teacher education and to what extent it contributes to the improvement of quality education in Indonesia [16]. This study focuses on the pre-service teacher professional education program instead of the in-service one. Due to fundamental differences between the two programs, both philosophically and in implementation, the discussion in this study is mainly on the pre-service TPE practice currently implemented in Indonesia.

Teacher professional education (TPE) for pre-service teachers in Indonesia is a one-year program for a 4-year university degree holder regardless of their background education. Unless for the primary teacher program, the applicants can be from teaching or non-teaching background. The primary purpose of pre-service TPE is to improve teacher quality for future education in Indonesia, in addition to replacing retired teachers and shaping for more qualified ones [18]. Furthermore, the critical point of establishing a pre-service TPE program is that 'the government was concerned that most teacher colleges were producing subpar graduates' [19, p. 3]. It was first launched in 2018 with only several study programs open to accommodate the needs or demands of the teaching position. Since the program launched, it has gained interest from the applicants, with around 20-30% admission from the total applicants per year. Considering

the recommendation from education stakeholders to improve the quality of students' intake to the professional teacher education program, the applicants underwent several stages of entrance exams, from the pedagogical and content mastery exams to the oral interview. The exam, unfortunately, does not include the content knowledge exam specific to the student's educational background. To be clear, the policy ruling this program changed along the way. Thus, different policies most likely apply in other years or even batches of the same year.

As the student recruitment and admission process are the crucial part of the teacher education program, a recent study on whether the recruitment criteria in pre-service TPE programs can predict teacher performance [19] shows that the admission process is a significant factor in predicting the success of completing the program; however, it does not show significant impact on the school students' performance. The study elaborates on the 2018 sample that the acceptance rate is around 30% out of the total 4000 applicants that pass the administrative requirement. The surprising fact is that these unsuccessful applicants can apply for the program in the following years, and there is a chance to pass the next round of the application process. The curriculum structure of the program focus on the pedagogical knowledge of designing a lesson plan, manipulating teaching media, and using technology in the classroom. This curriculum content, however, was criticized for its repetitiveness and overlap with the undergraduate level [16], [20]. The school placement with clinical supervision from senior teachers in the university partner school is incorporated into the curriculum. Students practice teaching and observing the mentor teacher to understand the nature of teaching in real classrooms and the other responsibilities of being a teacher in a formal school. Considering the constant changes for quality improvement on implementing the TPE program, empirical studies show there is much more to be done to create an effective teacher education program to produce a good quality teacher [16], [20].

In conclusion, teacher professional education in Indonesia, as in other countries, aims to improve the quality of education by improving the quality of teachers. Similar practices and patterns on the outward can be observed, which shows the tendency to replicate other countries' successes and what is known as policy borrowing or isomorphic mimicry phenomenon. The fact that isomorphic mimicry leads to failure [11], [12], [21] should serve as a warning alarm.

## 4 Conclusion

The common features that effective professional teacher education programs are competitive and selective candidate recruitment, innovative curricula with a strong envision of future needs, advanced skills on disciplinary subjects and research competence, strong community support and collaboration between institutions and schools for professional learning and most importantly, a strong sense of teacher identity throughout the program [3], [6], [9]. What is strikingly outstanding from the teacher education program in Finland and Singapore is that the weight of passion and inclination to become a teacher is part of the final decision for student teacher recruitment shows how

these countries consider highly students' passion and trust individuals when they choose to be in the profession. As Indonesia's recruitment of prospective applicants in the TPE program heavily emphasizes the entrance exam score, RISE recommends to embed assessment on the values, interests, and passion in pursuing the teaching profession in the final admission decision [17].

The takeaway of best practices of professional teacher education to improve teaching quality, among others, are 'articulation of standard of what teacher should learn and be able to do' [6, p. 295] used in licensing or certification as well as accreditation. Finally, taking into account the study on features of good quality education programs, among others, a clear and shared vision of good teaching; it is coherent in that it links theory with practice and offers opportunities to learn that are aligned with the vision of good teaching; and it offers opportunities to enact teaching' [22, p. 243] (Emphasis in original). This paper has explored professional teacher education as an international practice emphasizing Indonesia. It covers the implementation of the TPE program in Indonesia and its purpose and impact on Indonesian education quality. The literature review concerning the notion shows that setting a high standard for selecting teachers will positively impact the country's education quality.

## References

1. Republic of Indonesia, *Guru dan Dosen*. Republic of Indonesia, 2005.
2. J. Lavonen, "Curriculum and Teacher Education Reforms in Finland that Support the Development of Competences for the Twenty-First Century," in *Audacious Education Purposes*, F. M. Reimers, Ed. Springer Open, 2020.
3. Sahlberg and Pasi, *Finnish Lessons 3.0: What Can the World Learn from Educational Change in Finland?*, Third. New York: Teachers College Press, 2021.
4. O. P. Malinen, P. Väisänen, and H. Savolainen, "Teacher education in Finland: A review of a national effort for preparing teachers for the future," *Curric. J.*, vol. 23, no. 4, pp. 567–584, 2012, doi: 10.1080/09585176.2012.731011.
5. L. Darling-Hammond, "Response to How Teacher Education Matters," *J. Teach. Educ.*, 2023, doi: 10.1177/00224871231160378.
6. L. Darling-hammond, "Teacher education around the world: What can we learn from international practice?," *Eur. J. Teach. Educ.*, vol. 40, no. 3, pp. 291–309, 2017, doi: 10.1080/02619768.2017.1315399.
7. R. Zuzovsky and S. Donitsa-Schmidt, "Comparing the effectiveness of two models of initial teacher education programmes in Israel: concurrent vs. consecutive," *Eur. J. Teach. Educ.*, vol. 40, no. 3, pp. 413–431, 2017, doi: 10.1080/02619768.2017.1318377.
8. J. Loh and G. Hu, "Teacher Education in Singapore," *Oxford Res. Encycl. Educ.*, no. February, 2019, doi: 10.1093/acrefore/9780190264093.013.293.
9. S. T. Oon, C. L. Woon, and E.-L. Low, *Teacher Education in the 21st Century: Singapore's Evolution and Innovation*. Springer, 2019.
10. Permendikti, *Peraturan Menteri Riset, Teknologi, dan Pendidikan Tinggi Republik Indonesia Nomor 55 tahun 2017 tentang standar pendidikan guru*, no. 1146. Indonesia, 2017, p. 29.

11. L. Pritchett, M. Woolcock, and M. Andrews, "Looking Like a State: Techniques of Persistent Failure in State Capability for Implementation," *J. Dev. Stud.*, vol. 49, no. 1, pp. 1–18, 2013, doi: 10.1080/00220388.2012.709614.
12. P. Sahlberg, "Facts and myths about Finnish schools," in Seminar series, 2019, no. 290, p. 14.
13. J. Ro, "On the matter of teacher quality: lessons from Singapore," *J. Curric. Stud.*, vol. 53, no. 4, pp. 500–515, 2020, doi: 10.1080/00220272.2020.1808903.
14. P. Sahlberg, "Education policies for raising student learning: The Finnish approach," *J. Educ. Policy*, vol. 22, no. 2, pp. 147–171, 2007, doi: 10.1080/02680930601158919.
15. K. Hammerness, R. Ahtiainen, and P. Sahlberg, *Empowered Educators in Finland: How High-Performing Systems Shape Teaching Quality*. San Fransisco: Jossey-Bass, 2017.
16. A. Yusrina, U. Alifia, S. Revina, R. P. Pramana, and L. Bima, "Is the Game Worth the Candle? Examining the Effectiveness of Initial Teacher Education in Indonesia," Jakarta, 22/106, 2022. doi: 10.35489/BSG-RISE-WP\_2022/106 Use.
17. S. Revina, "Improving the Quality of Teacher Education Delivery in Indonesia," Jakarta, 2022.
18. Kemenristekdikti, *Petunjuk Teknik Pelaksanaan Program Pendidikan Profesi Guru dalam Jabatan*. Indonesia, 2022.
19. A. Yusrina, E. Berkhout, D. Suryadarma, and L. Bima, "Can the Teacher Professional Education Admission Criteria in Indonesia Predict Teacher Performance?," RISE, Jakarta, 055/2023, 2023. doi: /10.35489/BSG-RISE-RI\_2023/055.
20. M. M. Simanjorang, A. Mansyur, and S. Gultom, "Reconstruction of Professional Teacher Education Program," *J. Educ. Pract.*, vol. 11, no. 16, pp. 99–105, 2020, doi: 10.7176/jep/11-16-12.
21. L. Andrews, L. Pritchett, and M. Woolcock, *Building State Capability: Evidence, Analysis, Action*. Oxford: Oxford University Press, 2017.
22. K. Hammerness and K. Klette, "Indicators of Quality in Teacher Education: Looking at Features of Teacher Education from an International Perspective," in *Promoting and Sustaining a Quality Teacher Workforce*, 2015, vol. 27, no. 1, pp. 239–277, doi: <http://dx.doi.org/10.1108/S1479-367920140000027013>.

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