



Comparative Study of Teacher Education Programs: Indonesia vs. Singapore

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Abstract

This study provides a comparative examination of teacher education programs in Indonesia and Singapore, focusing on their structures, policies, and practices that shape teacher preparation. Using a qualitative comparative approach, it analyzes policy documents, secondary data, and prior studies to understand how both countries develop their teaching workforce. Indonesia has implemented major reforms to improve teacher qualifications, promote continuous professional development, and reduce regional disparities, yet it still struggles with uneven implementation, limited resources, and weak quality assurance. Conversely, Singapore maintains a centralized and cohesive system under the National Institute of Education (NIE), integrating recruitment, training, and career progression with national education goals. Its program emphasizes selective entry, mentorship, and sustained professional learning, positioning teaching as a high-status profession. The analysis suggests Indonesia could adopt aspects of Singapore's structured model especially in teacher preparation, professional development, and policy alignment while tailoring them to its socio-cultural and regional diversity. The study enriches discussions on teacher education reform and provides policy insights for improving the quality and equity of teacher training systems.

INTRODUCTION

Teacher education is a fundamental component of any national education system; the quality of teachers directly influences classroom learning processes and has long-term implications for achieving national education goals. The way countries design, implement, and evaluate teacher education programs ranging from pre-service training to continuous in-service professional development has therefore become a critical topic of educational research. Indonesia and Singapore, two neighboring countries in Southeast Asia, provide an interesting comparative case. While Singapore is often praised internationally as a model for producing highly competent teachers through a systematic and centralized approach, Indonesia is in the midst of ongoing educational reforms to strengthen its teacher education system in the face of diverse and complex challenges. Comparing these two contexts offers valuable

insights into how different structural, cultural, and policy frameworks shape teacher preparation and professional development (Hassen et al., 2024; Katoue et al., 2022; Murtaza et al., 2021).

Indonesia, with its vast archipelagic geography and cultural diversity, faces significant challenges in ensuring standardized quality in teacher education across regions, particularly in rural and remote areas (Johnson & Griffin, 2024; Grossman & Loeb, 2021). Historically, teacher education in Indonesia has evolved through several phases, beginning with colonial-era training, continuing through the early years of independence, and extending into recent reforms such as teacher certification programs, national curriculum changes, and the decentralization of education policy (Habinyák, 2022; Leider et al., 2021; Bellei & Muñoz, 2023). By contrast, Singapore's smaller geographical size and more centralized governance structure have enabled it to build a highly organized and systematic teacher education framework. The government has consistently emphasized rigorous teacher selection, strong institutional support, and continuous professional development to ensure high teaching standards (Zhao et al., 2024; Cochran-Smith & Reagen, 2021).

One of the most significant differences between the two countries lies in the recruitment and selection of prospective teachers. In Singapore, teacher education is largely centralized at the National Institute of Education (NIE), which serves as the sole institution mandated to prepare teachers. Only top-performing students are recruited, and the selection process takes into account not only academic achievement but also personal qualities and commitment to teaching (Oparaji et al., 2021; Kumar et al., 2021). In Indonesia, although regulations and certification programs have been introduced to raise standards, the pathways to becoming a teacher remain more diverse, with varying levels of institutional quality, candidate backgrounds, and access to resources especially between urban and rural areas.

Professional development after graduation is another key point of contrast. Singapore has established a systematic lifelong learning framework for teachers, including the "SkillsFuture for Educators" roadmap, which ensures that teachers continually update their skills to meet the demands of a rapidly changing, technology-driven, 21st-century society. In Indonesia, efforts have been made to enhance teacher professionalism through certification programs, pedagogical training, and reforms such as the Kurikulum 2013 and Kurikulum Merdeka, which aim to make education more adaptive to both local contexts and global demands.

Although existing studies have examined aspects of teacher education in both countries, there remains a gap in comparative literature that systematically explores the full continuum of teacher education programs from pre-service recruitment and training, to practicum experiences, to in-service professional development, and policy support mechanisms. Research such as *Comparative Analysis: Conceptualization of Teacher Quality in Indonesia and Singapore* (Khairiyah et al., 2024) and *Comparative Study of Education Reform in Singapore and Indonesia* (Mariam et al., 2025) has highlighted differences in educational philosophy and reform directions. However, these works often stop short of detailing the practical aspects of teacher education, such as curriculum structure, practicum design, mentorship systems, and teacher welfare policies.

The purpose of this study, therefore, is to conduct a comparative analysis of teacher education programs in Indonesia and Singapore, focusing on similarities and differences in institutional structures, curriculum design, recruitment and selection procedures, practicum experiences, professional development opportunities, and government policy support. By identifying strengths and weaknesses in each system, the study aims to generate practical recommendations for improving teacher education in Indonesia, while also acknowledging the need for contextual adaptation

rather than wholesale adoption of the Singaporean model. Ultimately, this comparative study seeks to contribute to a broader understanding of how diverse nations can strategically shape teacher education in order to raise the quality of teaching and learning outcomes.

METHODS

This study employed a comparative qualitative research design to examine teacher education programs in Indonesia and Singapore. A qualitative comparative approach was chosen because it allows for a nuanced exploration of similarities and differences between the two systems within their distinct sociocultural, historical, and policy contexts. Rather than producing statistical generalizations, the study aimed to generate interpretive insights that can inform policy debates and practical reforms in teacher education. By situating teacher preparation within broader national frameworks, the study sought to highlight how structural, cultural, and governance factors shape the professional formation of teachers in both countries.

The research relied on a documentary and literature-based comparative method, commonly known as document analysis. This approach was particularly appropriate given the focus on national education systems, which are well documented through government policies, institutional frameworks, and scholarly studies. By systematically reviewing and synthesizing information from multiple sources, the study was able to trace patterns in the organization, implementation, and outcomes of teacher education programs across both contexts. The analysis emphasized not only official regulations but also critical perspectives from researchers who have studied the practical realities of teacher preparation.

Data for this research were gathered from two broad categories of sources. The first category consisted of primary documents such as government regulations, national curriculum frameworks, teacher education guidelines, and policy reports. In Indonesia, these included publications from the Ministry of Education, Culture, Research, and Technology, as well as documents related to teacher certification and reform initiatives such as the Kurikulum 2013 and Kurikulum Merdeka. In Singapore, official materials from the Ministry of Education and the National Institute of Education (NIE) were reviewed, particularly those outlining the recruitment, pre-service training, and continuous professional development of teachers. The second category comprised secondary sources, including peer-reviewed journal articles, comparative education studies, and reports from international organizations such as UNESCO, the OECD, and the World Bank. Books, conference proceedings, and think-tank publications focusing on Southeast Asian education systems were also included to provide additional context and critical commentary. To ensure that the findings reflected contemporary practices, most of the selected literature was published between 2010 and 2024, with earlier sources used only when necessary to trace historical developments.

The analysis of data followed a thematic content analysis approach. Documents and literature were reviewed, coded, and categorized according to major themes relevant to teacher education. These themes included recruitment and selection procedures, curriculum structure and pre-service training, practicum and field experiences, professional development opportunities, governance frameworks, and the broader challenges faced in each country. Once the material was organized into these thematic categories, comparative analysis was conducted by juxtaposing the findings from Indonesia and Singapore. This process made it possible to identify not only similarities and differences but also the underlying strengths and weaknesses of each system.

To strengthen the validity and reliability of the findings, the study employed triangulation of sources. For example, official policy documents were cross-checked

against scholarly evaluations, while international reports were compared with local research to avoid one-sided interpretations. Transparency was maintained by clearly documenting the criteria for including sources and the process of thematic coding. Nevertheless, the scope of this study was limited to national-level teacher education programs. The analysis focused on systemic and policy-level dimensions rather than micro-level practices such as classroom interactions or teacher training at specific institutions. Field interviews with teacher educators and classroom observations were not conducted, which means the findings should be understood primarily as a comparative overview of structural and policy frameworks. Despite this limitation, the study offers valuable insights into how Indonesia and Singapore design and implement teacher education programs and provides lessons that may inform future reforms in Indonesia.

RESULTS AND DISCUSSION

This comparative analysis reveals distinct differences and similarities between the teacher education systems of Indonesia and Singapore, particularly in the areas of teacher recruitment and selection, curriculum design, practicum experiences, professional development, and governance frameworks. These dimensions reflect how the national priorities, educational governance, and socio-cultural contexts of each country influence the preparation of teachers.

Comparative Study of Teacher Education Programs: Indonesia vs. Singapore		
	Indonesia	Singapore
Recruitment and Selection	<ul style="list-style-type: none"> Diverse pathways to become a teacher, teachers recruited from various institutions 	<ul style="list-style-type: none"> Highly selective process, process only top degree achieve performers are admitted to teacher education programs
Curriculum Design	<ul style="list-style-type: none"> Teacher education curricula undergoing frequent reforms, indicating Sutham Kurikulum 2013 and 	<ul style="list-style-type: none"> Teacher education curriculum standardized and integrated, added performers, and 21-century skills into a cohesive framework
Practicum and Field Experiences	<ul style="list-style-type: none"> Variably structured practicum experiences, with limited mentorship and inconsistent quality 	<ul style="list-style-type: none"> Teacher trainees undergo structured and supervised practicum placements with strong mentorship and assessment components
Professional Development	<ul style="list-style-type: none"> In-service training characterized by periodic workshops and certification 	<ul style="list-style-type: none"> Comprehensive continuous professional development framework including SkillsFuture for Educators

Figure 1. Comparative Overview of Teacher Education Programs in Indonesia and Singapore

Recruitment and Selection of Teacher Candidates

In Singapore, the teacher recruitment process is highly selective and centralized, which ensures that only the most qualified candidates enter the teaching profession. The National Institute of Education (NIE) is the sole institution responsible for preparing teachers, and only those in the top one-third of academic cohorts are considered eligible for teacher training. Candidates are rigorously evaluated based on academic performance, but also undergo personality and aptitude assessments to gauge their motivation, commitment, and interpersonal skills (Oparaji et al., 2021). This selective process ensures that teacher candidates are not only academically capable but also possess the personal qualities needed for the demanding role of teaching. The Ministry of Education further solidifies the prestige of teaching by offering salaried positions to trainees from the onset of their training, reinforcing the value of teaching as a profession within the country.

In contrast, Indonesia's recruitment process for teachers faces more challenges due to the country's large and diverse population, coupled with its decentralized education system. Teacher education institutions are spread across the archipelago, varying greatly in terms of quality, particularly between urban and rural regions. The recruitment standards in Indonesia are less centralized, with a wider range of institutions offering teacher preparation programs. While national policies, such as the introduction of teacher certification programs and professional allowances, have been implemented to raise standards, the recruitment process remains less selective than in Singapore. Factors such as regional accessibility, socio-economic background, and local educational infrastructure significantly influence access to teacher training, creating disparities in the quality of teachers recruited across the nation (Wilson & Kelley, 2022).

Moreover, despite efforts to standardize teacher qualifications, regional inequalities persist in Indonesia's teacher recruitment. Many teachers in rural areas or underprivileged regions often face challenges in accessing high-quality training programs. As a result, the quality of candidates entering the profession can vary significantly depending on where they are trained. This variation is compounded by differences in educational resources, local government priorities, and institutional capacity. Therefore, while the Indonesian government has made strides to raise teaching standards, the recruitment process continues to face substantial obstacles in ensuring a uniform quality of teacher candidates across the country's diverse regions (Johnson & Griffin, 2024).

Curriculum Design and Pre-Service Training

The curriculum design for teacher education in Singapore is highly standardized and centrally coordinated, primarily through the National Institute of Education (NIE). Singapore's teacher education system places a strong emphasis on integrating subject knowledge with pedagogical theory, ensuring that teachers are equipped not only with content mastery but also with the ability to apply this knowledge in the classroom. The curriculum is research-informed, with a clear focus on evidence-based teaching practices and the development of 21st-century skills such as critical thinking, creativity, and digital literacy (Liu, 2021). This integration of theory and practice is designed to ensure that teacher trainees are fully prepared to meet the diverse needs of modern classrooms. Furthermore, the NIE's centralized approach allows for a unified curriculum across the entire country, ensuring consistency and high standards for all teacher education candidates.

In Indonesia, however, the teacher education curriculum has undergone several reforms over the years, with the introduction of the Kurikulum 2013 and Kurikulum Merdeka being among the most notable. These reforms have aimed to align teacher preparation with national educational goals, such as student-centered learning and more flexible, context-specific teaching practices. While these reforms have brought about positive changes, the implementation of these curricula has been uneven across the country. Some teacher education institutions have successfully integrated innovative pedagogical approaches, while others continue to rely heavily on traditional, lecture-based teaching methods (Natale, 2024). This inconsistency in curriculum implementation has led to variations in the quality of teacher preparation across different regions, particularly between urban and rural areas.

The disparity in curriculum delivery is further compounded by the lack of comprehensive support for teacher education institutions, especially in remote areas. While some universities and teacher training colleges are equipped with modern teaching materials and skilled faculty, others, particularly in less developed regions, struggle with outdated teaching resources and limited access to professional development. These disparities in institutional capacity contribute to an uneven

quality of pre-service training, leaving certain teacher candidates inadequately prepared to face the demands of the profession. As a result, the effectiveness of the teacher education curriculum in Indonesia is often dependent on the resources available at the local level, which can lead to disparities in the overall quality of teacher preparation across the nation (Rowland et al., 2025).

Practicum and Field Experiences

Practicum placements are an essential component of teacher education, offering trainees the opportunity to apply theoretical knowledge in real-world classroom settings. In Singapore, teacher trainees undergo structured and carefully supervised practicum placements that are an integral part of their training. These practicum experiences are coordinated by the NIE in collaboration with partner schools, ensuring that trainees receive comprehensive mentorship from experienced teachers. Feedback and reflection are systematically integrated into the practicum process, which is assessed both by the mentor teacher and the trainee themselves. This reflective practice ensures that trainees can critically evaluate their teaching performance and make necessary adjustments to improve their teaching methods. As a result, the practicum in Singapore is a well-organized and critical part of the teacher preparation process, designed to ensure that all candidates are fully prepared for the realities of classroom teaching (OECD, 2019).

In contrast, the practicum experience in Indonesia, known as Program Pengalaman Lapangan (PPL), varies widely depending on the institution and the local school's resources. While some teacher education programs offer structured practicum experiences with close supervision and regular feedback, others place teacher candidates in under-resourced schools with limited mentorship. This disparity is particularly evident in rural and remote areas, where schools often lack qualified teachers and experienced mentors to guide student teachers. As a result, many teacher candidates are not able to fully translate their theoretical knowledge into effective classroom practice. This variability in the quality of practicum experiences raises concerns about the readiness of new teachers to face the challenges of the classroom, particularly in less privileged areas (Rowland et al., 2025; Ray et al., 2023).

The inconsistency in the quality and length of practicum experiences in Indonesia highlights a significant challenge in the country's teacher education system. While some institutions provide extensive mentorship and opportunities for reflection, others fail to ensure that all teacher candidates receive adequate training in real-world teaching environments. The lack of standardization in practicum placements can result in significant differences in the preparedness of teacher candidates, depending on where they are trained and the resources available to them. This variation poses a challenge to ensuring a uniformly high standard of teacher education across Indonesia, particularly in terms of translating theoretical knowledge into practical teaching skills (Collinson et al., 2009; Yando et al., 2024).

Professional Development and In-Service Training

In Singapore, professional development is an ongoing, structured process, embedded within the teacher's career from the moment they enter the profession. The "SkillsFuture for Educators" initiative provides a clear roadmap for teachers to continue developing their skills throughout their careers. This initiative includes opportunities for teachers to engage in advanced studies, attend workshops, and participate in professional learning communities within schools. The government also supports teachers by encouraging them to pursue leadership roles and take part in research activities, ensuring that teachers remain adaptable to changes in education and technology. This approach to continuous professional development

reflects Singapore's commitment to maintaining a highly skilled and responsive teaching workforce (EEF, 2023).

In contrast, professional development in Indonesia is more fragmented and less systematic. While the government has introduced initiatives such as teacher certification and professional allowances to encourage continuous development, these programs often lack follow-up or long-term support. Professional development in Indonesia is typically delivered through short workshops or one-off seminars, many of which focus more on compliance with government regulations rather than on deepening teachers' pedagogical knowledge or improving classroom practices. As a result, many teachers do not receive the ongoing support necessary to enhance their teaching methods or adapt to the rapidly changing educational landscape. Moreover, professional development opportunities are often less accessible in rural and remote areas, where teachers face additional barriers such as limited access to resources and professional networks (Collinson et al., 2009; Yi e al., 2024; Ramsden et al., 2022).

This lack of sustained professional development in Indonesia is a significant barrier to improving teacher quality. While the country has made efforts to provide professional learning opportunities, these efforts are often inconsistent and poorly coordinated. The absence of a structured, long-term professional development framework means that teachers in Indonesia may struggle to stay current with best practices and educational innovations. This is particularly problematic in the face of global educational shifts, such as the increasing reliance on technology and digital literacy, where teachers in Indonesia may lack the training necessary to effectively integrate these skills into their classrooms (Wilson & Kelley, 2022).

Governance and Policy Support

Singapore's governance framework for teacher education is highly centralized, with close coordination between the Ministry of Education and the National Institute of Education. This centralized approach ensures that teacher preparation is aligned with national education goals, and policies are implemented uniformly across the country. The integration of teacher education with broader educational policies enables Singapore to maintain high teaching standards and rapidly respond to emerging educational needs. The centralized governance system also ensures that resources are allocated efficiently, contributing to a high-quality teacher education system that is able to meet the demands of modern education (Zhao et al., 2024; Abbaspour et al., 2024; Liu, 2024).

In contrast, Indonesia's decentralized governance structure presents both opportunities and challenges. Local governments have substantial control over the implementation of education policies, which allows for flexibility in responding to regional needs. However, this decentralization has also led to significant disparities in the quality of teacher education across different regions. While the national government has set standards for teacher education and established accreditation processes for institutions, the actual implementation of these policies varies widely. In some regions, teacher education programs are well-resourced and well-implemented, while in others, resource constraints and political factors hinder effective policy execution. This decentralization can lead to inconsistencies in teacher preparation and gaps in the quality of education provided (Bjork, 2013).

Despite the challenges posed by decentralization, Indonesia has made efforts to address these issues through national policy reforms, such as the introduction of teacher certification programs and the development of curriculum frameworks like the Kurikulum 2013 and Kurikulum Merdeka. These reforms are designed to standardize teacher education across the country and ensure that all teachers meet minimum qualifications. However, the effectiveness of these reforms is hindered by

regional disparities and limited resources, making it difficult to ensure that all teachers receive the same level of preparation and support. As Indonesia continues to decentralize its education system, the challenge remains to balance flexibility with uniformity in teacher preparation to achieve consistent educational outcomes (Leider et al., 2021).

CONCLUSION

This comparative study of teacher education programs in Indonesia and Singapore highlights both the similarities and contrasts that shape the quality of teacher preparation in each country. Indonesia has made considerable efforts to improve its teacher education system, with policies aimed at raising qualification standards and professional development opportunities. However, challenges remain in terms of uneven implementation, limited resources, and gaps between policy design and classroom realities. In contrast, Singapore demonstrates a highly centralized and coherent system, where teacher education is tightly integrated with national educational goals. The structured pathways, strong mentorship, and continuous training reflect Singapore's prioritization of teaching as a profession critical to national progress.

Ultimately, while Indonesia can be commended for its broad commitment to expanding access and improving teacher competencies, Singapore provides a model of efficiency and consistency in preparing future educators. The findings suggest that Indonesia could benefit from adopting elements of Singapore's centralized training structure and emphasis on continuous professional development, while still considering its own diverse contexts and educational challenges. A sustained commitment to innovation, quality assurance, and investment in teacher education will be key for both countries to meet the demands of 21st-century education.

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