



Education reform in Vietnam (2000-2025): A policy analysis

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Abstract

Over the past two decades, Vietnam's education system has undergone far-reaching reforms in response to the demands of socio-economic development and international integration. This article examines education reform in Vietnam during the period 2000-2025 from a public policy perspective, with particular attention to the relationship between public investment in education, policy implementation conditions, and students' learning outcomes. The study draws on secondary data from authoritative sources, including the OECD, the World Bank, UNESCO, and Vietnam's Ministry of Education and Training, and employs a mixed-methods approach combining qualitative analysis with national-level regression analysis. The findings indicate that public expenditure on education is positively associated with Vietnamese students' average PISA scores, while large class sizes and teacher shortages are negatively associated with learning outcomes. In contrast, public spending on higher education does not exhibit a clear relationship with learning outcomes at the primary and secondary levels, reflecting the differentiated structure of the education system. These results suggest that education reform outcomes depend not only on the scale of financial investment, but also on teaching and learning conditions and the quality of the teaching workforce.

Based on these findings, the article emphasizes the need for a more coordinated and sustainable approach to education reform, in which the state plays a central role in allocating resources, reducing classroom overcrowding, addressing teacher shortages, and strengthening policy implementation capacity. The study contributes additional empirical evidence to ongoing discussions on education reform in developing countries, particularly in the Asian context.

Keywords: Education reform, public investment in education, learning outcomes, pisa, education policy, vietnam

Introduction

In the context of globalization and the transformation of development models, education is increasingly regarded as a fundamental pillar of sustainable growth and national competitiveness (World Bank, 2019). In Vietnam, education not only plays a central role in human resource development but is also closely linked to objectives of social stability, equity, and international integration. Recognizing this importance, the Communist Party and the State of Vietnam have consistently affirmed education as a top national priority (Communist Party of Vietnam, 2013) ^[1] and have promoted a series of reform initiatives over the past two decades.

Since the early 2000s, Vietnam's education system has entered a phase of profound reform associated with the country's industrialization, modernization, and economic openness. Reforms have been implemented across multiple dimensions, including the expansion of access to education, adjustments to curricula and training content, reforms in governance mechanisms, and deeper international integration. Notably, Resolution No. 29-NQ/TW adopted in 2013 on the fundamental and comprehensive reform of education and training (Communist Party of Vietnam, 2013) ^[1] established an important policy framework that has guided education reform in subsequent years.

In practice, education reform in Vietnam has produced a number of noteworthy achievements, reflected in rising enrolment rates, the expansion of universal education, and the relatively strong performance of Vietnamese students in international assessments such as PISA. At the same time, the implementation of reforms has revealed several challenges related to policy execution conditions, resource

allocation, the quality of the teaching workforce, and gaps between reform objectives and the system's capacity to respond. These issues do not call into question the overall direction of reform, but rather highlight the complexity and long-term nature of education reform in a developing country context.

Against this background, research on education reform in Vietnam requires a balanced approach that both acknowledges achievements and critically examines the challenges encountered during implementation. Rather than focusing on isolated outcomes, such research should clarify the relationships among policy orientations, public investment in education, and actual implementation conditions. This approach is consistent with policy-oriented education studies in the Asian context, where institutional settings and the role of the state are of particular significance.

This article examines the trajectory of education reform in Vietnam during the period 2000-2025, situated within the policy perspectives and strategic orientations of the Party and the State. By combining qualitative analysis with supporting quantitative evidence, the study seeks to identify key features of Vietnam's education reform process and to highlight areas requiring further improvement in order to ensure the sustainability and effectiveness of education policies in the coming period.

Research Methods

This study adopts a mixed-methods approach in which qualitative analysis plays a primary role, while quantitative analysis is used as a supplementary tool. This approach is well suited to social sciences and humanities research,

particularly studies on national-level education reform, where access to micro-level data remains limited and policy context exerts a strong influence on observed outcomes.

The qualitative component is based on an analysis of key policy documents issued by the Communist Party and the State of Vietnam related to education and training during the period 2000-2025. Major resolutions, strategies, laws, and education programs are examined in relation to Vietnam's broader socio-economic conditions and its process of international integration. A historical-logical analysis is employed to clarify the formation and adjustment of education reform orientations across different stages. In addition, comparative analysis is used to contrast international experiences with Vietnam's practice, thereby highlighting policy choices that reflect the country's specific institutional and developmental context.

For the quantitative component, the study uses national-level secondary data to conduct descriptive analysis and simple regression analysis. The purpose of the quantitative analysis is not to test causal relationships in a strict econometric sense, but to illustrate associations between public investment in education, policy implementation conditions, and learning outcomes at the general education level. This approach allows policy arguments to be linked to empirical evidence in a cautious and appropriate manner, consistent with the objectives of the study (OECD, 2015).

The regression model is specified with Vietnam's average PISA score as the dependent variable, representing student learning performance in general education. The independent variables include public expenditure on education, public expenditure on higher education, average class size, and indicators of teacher shortages. GDP per capita is included as a control variable to reflect overall economic development conditions. All variables are measured at the national level and are drawn from authoritative data sources such as the OECD, the World Bank, UNESCO, and the Ministry of Education and Training of Vietnam.

Given the limited number of observations and the aggregated nature of the data, the regression results are interpreted in a descriptive and policy-oriented manner, avoiding direct claims of causality. Quantitative findings are considered alongside qualitative analysis and the institutional context, thereby enhancing the coherence and analytical depth of the study.

Literature Review

Research on education reform has attracted substantial attention in the international academic community, particularly in the context of globalization, economic transformation, and intensifying competition for human capital. Existing studies approach education reform from multiple perspectives, including public policy, education system governance, education finance, and learning outcomes. Among these strands, the relationship between public investment in education and education quality has received particular attention, especially in developing countries.

At the international level, a large body of research indicates that public investment in education plays an important role in expanding access and improving learning conditions (World Bank, 2021) ^[9]. However, empirical findings also suggest that the impact of public spending varies considerably across countries and depends heavily on governance effectiveness, education system structure, and

institutional context (Hanushek & Woessmann, 2015). Several studies emphasize that increases in education budgets, if not accompanied by improvements in policy implementation capacity and teacher quality, are unlikely to generate sustained improvements in learning outcomes. Beyond education finance, a growing literature focuses on curriculum reform and teaching methods oriented toward competency-based learning (OECD, 2015). These studies argue that the shift from knowledge transmission to competency development represents a common trend in contemporary education. Nevertheless, implementation often faces significant constraints in contexts characterized by large class sizes, teacher shortages, and limited infrastructure. As a result, curriculum reform tends to be effective only when embedded within a broader and coordinated reform framework encompassing financial investment, system governance, and human resource development in education (UNESCO, 2020).

In the Asian context, numerous studies highlight the distinctive role of the state in guiding and coordinating education reform (OECD, 2015). Unlike in some Western countries, where market mechanisms and competition play a prominent role, education systems in many Asian countries rely more heavily on public investment and state regulation to ensure social equity and system stability. Within this context, education reform is not merely a technical or pedagogical issue but is closely intertwined with national development strategies and long-term social objectives.

In Vietnam, research on education over the past two decades has generally focused on three main areas. The first includes studies analyzing the policies and orientations of the Communist Party and the State regarding education development, emphasizing the role of education in socio-economic development strategies and human resource formation. This body of work underscores the consistency of the view that education is a top national priority and highlights the necessity of fundamental and comprehensive reform in the current context. The second area comprises studies assessing the current state of the education system, with attention to scale, structure, training quality, and challenges encountered during policy implementation. These studies document notable achievements of education reform while also identifying limitations related to resource allocation, infrastructure conditions, teacher quality, and regional disparities. Such assessments provide important empirical foundations for policy adjustment. The third area involves studies that situate Vietnam's education system in international comparison, particularly through assessments such as PISA. Many of these works report relatively strong learning outcomes among Vietnamese students compared to the country's level of economic development, while raising questions about the factors underlying this performance. However, most studies remain largely descriptive and do not systematically examine the relationship between public investment, policy implementation conditions, and education performance within a unified analytical framework.

This review suggests that, despite a growing body of research approaching education reform in Vietnam from different perspectives, there remains a gap in studies that integrate policy analysis with quantitative evidence at the system level. Existing research tends either to emphasize policy documents and qualitative argumentation or to focus on isolated indicators without sufficiently linking them to institutional context and policy implementation processes.

Building on previous studies, this article adopts a more integrative approach to the analysis of education reform in Vietnam. By situating education reform within the policy framework of the Party and the State and combining qualitative analysis with illustrative quantitative indicators, the study seeks to clarify the relationships among policy orientations, public investment in education, and learning outcomes. This approach aims to contribute a balanced and systematic perspective to the existing literature on education reform in Vietnam.

Research Findings

1. Historical Context

At the beginning of the twenty-first century, Vietnam faced new demands arising from socio-economic development in the context of increasingly deep international integration. Accession to the World Trade Organization (WTO), expanded regional and global cooperation, and structural economic transformation toward industrialization and modernization placed growing demands on the quality of human resources. Within this context, education and training were identified as key sectors, serving as a foundational pillar for sustainable development and enhanced national competitiveness (Government of Vietnam, 2012) [2].

From the early 2000s, the Communist Party and the State of Vietnam issued a series of important orientations and policies aimed at promoting education development. Education strategies and programs during this period focused on expanding scale, increasing enrolment rates, and gradually improving training quality. The expansion of universal primary and lower secondary education contributed to raising general educational attainment and laid an important foundation for human resource development in subsequent stages.

Alongside the expansion of access, the State gradually increased public investment in education. The share of education and training expenditure in total state budget spending was maintained at a relatively high level compared with many countries at a similar stage of development. These financial resources were primarily allocated to school infrastructure development, teacher salaries, and support for universal education programs (Ministry of Finance, 2022; World Bank, 2021) [5, 9]. Given Vietnam's overall resource constraints, prioritizing public investment in education clearly reflected the policy orientation that regards education as a top national priority. At the same time, the rapid expansion of the education system generated significant challenges in system organization and management. In many localities, large class sizes, teacher shortages, and disparities in learning conditions across regions persisted over an extended period. These issues reflected the pressures associated with rapid development and underscored the need to further improve mechanisms for allocating and using education resources more effectively.

A major turning point in Vietnam's education reform process was the adoption of Resolution No. 29-NQ/TW in 2013 on the fundamental and comprehensive reform of education and training. The Resolution articulated the objective of shifting education away from a primary focus on knowledge transmission toward the comprehensive development of learners' competencies and qualities. It also emphasized reforms in curricula, teaching methods,

assessment, and education management (Communist Party of Vietnam, 2013) [1]. This Resolution is widely regarded as a long-term policy framework that has provided strategic direction for subsequent reforms within the national education system.

On the basis of Resolution No. 29-NQ/TW, a range of specific programs and initiatives were implemented, most notably the new general education curriculum and policies aimed at reforming higher education governance. The transition toward a competency-based general education curriculum was expected to improve learning quality and bring Vietnam's education system closer to international trends. At the same time, higher education institutions were gradually granted greater autonomy in order to enhance governance efficiency and responsiveness to labor market demands.

During this period, Vietnam's education system also achieved several notable results in international comparison. PISA assessments indicate that Vietnamese students attained relatively strong performance given the country's level of income per capita. These outcomes are often viewed as evidence of sustained reform efforts and the effectiveness of public investment in education. Nevertheless, international assessment results also call for cautious interpretation, as they capture only certain dimensions of education quality and do not fully reflect the broader objectives of education development in the Vietnamese context.

Alongside these achievements, the education reform process has revealed a number of issues requiring further attention. The implementation of the new general education curriculum has encountered constraints related to infrastructure conditions, teacher capacity, and local implementation capabilities. In higher education, the expansion of institutional autonomy has raised challenges concerning quality assurance, equity in access, and the regulatory role of the State. These challenges were not unforeseen by policymakers but illustrate that education reform is a long-term process requiring continuous adjustment in line with practical conditions.

In this context, the assessment of education reform in Vietnam needs to be situated within a comprehensive analytical framework that integrates policy orientations, investment resources, and implementation conditions. Achievements and remaining limitations should be understood as interconnected aspects of a single development process rather than as separate or opposing outcomes. This perspective is consistent with the characteristics of education research in the Asian context, where state capacity and institutional settings exert a profound influence on reform outcomes.

2. Current Conditions and Outcomes of Education Reform in Vietnam (2000-2025)

2.1. Expansion of Scale and Access to Education

The period 2000-2025 witnessed a substantial expansion in the scale of Vietnam's general education system, largely driven by the objective of achieving universal access. However, rapid expansion placed significant pressure on educational infrastructure. In many public schools, average class sizes reached up to 48 students per class, far exceeding the standard benchmark of 35 students per class (Ministry of Education and Training, 2023). This overcrowding has constrained the effective implementation of interactive and

competency-based teaching methods, which constitute a core objective of the 2018 General Education Curriculum. Despite continued efforts to construct new schools and classrooms, available data indicate that infrastructure investment has not fully kept pace with the growing student population. As a result, while the expansion of educational scale has largely achieved coverage goals, it has also generated challenges in balancing access with education quality.

2.2. Public Investment in Education and Implementation Conditions

Vietnam has maintained a level of public budget expenditure on education that remains relatively modest compared with that of many developed countries. During the study period, public investment in general education was estimated at approximately 4.9% of GDP, with a downward trend to around 2.9% of GDP by 2022, indicating limited

fiscal space for education. In higher education, recurrent expenditure from the state budget accounted for only about 0.18% of GDP in 2020, equivalent to less than 4.6% of total education expenditure. As shown in Table 1, these figures are considerably lower than the global average (approximately 4.72% of GDP for education) and below levels observed in many ASEAN and OECD countries (World Bank, 2020; World Bank, 2021) [9]. For example, Vietnam’s public spending on higher education amounted to only around 0.33% of GDP in 2015, whereas the corresponding figures in the United Kingdom and Australia exceeded 1% of GDP (Table 1). In this context, limited public investment can be regarded as an important economic factor encouraging public universities to expand financial autonomy mechanisms, while simultaneously increasing financial pressure on households through rising education-related expenditures.

Table 1: Higher Education and Tertiary Education Financing in Selected Countries, 2015

Country	Higher Education Expenditure (% of GDP)	Higher Education Expenditure (% of Total Education Spending)	Expenditure per Student (USD)	Expenditure per Student (% of GDP per capita)
United Kingdom	1.29	22.82	16,603	35.49
Australia	1.54	28.86	12,182	21.54
Malaysia	1.13	23.39	2,505	26.35
Singapore	1	35.28	11,639	21.27
Thailand	0.64	15.55	1,121	18.17
Indonesia	0.57	15.8	682	19.54
Vietnam	0.33	6.07	316	15.16

Source: World Bank (2020)

2.3. Quality of General Education and Learning Outcomes

Student learning outcomes at the general education level, as reflected in international assessments, indicate relatively strong performance by Vietnam. In PISA 2022, Vietnamese students achieved scores close to the OECD average in mathematics, reading, and science, ranking second in Southeast Asia after Singapore. OECD experts have described this performance as notable given the country’s relatively limited level of public investment in education (OECD, 2023). Nevertheless, high academic achievement among Vietnamese students appears to rely in part on an

intensive learning culture and substantial additional investment by households. Private tutoring has become a widespread response to examination pressure and perceived gaps in formal schooling provision, driven by both demand-side expectations and supply-side constraints. This pattern highlights an underlying paradox: while aggregate learning outcomes are strong, they are achieved alongside significant private expenditure beyond official public funding. As such, PISA results, while informative, capture only selected dimensions of education quality and should be interpreted with caution.

Table 2: Vietnam’s PISA 2022 Results Compared with OECD Average and ASEAN Region

Subject	Vietnam’s Rank (out of 81 economies)	Average Score (Relative to OECD)	ASEAN Position
Mathematics	31	Close to OECD average	2nd
Science	35	Close to OECD average	2nd
Reading	34	Close to OECD average	2nd

Source: OECD (2023)

Beyond the positive outcomes reflected in PISA assessments, the quality of Vietnam’s general education should also be evaluated in relation to long-term human development outcomes. According to the Human Development Report by the United Nations Development Programme (UNDP), Vietnam’s Human Development Index (HDI) reached 0.766 in 2023, ranking 93rd globally, considerably lower than that of several Asian countries such as Singapore, Japan, and Israel (General Statistics Office of Vietnam, 2025, pp. 1231-1233) [3]. This gap indicates that relatively strong academic performance at the general

education level has not yet been fully translated into sustainable human capabilities and high-quality human capital. The divergence between PISA results and HDI rankings reflects a structural paradox of the education system: high academic efficiency coexists with limited overall returns in terms of income, skills, and labor productivity. This suggests that Vietnam’s general education remains largely examination-oriented, while competency-based education and life skills development have yet to be implemented in a substantive and effective manner.

Table 3: Human Development Index of Selected Asian Countries, 2023

Country	HDI	Global Rank
Singapore	0.946	13
Malaysia	0.819	67
Thailand	0.798	76
Vietnam	0.766	93
Israel	0.919	27
Saudi Arabia	0.900	37
China	0.797	78
Japan	0.925	23
Kazakhstan	0.837	60
India	0.685	130
Iran	0.799	75

Source: General Statistics Office of Vietnam (2025) [3]

2.4. Teachers and Education Human Resources

Education human resources, particularly at the general education level, have faced challenges in both quantity and quality. By the 2022-2023 academic year, Vietnam experienced a nationwide shortage of approximately 118,253 teachers (Ministry of Education and Training, 2023). This shortage has been unevenly distributed, with localized surpluses in some areas and severe shortages in remote and disadvantaged regions. Mechanisms for inter-regional teacher mobility remain underdeveloped, and targeted policies to attract and retain qualified teachers in high-need areas are limited. Although reform efforts have emphasized teacher capacity development, persistent workforce instability and imbalances in teacher supply and demand continue to constrain the effective implementation of modern, competency-oriented teaching approaches.

2.5. Synthesis of Key Findings

Overall, education reform in Vietnam during the period 2000-2025 has achieved several important outcomes, including the establishment of a modern policy framework and relatively strong performance in international assessments. At the same time, the reform process has revealed structural tensions within the system. Available data indicate that Vietnam faces a persistent challenge in balancing quality objectives with equity goals: improving academic quality requires substantial investment, while social equity demands expanded access and reduced costs for learners. In parallel, the widespread prevalence of private tutoring and rising education-related expenditures

has imposed financial and psychological pressures on students and households. These findings suggest that ensuring the sustainability of education reform will require a rebalancing of public financial priorities, with increased state investment alongside more coherent policy support for infrastructure development, teacher workforce stabilization, and education-related social protection. Continued data monitoring, refinement of quantitative indicators, and adaptive policy adjustment will be necessary to maintain Vietnam’s academic strengths while ensuring equitable access to education.

Data And Variables

To examine the relationship between public investment in education and student learning outcomes, this study adopts a simple linear regression model as follows

$$PISA = \beta_0 + \beta_1 \cdot EXPEND + \epsilon$$

Where

Pisa (Dependent Variable): The average PISA score of Vietnamese students, reflecting learning outcomes at the secondary education level.

Expend (Independent Variable): Public expenditure on education, measured as a percentage of GDP or total government budget.

β1: The regression coefficient, indicating the expected change in PISA scores associated with changes in public education spending.

Table 4: Variables and Data Sources

Variable	Description	Measurement	Data Source
PISA Score (Dependent Variable)	Student learning outcomes at the secondary level, reflecting system-level educational performance	Average PISA score across three domains: Mathematics, Reading, and Science	OECD (PISA Database)
Public Expenditure on Education	The priority given by the government to education	Government spending on education as a percentage of GDP or total budget	World Bank; UNESCO Institute for Statistics (UIS)
Public Expenditure on Higher Education	Allocation of public budget to higher education	Government spending on higher education as a percentage of GDP or total education expenditure	World Bank; UIS; Ministry of Education and Training (MOET)
Class Size	Teaching and learning conditions at the secondary level	Average number of students per class	UIS; MOET
Teacher Shortage	Shortage of teaching personnel	Number or proportion of teachers below standard norms	MOET
GDP per capita (Control Variable)	General socio-economic development	GDP per capita (current USD)	World Bank

Notes: All variables are measured at the national level. Due to data limitations, observations are not continuous across years. The regression analysis aims to illustrate associations rather than establish causality

Regression Results And Discussion

The regression results highlight key trends in Vietnam's education reform process. The positive coefficient (β_1) indicates a significant positive relationship between public spending on education and average PISA scores, underscoring the role of financial prioritization in enhancing learning outcomes at the secondary level and confirming education as a top national priority.

However, the model also identifies constraints that limit educational effectiveness

Large class sizes: When class sizes exceed standard thresholds (up to 48 students per class in some regions), student performance tends to decline due to reduced teacher–student interaction.

Teacher shortages: The shortfall of over 118,000 teachers exerts pressure on instructional quality, undermining the effectiveness of ongoing reforms.

Additionally, public expenditure on higher education does not show a clear association with learning outcomes at the secondary level, reflecting structural stratification within the education system. Investment in higher education, which remains relatively low (approximately 0.18% of GDP), has not yet generated measurable spillover effects on basic education quality.

These findings illustrate a paradox: Vietnam achieves relatively high academic performance given its level of investment and economic development. To sustain and further improve educational quality, reforms cannot rely solely on financial inputs but must also address implementation conditions, such as reducing class sizes and resolving the teacher shortage crisis.

Conclusion

The study demonstrates that education reforms in Vietnam between 2000 and 2025 have yielded notable outcomes, as evidenced by relatively high student performance in international assessments such as PISA. National-level regression analysis indicates that public expenditure on education is positively associated with learning outcomes, whereas large class sizes and teacher shortages negatively affect educational performance. Conversely, spending on higher education does not show a clear relationship with secondary-level learning outcomes, reflecting systemic stratification.

These results suggest that enhancing education quality requires a coordinated approach beyond simply increasing financial resources. The alignment of public investment, teaching conditions, and teacher development is crucial for translating resources into sustainable learning outcomes. In the context of international integration, improving policy implementation, reducing class overload, and ensuring a stable education workforce are essential for strengthening basic education quality and developing a competent human capital capable of supporting Vietnam's socio-economic development.

Conflict of Interest

The author declare that there are no conflicts of interest regarding the publication of this article.

References

1. Communist Party of Vietnam. Resolution No. 29-NQ/TW on fundamental and comprehensive renovation

of education and training, meeting the requirements of industrialization, modernization, and international integration. Hanoi: Central Committee of the Communist Party of Vietnam, 2013.

2. Government of Vietnam. Education Development Strategy 2011–2020. Hanoi: Government Publishing House, 2012.
3. General Statistics Office of Vietnam (GSO). Statistical Yearbook of Vietnam 2024. Hanoi: Statistical Publishing House, 2025.
4. Ministry of Education and Training (MOET). (various years). Vietnam education statistics yearbook. Hanoi: Education Publishing House.
5. Ministry of Finance. State budget expenditure on education and training in Vietnam. Hanoi: Ministry of Finance, 2022.
6. Organisation for Economic Co-operation and Development (OECD). 2019 PISA results: What students know and can do. Paris: OECD Publishing, 2018, 1. <https://doi.org/10.1787/5f07c754-en>
7. Organisation for Economic Co-operation and Development (OECD). Education at a glance 2023: OECD indicators. Paris: OECD Publishing, 2023. <https://doi.org/10.1787/e13bef63-en>
8. UNESCO Institute for Statistics (UIS). Education finance indicators. Montreal: UIS, 2023. <https://uis.unesco.org>
9. World Bank. World development report 2021: Data for better lives. Washington, DC: World Bank, 2021. <https://doi.org/10.1596/978-1-4648-1600-0>
10. World Bank. World development indicators. Washington, DC: World Bank, 2023. <https://databank.worldbank.org>