

**Received:** 09 January, 2026

**Accepted:** 01 April, 2026

**Published:** 12 April, 2026

# Development of Postgraduate Education Programs in Vietnam: Applying International Collaborative Training Models with Leading Global Universities

**Do Hong Cuong**

Ha Noi Metropolitan University, Hanoi city, Vietnam

**Nguyen Dang Trung**

Ha Noi Metropolitan University, Hanoi city, Vietnam;  
nguyendangtrungdhtd@gmail.com

**Tran Thi Minh Hang**

National Academy of Education Management, Hanoi city, Vietnam

**Tran Thi My Luong**

Vietnam Women's Academy

**Do Hoang Duong**

Ha Noi Metropolitan University, Hanoi city, Vietnam

---

## Cite this article:

Cuong, D. H., Trung, N. D., Hang, T. T. M., Luong, T. T. M., & Duong, D. H. (2026). Development of postgraduate education programs in Vietnam: Applying international collaborative training models with leading global universities. *Cultura Científica*, (24), pp. 130–138.

## Abstract

This study examines the development of postgraduate education programs in Vietnam with a focus on applying international collaborative training models to enhance quality and global competitiveness. Using a mixed-methods approach that combined policy and document analysis, curriculum benchmarking, and expert interviews, the research analyzed 32 policy documents, 15 domestic programs, and 8 international collaborative programs, and collected insights from 18 key stakeholders across three major institutions. The findings highlight significant progress in policy clarity, standardization, and international integration, alongside persistent challenges in research capacity, competency-based cur-

riculum design, and infrastructure readiness. The study proposes strategic directions including curriculum innovation, faculty development, investment in research facilities, and the expansion of collaborative networks. These recommendations aim to position Vietnamese postgraduate education as an active contributor to global academic and research communities while meeting domestic socio-economic demands.

**Keywords:** postgraduate education, Curriculum development, International collaboration, Competency-based training, CDIO model, Research-oriented programs, Higher education reform, Vietnam

## 1. INTRODUCTION

In recent decades, Vietnam's higher education system has faced increasing pressure to innovate, particularly in the development of postgraduate education programs. The rapid globalization of knowledge, the expansion of technology, and the demands of a dynamic labor market have challenged universities to modernize their curricula, teaching methods, and quality assurance systems [1]. Within this context, postgraduate education is no longer just about deepening academic expertise; it must also enhance learners' competencies to meet the practical and research-based demands of the economy and society [2, 3].

International experiences have shown that collaborative models can effectively bridge the gap between local needs and global standards. Competency-based education and training frameworks, for instance, emphasize aligning learning outcomes with real-world competencies to enhance both employability and research capacity [4, 5]. Such models have been widely adopted in many countries to build postgraduate programs that are not only academically rigorous but also industry-relevant and globally competitive [6, 7].

In Vietnam, the Ministry of Education and Training (MOET) has made significant strides to improve the legal and policy frameworks for postgraduate education through the issuance of updated regulations for master's and doctoral programs [8, 9]. Despite these efforts, challenges remain in achieving international quality benchmarks, particularly in curriculum design, research integration, and collaboration with foreign universities [10, 11, 12].

From a theoretical perspective, curriculum development in postgraduate education should integrate both classical and modern approaches. Early frameworks such as Tyler's basic principles [13] and Caswell and Campbell's curriculum development theories [14] remain relevant when combined with contemporary models like outcome-based and competency-based designs [15, 16, 17]. This integration provides a structured foundation for programs that are flexible, innovative, and responsive to the needs of learners and society.

Applying international collaborative training models offers a strategic pathway for Vietnamese universities to enhance the quality and global relevance of their postgraduate programs. Partnerships with leading global universities facilitate the transfer of advanced curricula, joint research initiatives, and the development of faculty capacity [18, 19]. Such collaborations not only foster academic excellence but also position Vietnam's higher education institutions as active players in the global knowledge network.

This paper explores the development of postgraduate education programs in Vietnam through the lens of international collaboration. It analyzes existing models, highlights best practices from global partnerships, and proposes practical recommendations for improving the quality and competitiveness of postgraduate education in Vietnam.

## 2. LITERATURE REVIEW

### 2.1. THEORETICAL FOUNDATIONS

The theoretical foundations of postgraduate education program development are grounded in both classical and modern curriculum theories. Caswell and Campbell [14] were among the first to conceptualize curriculum as a dynamic and evolving process that reflects societal needs and the advancement of knowledge. Later, Tyler [13] expanded on this approach by introducing his Basic Principles of Curriculum and Instruction, which emphasized the alignment of educational objectives, learning experiences, and evaluation processes. Similarly, Tanner and Tanner [15] highlighted that curriculum design should be both systematic and flexible, capable of adapting to the rapidly changing context of education and labor markets.

Modern approaches build on these classical frameworks, introducing competency-based and learner-centered designs that emphasize the practical application of knowledge. Arguelles and Gonczi [4] and Osborne [17] argue that competency-based education (CBE) aligns academic learning with the professional and research skills required in contemporary economies, ensuring that graduates can perform effectively in both academic and applied roles. In the same vein, Bradley, Seidman, and Painchaud [5] highlight how competency-based models help students build relevant, measurable skills and shorten the time to degree completion. These frameworks emphasize a results-oriented approach that integrates theory with practical outcomes.

Postgraduate curriculum design also increasingly integrates learner-centered strategies that enhance student engagement and adaptability. Wiles and Bondi [16] and Hien [3] note that a learner-focused framework allows programs to tailor content to diverse learning needs and professional pathways, making education more relevant and accessible. Theoretical foundations, therefore, provide a balanced perspective that combines structured curriculum design with the adaptability and innovation needed for modern postgraduate programs.

### 2.2. GLOBAL PRACTICES

Globally, universities have embraced a variety of strategies and models to enhance the quality and competitiveness of postgraduate programs. One widely adopted approach is competency-based education and outcome-based learning,

which ensures that postgraduate curricula are tightly aligned with industry and research demands. Anema and McCoy [6] emphasize that integrating competencies into postgraduate programs equips graduates with practical skills and critical thinking abilities that meet the expectations of global labor markets. Similarly, Blaxell and Moore [7] highlight how embedding employability skills within academic programs bridges the gap between theoretical knowledge and workplace application.

Another important global practice is international collaboration in postgraduate education. Universities increasingly establish dual-degree programs, joint research initiatives, and faculty and student exchanges to leverage international expertise and promote global standards in curriculum design and quality assurance [18, 19]. These partnerships enable resource sharing, capacity building, and mutual recognition of qualifications, which collectively raise the profile of participating institutions and increase opportunities for students to engage in international research networks.

Innovative frameworks like the CDIO (Conceive–Design–Implement–Operate) model have also been applied to postgraduate education to integrate theoretical learning with practical, research-oriented projects [20]. This approach enhances students' ability to innovate, solve complex problems, and adapt to globalized professional environments. Furthermore, the integration of digital learning tools and blended delivery models has expanded the reach and flexibility of postgraduate programs, allowing institutions to respond more effectively to global challenges such as the COVID-19 pandemic and the rapid evolution of digital economies.

### 2.3. CURRENT RESEARCH GAP

Despite significant policy reforms and institutional efforts, there remain notable gaps in research and practice related to the development of postgraduate education programs in Vietnam. Much of the existing literature has focused on regulatory frameworks, such as MOET's circulars on master's and doctoral programs [8, 9, 21], but has not sufficiently addressed how these regulations translate into effective curriculum design and implementation. Studies by Tri, Thang, and Phuong [10] and Thanh [11] emphasize the need for application-oriented master's programs, but they provide limited guidance on integrating international collaborative models to achieve these goals.

There is also a lack of empirical research evaluating the effectiveness of existing international partnerships. Although several universities have developed collaborative programs with foreign institutions, little is known about their impact on program quality, graduate employability, or research output [12, 22]. This gap makes it challenging for policymakers and academic leaders to refine collaboration strategies to maximize benefits and address local contextual challenges, such as resource limitations or gaps in faculty capacity.

Additionally, much of the current research examines isolated elements of postgraduate education, such as curriculum design [23] or quality assurance, without integrating these aspects into a holistic model for sustainable program development. As a result, there is limited evidence to support systemic reforms that simultaneously address curriculum innovation, faculty development, research integration, and governance. This underscores the need for comprehensive and context-specific studies that draw on global best practices while also considering Vietnam's unique socio-economic and institutional environment.

Overall, while Vietnam has made progress in aligning its postgraduate education with global trends, bridging these research gaps is essential to designing internationally competitive programs that are also responsive to national priorities and local workforce needs.

## 3. METHODOLOGY

### 3.1. RESEARCH DESIGN

This study adopted a mixed-methods approach that combined qualitative document analysis and semi-structured expert interviews to ensure a comprehensive understanding of the development and application of international collaborative training models in postgraduate education. The mixed-methods design was selected to capture both policy-level perspectives through document analysis and practical insights from academic leaders and managers directly involved in program implementation.

### 3.2. DATA COLLECTION

#### 3.2.1 Policy and document analysis

A total of 32 policy documents and institutional reports published between 2014 and 2024 were analyzed. These included Ministry of Education and Training (MOET) circulars, national strategies, institutional regulations, and annual reports from three key institutions: Hanoi Metropolitan University (HMU), National Academy of Education Management (NAEM), and Vietnam Women's Academy (VWA).

### 3.2.2 Curriculum review and benchmarking

Curricula from 15 postgraduate programs (10 master's programs and 5 doctoral programs) across the three institutions were reviewed. These were benchmarked against 8 international collaborative programs from partner universities in the UK, Australia, Belgium, and France. The benchmarking process focused on curriculum structure, credit requirements, research integration, competency frameworks, and quality assurance mechanisms.

### 3.2.3 Expert interviews

A total of 18 in-depth interviews were conducted between March and July 2024 with stakeholders, including: 6 academic managers, 6 senior faculty members, and 6 graduate students. Each interview lasted approximately 60–75 minutes and followed a semi-structured guide to explore themes such as curriculum relevance, collaboration experiences, challenges, and improvement opportunities.

## 3.3. ANALYTICAL FRAMEWORK

Data were analyzed using a combination of comparative analysis and SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis. Comparative analysis was applied to evaluate the alignment between Vietnamese postgraduate programs and their international counterparts, focusing on curriculum design, learning outcomes, and research integration. SWOT analysis provided a structured assessment of the internal strengths and weaknesses of the programs, as well as external opportunities and threats influencing their development and global competitiveness.

## 4. RESEARCH RESULTS

### 4.1. QUANTITATIVE RESULTS

#### 4.1.1 Policy and Document Analysis

Analysis of 32 policy documents and institutional reports from 2014 to 2024 revealed significant progress in policy clarity, standardization, and strategic orientation of postgraduate education in Vietnam. Regulatory frameworks such as MOET Circular 15/2014 and MOET Circular 08/2017 have formalized program structures for both master's and doctoral levels, providing clear guidance on admission, curriculum design, and quality assurance processes [8, 9]. Strategic documents like the Education Development Strategy 2011 to 2020 further highlight the government's intent to develop human resources capable of meeting global labor market needs and strengthening international partnerships [1].

Institutional reports from Hanoi Metropolitan University (HMU), National Academy of Education Management (NAEM), and Vietnam Women's Academy (VWA) indicate that universities are increasingly integrating digital platforms for program management and gradually embedding international standards in their postgraduate curricula. However, the documents also reveal variability in implementation, with some institutions advancing faster than others in aligning with global quality frameworks. Distribution of analyzed policy documents is given in Table 1.

**Table 1.** *Distribution of analyzed policy documents (n = 32)*

Category	No. of documents	Percentage
National strategies and laws	8	25.0%
MOET circulars and regulations	12	37.5%
Institutional annual reports	7	21.9%
Quality assurance reports	5	15.6%

The data show that nearly 63% of analyzed documents were produced by MOET or institutional bodies, reflecting a strong focus on compliance and operational guidance. However, quality assurance reports accounted for only 15.6%, indicating a need for more consistent evaluation and feedback mechanisms to support evidence-based program development.

#### 4.1.2 Curriculum Review and Benchmarking

The curriculum review of 15 domestic postgraduate programs (10 master's and 5 doctoral) revealed that while program structures are clear and credit allocations are consistent, there are notable gaps in research integration, competency-based approaches, and interdisciplinary offerings. Benchmarking against 8 international collaborative programs from the UK, Australia, Belgium, and France highlighted key differences.

Domestic programs dedicate an average of 18% of total credits to research components, compared to 39% in international programs. Similarly, competency-based learning outcomes are only explicitly embedded in 6 out of 15 programs (40%), while all international programs (100%) feature well-defined competency frameworks. Benchmarking of domestic and

international postgraduate programs is presented in Table 2.

**Table 2.** Benchmarking of domestic and international postgraduate programs

Criteria	Domestic Programs (n=15)	International Programs (n=8)
Research credit proportion	~18% (5–8 credits of 30–40)	~39% (12–15 credits of 40)
Competency-based outcomes	Applied in 6 programs (40%)	Applied in all programs (100%)
Interdisciplinary modules	Present in 4 programs (27%)	Present in 7 programs (88%)
External accreditation	3 programs (20%)	8 programs (100%)
International faculty	2 programs (13%)	6 programs (75%)

This comparison highlights a gap in international exposure and quality assurance, as domestic programs rarely involve foreign faculty or undergo external accreditation processes. These gaps limit opportunities for students to engage with global research networks and hinder international recognition of Vietnamese postgraduate degrees.

## 4.2. QUALITATIVE RESULTS

### 4.2.1 Insights from Expert Interviews

Findings from 18 semi-structured interviews with 6 academic managers, 6 faculty members, and 6 postgraduate students provided deeper insights into the strengths, weaknesses, and areas for improvement in Vietnam's postgraduate programs.

Academic managers highlighted that the regulatory environment is increasingly supportive and that institutional leadership is committed to international collaboration. However, they noted that funding limitations and administrative barriers slow the implementation of reforms.

Faculty members acknowledged progress in curriculum updates but emphasized the need for capacity-building programs to improve research supervision and the adoption of modern teaching methodologies.

Students appreciated the affordability and accessibility of domestic programs but expressed concerns about the lack of research opportunities and limited access to international learning experiences. Summary of expert interview findings is presented in Table 3.

**Table 3.** Summary of expert interview findings (n=18)

Theme	Managers (n=6)	Faculty (n=6)	Students (n=6)
Curriculum	Structured (83.3%) but not dynamic (50%)	Needs interdisciplinary integration (66.7%)	Desire practical components (83.3%)
Research exposure	Industry links weak (66.7%)	Limited funding/resources (83.3%)	Insufficient research skills training (66.7%)
Collaboration	Partnerships fragmented (83.3%)	Need co-supervision support (50.0%)	Limited exchange opportunities (66.7%)
Infrastructure	IT facilities stable (100%)	Labs/libraries outdated (66.7%)	Digital resources inadequate (50.0%)

### 4.2.2 SWOT Analysis

The integrated SWOT analysis synthesized insights from the policy review, curriculum benchmarking, and expert interviews to provide a holistic view of the current state of postgraduate education in Vietnam. SWOT matrix of postgraduate education in Vietnam is presented in Table 4.

**Table 4.** SWOT matrix of postgraduate education in Vietnam

Strengths	Weaknesses
Clear regulatory frameworks from MOET	Limited research integration and competency-based frameworks
Growing institutional commitment to internationalization	Outdated research facilities and insufficient digital resources
Experienced faculty with strong local expertise	Limited involvement of international faculty and co-supervision
Opportunities	Threats
Rising demand for high-quality human resources	Competition from regional universities with stronger brands
Availability of international funding for joint research and mobility	Policy delays slowing partnership approvals and curriculum reforms
Expansion of digital learning and global quality frameworks	Risk of curriculum stagnation if periodic updates are not implemented

### 4.2.3 Emerging Patterns

Several patterns emerged from the integration of quantitative and qualitative findings. First, policy alignment and standardization are improving, but inconsistencies in implementation create disparities in program quality across institutions. Second, curricula are structurally sound but lack modern features, particularly in research integration, interdisciplinary approaches, and competency-based frameworks. Third, international collaborations are expanding but remain limited in scale and scope, often concentrated in a few institutions and disciplines. Fourth, stakeholders across all groups are eager for reform, particularly in enhancing faculty capacity, updating infrastructure, and expanding global partnerships. Finally, external opportunities such as international funding, digital transformation, and regional academic networks remain

underutilized and could be leveraged to accelerate the modernization of Vietnam's postgraduate education.

## 5. DISCUSSION

The findings of this study show that Vietnam's postgraduate education system has achieved significant progress in both standardization and international integration, but considerable gaps remain in curriculum design, research capacity, and institutional readiness. These insights, drawn from policy analysis, curriculum benchmarking, expert interviews, and SWOT evaluation.

One important outcome of this research is the recognition that Vietnam's regulatory and policy framework has become increasingly structured and supportive. Circulars such as MOET 15/2014 and MOET 08/2017 have provided a clear foundation for admissions, curricula, and quality assurance, allowing universities to align their programs with national and, to some extent, international standards. However, while these policies have laid the groundwork for reform, implementation has been uneven across institutions. Universities with better resources and leadership have made greater progress, whereas others have struggled due to limited autonomy and insufficient support. This finding underscores the need to refine governance mechanisms and establish clearer benchmarks to ensure consistent quality throughout the sector.

Curriculum design is an area that requires significant enhancement. Although domestic postgraduate programs are well organized and comply with established guidelines, they lack the depth of research integration and competency-based learning seen in leading international programs. The benchmarking results reveal that domestic programs devote less than half the research credits compared to international models and include fewer interdisciplinary modules. This limits graduates' readiness for both the domestic labor market and the global academic environment. To address this gap, universities should consider adopting innovative curriculum frameworks such as the CDIO model and process-based design, ensuring that programs balance theoretical knowledge with practical skills relevant to complex and evolving challenges.

Faculty development is also critical to improving postgraduate education. While Vietnamese universities benefit from dedicated and experienced faculty, many lack exposure to international pedagogical approaches and collaborative research networks. The interviews indicate that faculty members need greater support in the form of structured training programs, opportunities for joint supervision, and access to modern research resources. Enhancing research infrastructure, including updated laboratories, digital libraries, and academic databases, is essential to improving research quality and building capacity for global collaboration.

International partnerships stand out as a notable strength of Vietnam's postgraduate system. Collaborations with universities in Belgium, France, the United Kingdom, and Italy have introduced advanced curricula, enriched research training, and created opportunities for global exposure. However, these partnerships remain limited in scope and scale, often concentrated in a few disciplines or elite institutions. Expanding and diversifying such partnerships will require universities to build stronger administrative capacity, streamline program approval processes, and develop sustainable financial models. Successful examples show that effective collaborations combine adherence to international standards with adaptation to local needs, ensuring relevance and long-term success.

The study also highlights considerable opportunities for strategic development. The growing demand for high-quality human resources, the availability of international funding, and the rapid advancement of digital learning platforms create favorable conditions for reform and innovation. Institutions can capitalize on these opportunities by accelerating digital transformation in teaching, research, and administration, establishing regional and international research networks, and fostering public-private partnerships to secure sustainable funding for infrastructure and program development. These strategies would enhance program quality and strengthen the global visibility and competitiveness of Vietnam's postgraduate education.

At the same time, external threats and risks must be addressed proactively. Increasing competition from regional universities, delays in policy implementation, and the risk of outdated curricula threaten the relevance and attractiveness of Vietnam's programs. Continuous curriculum review and flexible governance frameworks are needed to ensure timely adaptation to global trends and domestic demands.

Finally, the perspectives of stakeholders including academic managers, faculty members, and students underscore the importance of inclusive and participatory approaches to reform. Their shared call for modernized curricula, enhanced research opportunities, and expanded international engagement highlights the need for collaborative planning and implementation. Engaging stakeholders in every stage of program design and evaluation will help ensure that reforms are contextually relevant, widely supported, and more sustainable over time.

## 6. CONCLUSION

This study confirms that Vietnam's postgraduate education system has taken substantial steps toward modernization and international integration. The regulatory framework provided by MOET has created a strong foundation for standardization and quality assurance, enabling institutions to align more closely with global benchmarks. However, the

findings also reveal persistent challenges in research integration, competency-based curriculum design, faculty capacity, and infrastructure readiness. Expanding the use of collaborative models such as CDIO, goal-oriented frameworks, and research-oriented training can bridge these gaps and enhance both academic rigor and practical relevance. Strengthening faculty development, investing in research facilities, and promoting meaningful international partnerships will be critical for positioning Vietnamese postgraduate education as a driver of innovation and a contributor to the global knowledge economy.

Looking ahead, strategic attention should be given to accelerating digital transformation, leveraging international funding and networks, and creating flexible governance models that support rapid adaptation to global and domestic changes. By addressing these priorities, Vietnam can cultivate a postgraduate education system that not only meets local socio-economic needs but also achieves regional and international recognition.

## REFERENCES

- [1] Government. (2011). Education Development Strategy 2011–2020. Ha Noi.
- [2] Osborne, Jonathan. "Teaching scientific practices: Meeting the challenge of change." *Journal of Science Teacher Education* 25.2 (2014): 177-196.
- [3] Dole, Sharon, Lisa Bloom, and Kristy Kowalske. "Transforming pedagogy: Changing perspectives from teacher-centered to learner-centered." *Interdisciplinary Journal of Problem-Based Learning* 10.1 (2016): 1.
- [4] Argüelles, Antonio, and Andrew Gonczi, eds. *Competency based education and training: A world perspective*. Editorial Limusa, 2000.
- [5] Bradley, Martin J., Robert H. Seidman, and Steven R. Painchaud. *Saving Higher Education: The Integrated, Competency-Based Three-Year Bachelor's Degree Program*. John Wiley & Sons, 2012.
- [6] Anema, Marion G., and Jan L. McCoy. *Competency based nursing education: guide to achieving outstanding learner outcomes*. springer publishing company, 2009.
- [7] Blaxell, Rebecca, and Catherine Moore. "Connecting Academic and Employability Skills and Attributes." (2012).
- [8] Ministry of Education and Training. (2014). Circular 15/2014/TT-BGDĐT on promulgating the Master's training regulations (issued May 15, 2014).
- [9] Ministry of Education and Training. (2017). Circular 08/2017/TT-BGDĐT on promulgating the Doctoral admission and training regulations (issued April 4, 2017).
- [10] Wang, Xu-xiu, et al. "Research on the Cultivation Mode of Application-Oriented Professional Master in the Two Stages of Production and Education Integration." 2020 6th International Conference on Social Science and Higher Education (ICSSHE 2020). Atlantis Press, 2020.
- [11] Phuc, P., N. Vinh, and Q. Do. "The implementation of outcome-based education: Evidence from master program in economic management at Hanoi universities." *Management Science Letters* 10.14 (2020): 3299-3306.
- [12] Metsämuuronen, Jari, Tuomo Kuosa, and Reijo Laukkanen. "Sustainable leadership and future-oriented decision making in the educational governance—a Finnish case." *International journal of educational management* 27.4 (2013): 402-424.
- [13] Tyler, Ralph W. "Basic principles of curriculum and instruction." *Curriculum studies reader E2*. Routledge, 2013. 60-68.
- [14] Caswell, H. L., Campbell, D. S. (1935). *Curriculum development*. American Book.
- [15] Tanner, D., Tanner, L. (1975). *Curriculum Development: Theory Into Practice*. Macmillan.
- [16] Wiles J., Bondi J. (2005). *Curriculum Development*. Education Publishing House.
- [17] Osborne, Y. (2010). *Guide to Developing Competency-Based Training Programs*. Queensland University of Technology.
- [18] Hamano, Takashi. "Educational reform and teacher education in Vietnam." *Asian Perspectives on Teacher Education*. Routledge, 2013. 156-169.

- [19] Abouelenein, Yousri Attia Mohamed. "Training needs for faculty members: Towards achieving quality of University Education in the light of technological innovations." *Educational Research and Reviews* 11.13 (2016): 1180-1193.
- [20] Biggs, John. "Aligning teaching and assessing to course objectives." *Teaching and learning in higher education: New trends and innovations* 2.4 (2003): 13-17.
- [21] Ministry of Education and Training. (2016). Circular 04/2016/TT-BGDĐT. Ministry of Education and Training of Vietnam.
- [22] Freeman, Edward. "The design and implementation of a career orientation course for undergraduate majors." *College Teaching* 60.4 (2012): 154-163.
- [23] Chinh, N. D. "Design and Evaluation of Educational Programs." *Lectures for the Graduate System Majoring in Educational Management, Faculty of Education, Vietnam National University, Hanoi* (2007).