



Review Article

# A Comparative Analysis of Teacher Education Pathways: United States vs. Vietnam

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**Abstract:** This report provides a comparative analysis of teacher education pathways in the United States and Vietnam, focusing on the diversity of options and requirements, advanced educational attainment of novice teachers, and their subject assignments. Both countries offer traditional undergraduate and postgraduate pathways, and the U.S. offers alternative pathways. Traditional programs in the U.S. typically involve a four-year undergraduate degree in education followed by certification, while alternative programs, such as Teach for America, allow prospective teachers to work full-time in classrooms while completing their education coursework. In Vietnam, teacher education often involves specialized training programs within universities that emphasize pedagogy and subject knowledge. Novice teachers in the U.S. frequently pursue advanced degrees within the first few years of teaching. In Vietnam, advanced education is less common among novice teachers, who instead focus on continuous professional development. Subject assignments in the U.S. are typically aligned with teachers' training and certification areas, but teacher shortages can lead to out-of-field teaching. In contrast, subject assignments in Vietnam are more rigid, with teachers usually teaching subjects they specialized in during their training. This report highlights the strengths and challenges of each system and thus contributes to the global discourse on teacher education, aiming to inform policy decisions and improve teacher preparation programs worldwide.

*Keywords:* Teacher education, program, certification, profession, teacher preparation, pedagogical.

## 1. Introduction

The quality of education in any country is intrinsically linked to the preparation and competence of its teachers. As Darling-

Hammond (2000) [1] notes, teacher quality is one of the most important factors influencing student achievement. Therefore, understanding the pathways through which teachers are educated and certified is crucial for evaluating and improving educational systems worldwide. This report presents a comparative analysis of teacher education pathways in the United States and Vietnam, two countries with distinct

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historical, cultural, and economic contexts that have shaped their approaches to teacher preparation.

The United States, with its decentralized education system, offers a diverse array of pathways into the teaching profession, ranging from traditional four-year undergraduate programs to alternative certification routes (Ingersoll, Merrill, & May, 2014) [2]. This diversity aims to address teacher shortages and attract individuals from various backgrounds into the profession, a strategy that has been both praised for its flexibility and criticized for potentially varying standards of preparation (Zeichner, 2014) [3]. On the other hand, Viet Nam, with its more centralized approach to education, has traditionally relied on specialized teacher training institutions and programs within universities to prepare its educators (Nguyen & Nguyen, 2019) [4]. This centralized approach reflects the country's historical and cultural context, as well as its efforts to maintain consistent standards across the nation.

This paper aims to explore the similarities and differences between these two systems, focusing on three key aspects:

i) The diversity of options and requirements for becoming a teacher: This includes an examination of traditional and alternative pathways in both countries, considering how these different routes impact teacher quality and workforce diversity (Cochran-Smith and Villegas, 2015) [5];

ii) The advanced educational attainment of novice teachers: This aspect explores the trends and motivations for novice teachers to pursue advanced degrees or engage in continuous professional development in both countries (Ingersoll, Merrill, & May, 2014; Canh, 2013) [6, 7];

iii) Subject assignments and their alignment with teachers' training: This section investigates how well teachers' assignments match their preparation, considering the implications for teacher effectiveness and student learning outcomes (Ingersoll, Merrill, Stuckey and Collings, 2018; Nguyen & Nguyen, 2019) [8, 9];

By examining these aspects, we seek to identify the strengths and challenges of each system, with the ultimate goal of informing policy decisions and improving teacher preparation programs globally. As Akiba and LeTendre (2009) [10] argue, cross-national comparisons of teacher education can provide valuable insights for policymakers and educators alike, offering opportunities to learn from diverse approaches and adapt successful strategies to local contexts.

This comparative analysis is particularly timely given the global emphasis on improving education quality and the recognition of teachers as key agents in this process (UNESCO, 2015) [11]. By understanding the nuances of teacher preparation in these two distinct contexts, we can contribute to the ongoing dialogue on how best to prepare educators for the complex challenges of 21<sup>st</sup>-century classrooms.

## **2. Literature Review and Method**

This study employs a comparative research methodology, drawing on a comprehensive review of existing literature, policy documents, and statistical data from both countries. The research process involved the following steps:

i) Literature Review: We conducted a review of academic publications, government reports, and policy documents related to teacher education in both the United States and Viet Nam was conducted. This review helped establish the historical context, current practices, and ongoing debates in teacher education for both countries;

ii) Comparative Analysis: The collected information was systematically analyzed to identify key similarities and differences between the two countries' approaches to teacher education. This analysis focused on the three main aspects outlined in the introduction: diversity of pathways, advanced educational attainment, and subject assignments;

iii) Expert Consultations: To validate our findings and gain deeper insights, we consulted with education experts from both countries.

These consultations helped ensure the accuracy of our interpretations and provided valuable context for understanding the nuances of each system;

iv) Synthesis and Interpretation: Finally, the findings were synthesized to draw meaningful conclusions and develop recommendations for policy and practice.

### 3. Results and Discussion

#### 3.1. Teacher Education Pathways in the United States

In the United States, pathways to becoming a teacher encompass both traditional and alternative routes, designed to cater to individuals at various career stages and with diverse educational backgrounds. The most common route is through traditional teacher preparation programs offered by colleges and universities. These programs typically lead to a bachelor's degree in education or a specific subject area coupled with teaching certification (Ingersoll et al., 2018) [12]. Undergraduate programs within this framework span four years and include a blend of general education courses, subject-specific content aligned with the intended teaching area, pedagogical training covering teaching methods, classroom management, and educational psychology, as well as extensive field experiences and student teaching placements (U.S. Department of Education, 2021) [13].

For individuals who already hold a bachelor's degree in a non-education field, many universities offer post-baccalaureate teacher preparation programs. These programs focus intensively on pedagogical knowledge and skills and often result in a master's degree in teaching (MAT) or education (M.Ed.), alongside initial teaching certification (Darling-Hammond, 2010) [14].

In response to teacher shortages and the need to attract diverse talent into the profession, the United States has developed various alternative pathways to teacher certification. Teach for America (TFA) is a well-known

example, recruiting recent college graduates and professionals to teach in high-need schools for a two-year commitment. TFA corps members undergo intensive summer training before starting their teaching assignments and receive ongoing support and professional development throughout their commitment period (Teach for America, 2023) [15].

Additionally, many states have established their own alternative certification programs tailored to local needs. These programs vary widely but generally allow individuals with bachelor's degrees to begin teaching while completing education coursework concurrently (Woods, 2016). Another innovative approach is teacher residency programs, modeled after medical residencies, which provide an intensive, school-based route to teacher certification. These programs typically last one year and combine graduate-level coursework with a full-year teaching apprenticeship under the guidance of an experienced mentor teacher (National Center for Teacher Residencies, 2022) [16].

The diverse pathways in the U.S. offer several strengths, including flexibility in accommodating individuals with different backgrounds, addressing immediate staffing needs in high-demand areas, and attracting a more diverse pool of candidates into the teaching profession. However, challenges remain, such as variability in the quality of preparation across different programs, concerns about retention rates among teachers from alternative pathways compared to traditional routes, and questions about whether shorter, alternative programs provide sufficient depth of pedagogical knowledge and skills (Redding & Smith, 2016) [17].

Overall, the U.S. teacher education system is characterized by its adaptability and responsiveness to evolving educational needs, aiming to prepare educators who can meet the diverse challenges of modern classrooms effectively.

#### 3.2 Teacher Education Pathways in Vietnam

Previously, in Vietnam, there was only one model of teacher training in teacher training

universities/educational institutions. In current practice, the concept of "teacher training universities do not only train teachers, teachers are not only trained in teacher training universities" has been formed, meaning that teachers can be trained from different sources, single-disciplinary universities or multidisciplinary universities. Independent educational institutions (Hanoi National University of Education, Ho Chi Minh City National University of Education,...); multi-disciplinary universities (pedagogical schools/pedagogical faculties located in multi-

disciplinary universities such as: Thai Nguyen University of Education in Thai Nguyen University; Hue University of Education in Hue University; Da Nang University of Education in Da Nang University; the University of Education in Vietnam National University, Hanoi, universities with pedagogical faculties,...). However, most of the universities follow the parallel training model or simultaneous training. Pedagogical schools tend to multi-disciplinaryize training fields.



Figure 1. Basic teacher training model in Vietnam.

Source: B. Q. Dinh, 2021.

In Vietnam, the system of preparing teachers has historically been more centralized and standardized compared to the United States. Traditionally, individuals seeking to become teachers in Vietnam pursue their education through specialized teacher training institutions or university programs dedicated to teacher education.

These specialized institutions, known as pedagogical universities and colleges, offer structured programs tailored for prospective educators. Secondary school teachers typically undergo four-year undergraduate programs, while primary school teachers follow three-year programs. The curriculum in these programs includes general education courses, subject-specific studies aligned with national curriculum standards, pedagogical courses covering teaching methods and educational theory, and practical teaching experiences (Nguyen & Nguyen, 2019) [4]. Graduates from these institutions are generally qualified to teach in their specialized subject areas upon completing their degrees.

In addition to these specialized institutions, many comprehensive universities across Vietnam also offer teacher education programs. These programs are similar in structure to those

provided by pedagogical universities but may offer a broader academic background due to their integration within larger university settings (Canh, 2014) [7].

Vietnam offers teacher preparation programs with the following features. Teachers can only be trained in teacher training facilities, in theory. However, a few significant institutions have recently been permitted to create their own departments dedicated to teacher preparation. This is different from other countries; teachers are trained for the subjects and education levels they will teach. For example, teachers must be able to teach all subjects at the primary level, one main subject and one additional subject at the lower secondary level, and only one subject at the upper secondary level (Tran, et al., 2022) [18]. Even if the current state of teacher credentials is not particularly high, there is a trend toward standardizing the teaching profession by offering university-level training to educators at all levels in the not too distant future; Those with exceptional distinction or foreign training are employed as teacher educators at universities and institutions that prepare future teachers (Hamano, 2010) [19].

Teacher-training programs differ somewhat from one another due to variations in geographic locations. For example, regions with challenging circumstances switch to 9+3 or 5+3 systems. These days, there's a push to get rid of these systems. Training for in-service teachers is a highly complex process, particularly for those in basic and lower secondary school (Ha, et al., 2021) [20]. The Ministry of Education and Training's (MOET) requirements must serve as the foundation for any future programs. The majority of educators today focused on get rid of employing outdated methods of instruction, such the one-way lecture or chalk-and-talk approach, instead of that, they forward to the more innovative ones, like the learner- or child-centered approach, the child-to-child approach, the problem-solving approach, teaching using instances, etc. Additionally, they are more very proficient in foreign languages or information technology (IT), which makes it easy for them to effectively integrate IT into their teaching duties.

Pre-service teachers in Vietnam enrol in education programs as undergraduates, complete four years of school, then participate in a student teaching practicum lasting roughly ten weeks. Two periods can be distinguished within the practicum: the initial five-week practicum during the third year of the study, and the subsequent five-week practicum during the final year. This is the ideal moment for high school teaching practice and microteaching at institutions of pedagogy. Three key components make up the coursework at education universities: training for the educational profession, specialized academic unit, and general academic unit. Philosophy, foreign languages, educational psychology, and Vietnamese practice are among the topics covered in the general academic unit. The specialized academic unit's emphasis is on applying learning theory to subject-specific teaching techniques. Additionally, the training of future educators in teaching and student capacity development in accordance with the national general education program's topic program is the focus of this area. A quarter of

the entire curriculum for teacher preparation is devoted to preparation for the pedagogical profession, which includes student teaching experience both inside and outside of pedagogical colleges.

Dinh Quang Bao (2011) [21] states that there are three primary types of training that universities and colleges offer:

i) Extended education leading to bachelor's and graduate degrees, including master's and doctorate degrees (primary function). When it comes to developing human resources for the education sector, this is the most crucial duty of teacher training institutions;

ii) Teacher professional development or short-term training, such as in-service, specialized, and remote training. The Ministry of Education and Training's system for managing certificates and diplomas governs the rigorous management of these degree-granting training programs. The training of teachers for bachelor's degrees outside of teacher training, as well as for university and college instructors outside of teacher training, also takes this shape.

The training program aims to form teachers with "3 in 1" qualities (educator, culturalist, scientific researcher) with a minimum bachelor's degree in pedagogy with the specific goal of forming and developing the competencies described in the output standards built on the basis of teacher professional standards. When developing detailed programs for majors, subjects and educational and training activities, it is necessary to thoroughly implement the competency approach by expressing expected professional behaviors through activities whose products are both easy to observe, recognize and evaluate, and are also evidence of changes in learners.

While alternative pathways are less common in Vietnam compared to the United States, recent efforts have introduced options to address specific challenges such as teacher shortages, especially in rural and disadvantaged areas. The Vietnamese government has implemented fast-track training programs for individuals with relevant bachelor's degrees, allowing them to complete an accelerated

pedagogical training course within one year to obtain teaching certification (Ministry of Education and Training, 2020a) [22]. Furthermore, some institutions offer in-service training programs designed for current school staff or teaching assistants to upgrade their qualifications while continuing to work (Tran et al., 2020) [23].

The Vietnamese approach to teacher education offers strengths such as standardized preparation across the country, deep subject specialization, and extensive practical teaching experience through integrated practicums. However, challenges include the system's limited flexibility in accommodating career changes or addressing acute teacher shortages, potential delays in adopting new teaching methodologies or curriculum changes due to centralized governance, and difficulties in attracting and retaining qualified teachers in rural areas (Nguyen & Nguyen, 2019) [9]. These factors reflect ongoing efforts to balance standardization with adaptability in meeting the diverse needs of Vietnam's education system.

The younger generation of Vietnamese instructors is cautiously open to embracing novel concepts about teaching and the teacher's role, given the correct conditions. From the unquestionable wisdom and authority of the ideal teacher of the pre-revolutionary era to the more compassionate and nurturing materialist of the post-revolutionary era, to the youthful, imperfect, and occasionally female heroes of modernity, they have progressed, indicating that Vietnamese society has been somewhat open to change. Though slow, the effects are noticeable. This larger societal shift and the process of transformation among trainee instructors are paralleling. Along with a cautious curiosity in investigating novel teaching concepts and teacher models, outdated stereotypes and attitudes continue to exist.

Teacher candidates will be awarded an education college credential upon completion of all criteria. To obtain a teaching license in Vietnam, candidates for teaching positions are not required to take the national teaching test. If Vietnamese teacher education program

graduates are hired by public or private schools, they will hold a national certification as teachers. The qualifications needed to become a teacher are the same for private and public schools. To compete, private schools pay top dollar to entice qualified teachers. Conversely, public schools frequently provide their employees with steady employment and pension schemes. Even in modern Vietnam, good pedagogical students are drawn to enroll in public schools located in urban regions. However, each province's plans for educational development determine the requirements for hiring teachers. Pedagogical institutes frequently train instructors based on their own abilities rather than considering the real need for teachers in their communities, which leads to the issue of teacher redundancy. As a result, it could be challenging for aspiring teachers to find employment after graduation. Newly graduated teachers will choose private schools if they are unable to enroll their children in quality public schools.

### *3.3. Advanced Educational Attainment of Novice Teachers*

In the United States, there is an increasing trend among novice teachers to pursue advanced degrees early in their careers, driven by several motivating factors. First, many school districts offer salary incentives for teachers who attain master's degrees or higher, viewing advanced education as a means to enhance teaching skills and knowledge. Moreover, higher degrees can open doors to leadership roles within schools, fostering career advancement opportunities (National Center for Education Statistics, 2020) [24]. As of 2017-18, approximately 57% of public school teachers in the U.S. held a master's degree or higher, with many obtaining these qualifications within their initial years of teaching.

For in-service teachers looking to further their education while maintaining their teaching positions, numerous universities offer part-time or online master's programs. These programs cater specifically to educators, offering degrees such as Master of Education (M.Ed.), Master of

Arts in Teaching (MAT), or specialized master's degrees in fields like Special Education or Educational Technology (Darling-Hammond et al., 2017) [25]. Some school districts have forged partnerships with local universities to create tailored master's programs aligned with district priorities, making the advanced coursework directly applicable to teachers' professional roles.

In contrast, in Vietnam, the focus for novice teachers tends to be on continuous professional development rather than formal pursuit of advanced degrees. The Vietnamese Ministry of Education and Training mandates regular professional development programs aimed at updating teaching methods, curriculum knowledge, and pedagogical skills for all educators (Nguyen & Nguyen, 2019) [4]. While opportunities for advanced degrees do exist in Vietnam, they are typically pursued by more experienced teachers seeking leadership positions or specialized roles, such as Master of Education or specific subject area master's degrees. These advanced programs are often undertaken after several years of teaching experience, differing from the U.S. approach where many teachers pursue advanced degrees early in their careers.

The differing approaches to advanced educational attainment for novice teachers reflect broader disparities in education systems and teacher career structures between the two countries. In the U.S., advanced degrees are often viewed as pathways to accelerated career progression and increased earning potential, serving as a retention strategy by providing teachers with opportunities for professional growth within the profession. Conversely, in Vietnam, career advancement is typically tied more closely to years of experience and performance evaluations rather than formal academic qualifications.

Both countries value ongoing professional development, but the U.S. tends to formalize this through structured degree programs, whereas Vietnam emphasizes continuous, job-embedded professional development. Resource allocation also plays a role, with the

U.S. system reflecting greater investment in teacher education resources compared to Vietnam's more cost-effective approach in its developing education system.

In summary, while advanced educational attainment among novice teachers is prevalent in the U.S., Vietnam focuses more on practical professional development initiatives, reflecting distinct strategies to enhance teacher quality and career advancement within their respective educational contexts.

### *3.4. Subject Assignments and Alignment with Training*

In the United States, how teachers are assigned to subjects generally aligns with their certifications and training. Elementary school teachers are typically trained as generalists, equipped to teach a variety of subjects like language arts, mathematics, science, and social studies to their students. This broad training allows them to handle diverse curriculum demands within their classrooms (U.S. Department of Education, 2021) [26]. At the secondary level in the U.S., teachers usually hold certifications in specific subjects such as English Language Arts, Mathematics, Science (often with specializations like Biology or Chemistry), Social Studies, Foreign Languages, Art, and Music. They are typically expected to teach within their certified subject areas. However, shortages in certain subjects, especially in STEM fields, can sometimes lead to teachers being assigned to teach outside their primary area of expertise (Ingersoll, Merrill, Stuckey & Collings, 2018) [8].

Special Education and English as a Second Language (ESL) teachers in the U.S. receive specialized training and certifications. They often work across various grade levels and subject areas, providing essential support to students with special needs or those learning English (NCES, 2020) [24].

In contrast, in Vietnam, subject assignments for teachers are typically more rigid and closely tied to their initial training and specialization. Similar to the U.S., primary school teachers in Vietnam are generally prepared as generalists,

capable of teaching multiple subjects to a single class. However, there is an emerging trend towards subject specialization, particularly in urban areas (Nguyen & Nguyen, 2019) [9].

At the secondary level in Vietnam, teachers are trained and certified in specific subjects such as Vietnamese Language and Literature, Mathematics, Sciences (Physics, Chemistry, Biology), Foreign Languages (primarily English), History, and Geography. The alignment between training and teaching assignments is usually strict, with teachers rarely assigned to teach outside their specialized subject areas. Teachers specializing in subjects like physical education, music, and art in Vietnam receive specific training in these fields and typically only teach within their area of expertise (Ministry of Education and Training, 2020a) [22].

The differing approaches to subject assignments in the U.S. and Vietnam reflect distinct priorities and challenges:

i) Flexibility vs. Specialization: The U.S. system offers more flexibility in teacher assignments, which can help mitigate staffing shortages. However, this flexibility may sometimes result in teachers teaching subjects outside their areas of expertise. In contrast, the Vietnamese system prioritizes subject-matter expertise but may encounter difficulties in staffing all subjects, especially in rural areas;

ii) Breadth vs. Depth: U.S. teachers, especially at the elementary level, are trained with a broader knowledge base across multiple subjects. Vietnamese teachers typically possess deeper knowledge in specific subject areas due to their specialized training;

iii) Adaptation to Curriculum Changes: The U.S. system's flexibility allows for quicker adaptation to changes in curriculum or the adoption of interdisciplinary approaches. Conversely, the Vietnamese system's strict specialization may require more substantial retraining efforts when curricula evolve;

iv) Teacher Identity: In Vietnam, teachers' professional identities are closely linked to their subject specializations. In the U.S., particularly at the elementary level, teachers often identify

more broadly as generalists due to their varied teaching roles;

v) Professional Development Needs: The differing approaches to subject assignments also impact the focus of ongoing professional development. U.S. teachers may require support in teaching multiple or evolving subjects, while Vietnamese teachers may concentrate more on deepening their subject-specific knowledge and pedagogical skills.

These differences illustrate how educational systems in the U.S. and Vietnam address the complex balance between subject specialization, teacher flexibility, and meeting educational demands within their respective contexts.

### 3.5. Discussion and Implications

The comparison of teacher education pathways between the United States and Vietnam highlights significant differences, each presenting unique strengths and challenges that shape policy, practice, and future research in the field.

In the United States, the diversity of pathways into teaching offers flexibility, accommodating various career stages and educational backgrounds (Darling-Hammond et al., 2017) [25]. This approach aims to attract a broader range of candidates to the profession. However, ensuring consistent quality across these diverse pathways remains a challenge. In contrast, Vietnam employs a more standardized approach, which establishes a baseline level of preparation but may limit opportunities for non-traditional candidates (Nguyen & Nguyen, 2019) [9].

Policy implications arise from these differences. Policymakers in both countries could explore hybrid models that blend flexibility with quality assurance. For instance, the U.S. might enhance standards for alternative certification programs, ensuring rigorous preparation (Ingersoll, Merrill, Stuckey & Collings, 2018) [8]. Conversely, Vietnam could introduce carefully designed alternative pathways to enhance flexibility while maintaining educational standards.

Regarding advanced educational attainment, the U.S. emphasizes early pursuit of advanced degrees among novice teachers as a



means to deepen their skills and qualify for leadership roles (NCES, 2020) [24]. In contrast, Vietnam focuses more on continuous professional development rather than formal degrees. Balancing these approaches could benefit both nations. The U.S. might enhance job-embedded professional development alongside formal degree programs, while Vietnam could make advanced degrees more accessible and relevant through partnerships with schools and districts.

Subject assignment practices also differ significantly. The U.S. offers flexibility in teacher assignments to address staffing shortages, though this may compromise subject-matter expertise (Darling-Hammond et al., 2017). In Vietnam, strict alignment ensures deep subject knowledge but poses challenges in staffing rural areas (Ministry of Education and Training, 2020b). To optimize these practices, both countries could explore interdisciplinary certification areas or programs that prepare teachers to teach related subjects effectively.

Both nations confront teacher shortages, particularly in critical subjects and underserved areas. The U.S. relies on alternative certification programs, while Vietnam employs targeted recruitment and incentive strategies (Ministry of Education and Training, 2020b) [28]. Comprehensive solutions could include improving working conditions, developing community-based teacher recruitment programs, and implementing robust mentoring for novice teachers.

Preparing teachers for 21<sup>st</sup>-century classrooms is a shared challenge. Integrating skills like project-based learning, digital literacy, and global competence into teacher preparation programs is crucial (Darling-Hammond et al., 2017). This adaptation should encompass both countries' educational contexts to ensure teachers are equipped to meet evolving educational demands effectively.

Finally, ongoing research and evaluation are essential for continuous improvement in teacher education. Establishing robust data systems and fostering research collaborations can identify effective practices and areas needing

enhancement (Darling-Hammond et al., 2017) [27]. Cross-national research partnerships could offer valuable insights into the strengths and challenges of diverse teacher education approaches.

#### 4. Conclusion

While the United States and Vietnam differ significantly in their approaches to teacher education, exploring these differences and potential synergies can lead to enhanced educational outcomes and better-prepared teachers for the challenges of the future. The comparative analysis of teacher education pathways in the United States and Vietnam reveals that each system has unique strengths and faces distinct challenges. The U.S. system offers flexibility and diverse pathways but struggles with ensuring consistent quality across programs. Vietnam's more centralized approach provides standardization but may lack flexibility to address emerging needs. As both countries strive to improve the quality of their education systems, they can learn from each other's experiences. The U.S. might benefit from more standardized elements in its teacher preparation programs, while Vietnam could explore carefully designed alternative pathways to increase flexibility.

Ultimately, the goal of any teacher education system should be to produce highly skilled, knowledgeable, and motivated educators who can effectively support student learning. By critically examining their approaches and being open to innovation, both the United States and Vietnam can continue to enhance their teacher education pathways and, in turn, improve educational outcomes for their students.

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