Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6, 1577-1595
2025
Publisher: Learning Gate
DOI: 10.55214/25768484.v9i6.8197

Current status of early childhood education teachers' professional competencies in response to the implementation of the competency-based early childhood education curriculum in Vietnam

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Abstract: This study examines the professional competencies of early childhood education (ECE) teachers in Vietnam in response to the implementation of a competency-based ECE curriculum. Employing a mixed-methods approach, the research included a survey of 329 ECE teachers using structured questionnaires, observations of 62 educational activities across public and private ECE institutions in two socioeconomically distinct regions, and semi-structured interviews with 12 administrators and 40 teachers. Results revealed that while most teachers self-assessed their competencies as proficient, particularly in cognitive competence and professional attitudes, classroom observations, discussions, and interviews disclosed significant limitations in practical teaching skills. These gaps were evident in teachers' ability to adapt lesson plans based on assessment data, respond to individual children's needs, including those with disabilities and special needs, provide effective feedback, and integrate technology meaningfully into instruction. Disparities in teacher competencies across regions and institution types reflected variations in working conditions and professional development opportunities. These findings provide empirical evidence to inform the development of a national competency framework for early childhood teachers, guide policy formulation, and enhance teacher preparation programs to support the effective implementation of Vietnam's competency-based ECE curriculum during the next phase of educational reform.

Keywords: *Competency-cased approach, Early childhood education curriculum, Early childhood education teacher's competency, Professional competency.*

1. Introduction

In the context of extensive educational reforms occurring globally and regionally, Vietnam's education system has undergone substantial transformations toward developing learners' practical competencies to address the demands of contemporary work and life. The General Education Curriculum has been restructured based on a learner competency-based approach [1]. Aligned with this trajectory and to ensure coherence with the General Education Curriculum, Vietnam's ECE Curriculum is currently undergoing revision, transitioning from a content-based framework to a competency-oriented approach.

Research conducted by Bennett and Tayler [2] emphasizes the inherent relationship between curriculum and pedagogy, identifying these as fundamental components that contribute to educational quality, alongside teacher professional development, monitoring and data systems, family and community engagement, quality standards, governance, and financial resources. Pedagogical approaches

History: Received: 14 April 2025; Revised: 13 May 2025; Accepted: 16 May 2025; Published: 19 June 2025
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in teaching, learning, and assessment are intrinsically linked to teachers' professional competencies and serve as critical mechanisms for achieving educational objectives at each level. Consequently, any transformation in curricular approach necessitates corresponding adaptations in teacher competencies.

This study aims to evaluate the current status of ECE teachers' professional competencies in response to the implementation of Vietnam's competency-based ECE curriculum. The research addresses the following questions: How do ECE teachers' professional competencies manifest in current pedagogical practices aligned with the competency-based ECE curriculum? What aspects require enhancement to establish an ecosystem that supports the development of ECE teachers' professional competencies? This investigation serves as a critical foundation for identifying both strengths and limitations in ECE teachers' professional capabilities, as well as the external and internal factors influencing their development. The findings provide empirical evidence for developing a comprehensive strategy to enhance ECE teachers' competencies, ensuring the effective implementation of the competency-based ECE curriculum in Vietnam's educational future.

2. Literature Review

2.1. Competency-Based Education and Competency- Based Curriculum

2.1.1. Competency-Based Curriculum

Competency-Based Education (CBE) is fundamentally a learner-centered approach that provides a flexible framework enabling learners to progress at their own pace. This educational model emphasizes competency development and the demonstration of mastery by learners. According to Levine and Patrick [3] and Oroszi [4] the key characteristics of CBE include: (1) learners advance upon demonstrated mastery; (2) competencies encompass explicit, measurable, and transferable learning objectives that empower learners; (3) assessments are meaningful and provide positive learning experiences; (4) learners receive timely, differentiated support tailored to their individual learning needs; and (5) learners develop and apply a comprehensive set of skills and dispositions. Thus, CBE represents an approach for educators to empower students through clearly defined learning goals, enabling them to progress at a pace appropriate to their individual needs. Sometimes referred to as proficiency-based learning, this approach cultivates a culture in which educators, learners, and community members collectively establish a shared vision and construct a transparent, innovative learning environment where all students flourish.

A competency-based curriculum is grounded in CBE theory, which emphasizes developing learners' practical abilities rather than merely acquiring content knowledge. This approach shifts the pedagogical focus from rote learning to the development of transferable skills essential for real-world problem solving [5-8]. Key characteristics include learner-centered pedagogy, authentic and formative assessment, and the integration of knowledge with values, ethics, and attitudes. Teachers function as facilitators, guiding students to construct knowledge through meaningful, context-based tasks. Competencies are not predetermined in isolation but emerge from learners' actions in specific, real-world contexts. Formative assessment practices such as portfolios, observations, and peer assessments are prioritized to monitor learner progress, with emphasis on criterion-referenced evaluation and constructive feedback [8].

This approach requires children to assume an active role in their learning environments and necessitates corresponding transformations in instructional strategies, assessment methods, and educational governance to create a responsive and holistic learning ecosystem.

2.2. Professional Competency Requirements for Implementing a Competency-Based Curriculum

The transition toward CBE places increasingly sophisticated demands on teachers' professionalism. Pažur, et al. [9] emphasize that educators must ensure learning is personalized, enabling students to

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 1577-1595, 2025
DOI: 10.55214/25768484.v9i6.8197

assume ownership of their learning and develop capacities essential for life, work, and societal contribution both presently and in the future.

In Vietnam, the current ECE curriculum remains predominantly content-based. The transition to a competency-based approach requires ECE teachers to fulfill several new professional expectations:

Comprehend their learners and design appropriate educational plans based on individual needs and desired outcomes at each developmental stage.

Plan learning experiences tailored to learners' abilities; implement diverse teaching strategies that promote engagement, autonomy, critical thinking, and problem-solving.

- Integrate contemporary scientific and societal developments into instructional content; innovate in preparing learning materials responsive to specific learning needs.
- Access and adapt educational resources, transfer knowledge, and apply skills in novel contexts.
- Foster an inclusive, equitable learning environment that accommodates diverse learning profiles.
- Strengthen partnerships among schools, families, and communities.
- Conduct formative assessments to monitor and support children's competency development.

To fulfill these requirements, teachers must possess a comprehensive set of professional competencies. Scholars such as Cho [10]; Urban, et al. [11]; Peeters, et al. [12] and Recchia, et al. [13] have emphasized core intellectual competencies including knowledge of child development, children's rights, ECE legislation and standards, pedagogical strategies, and digital literacy. Professional practice competencies encompass planning, individual child monitoring, creative pedagogical implementation, self-assessment, peer evaluation, and collaborative work. Additionally, a strong commitment to professional values such as respect for diversity, collaboration, and continuous professional growth is essential.

2.3. Early Childhood Education Teacher Professional Competency

Recent studies by Avseikova [14]; Roslin, et al. [15]; Yu [16] and Veretennikova, et al. [17] share a common perspective that professional competency comprises a combination of knowledge, skills, practical experience, and personal qualities that enable individuals to perform professional tasks effectively and ethically. In ECE, competencies are both socially and professionally standardized, ensuring the quality and efficacy of teaching practices.

Vietnamese scholars such as Thanh and Khai [18] conceptualize professional competency as a construct involving internal psychological structures and observable, outcome-based behaviors. These perspectives also highlight the moral dimension of professional work, emphasizing that teacher competencies are guided by social values and ethical norms recognized within the profession.

In this paper, ECE teacher professional competency is defined as an integrated set of abilities and personal qualities, shaped by socially acknowledged values, that reflect the quality and effectiveness of individual performance in the field of ECE.

2.4. Structure of ECE Teacher Professional Competency

Recent studies on competency frameworks indicate that ECE teachers' professional competencies can be conceptualized either based on structural dimensions of competency or through functional requirements of the profession.

From a structural perspective, competencies are often categorized into cognitive, behavioral, and affective domains, with professional practice at the core, manifesting in observable behaviors. Thanh and Khai [18] emphasized the centrality of professional practice within a broader model of teacher competence, including ethical execution, cultural enactment, intellectual engagement, and vocational action. Avseikova [14] proposed a structure comprising professional motivation, pedagogical

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ISSN: 2576-8484
Vol. 9, No. 6: 1577-1595, 2025
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knowledge, practical teaching skills, self-evaluation abilities, and reflective capacity for continuous improvement. Similarly, Dalli [19] highlighted core elements of professionalism such as pedagogical style, specialized knowledge, and collaborative relationships. From a task-oriented approach, competencies are aligned with professional requirements such as child development, family-community collaboration, and continuous professional learning. Recent literature has emphasized the importance of competencies in lifelong learning, effective communication Stankov, et al. [20] and the integration of technology into pedagogical practices Yu [16]. Avseikova [14] argues that competencies should be value-driven. Competency models thus emphasize educational values, the societal role of the teacher, and personal integrity, suggesting that internalizing professional values is fundamental to teachers' growth and development.

Regardless of the framework, ECE teacher competence is fundamentally an integration of pedagogical knowledge, ethical and professional attitudes, and practical teaching ability. An integrated approach that considers both the structural elements (knowledge, practice, and ethics) and specific job requirements allows for a more comprehensive understanding of teacher competency, both in terms of breadth (specific professional demands) and depth (psychological processes and developmental pathways).

2.5. Core Components of Ece Teacher Professional Competency

To define these components and their indicators, the framework must be grounded in existing regulations on teacher roles and responsibilities, such as those found in Chapter IV and Chapter V of the Law on Education in Vietnam [21] as well as in the national Professional Standards for ECE Teachers [1]. The competency framework is also informed by analysis of professional requirements aligned with the competency-based ECE curriculum and the broader educational reform context in Vietnam. Based on these foundations, this research designed a competency assessment tool to evaluate ECE teachers' readiness to implement the competency-based curriculum in which the professional competency framework for ECE teachers can be structured into four interrelated components:

1. *Cognitive competency in the professional domain*: This encompasses understanding of early childhood learners, specialized knowledge in ECE, the learning environment, teaching conditions, and educational technologies. This knowledge base forms the foundation for professional practice, equipping teachers with essential resources to care for, educate, and support children's development while enhancing their expertise.
2. *Professional practice competency*: This encompasses the skills necessary to facilitate children's learning and development. It includes competencies such as communication, observation, assessment, classroom and time management, collaboration with colleagues, and the ability to design and implement care and educational activities, including the integration of technology into teaching practice.
3. *Professional attitude*: This refers to the consistent demonstration of responsible, respectful, and ethical behavior in all professional activities. Such attitudes foster trust and respect from learners, families, and colleagues within the educational environment.
4. *Competency in professional development and self-improvement*: This component reflects the teacher's ongoing efforts to enhance their professional knowledge, skills, and ethical standards, demonstrating a commitment to continuous improvement and personal growth in the field.

2.6. The Process of Competency Development is Progressive and Systemic

Research has demonstrated that professional competencies develop progressively from basic to more complex levels, reflecting an increasing degree of professionalism. Miller [22] proposed a pyramid model to assess clinical competencies in medical students, outlining four hierarchical levels: *knows*, *knows*

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ISSN: 2576-8484
Vol. 9, No. 6: 1577-1595, 2025
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how, *shows how* (application of knowledge and skills in simulated settings), and *does* (performance in real-world environments).

A more comprehensive understanding of competency development has been offered by Bronfenbrenner's ecological systems theory [23, 24] later expanded by Bronfenbrenner and Morris [25] and Dalli, et al. [26] and further supported by Nasiopoulou [27] and Nasiopoulou, et al. [28]. These studies emphasize that teacher competency is shaped not only by formal training and personal growth but also by continuous interaction with various elements of the educational system.

From this perspective, assessing and developing ECE teacher professional competencies must be situated within an educational ecosystem. Applying ecological theory, teacher competencies should be evaluated not only through individual performance but also in relation to systemic influences:

- *Microsystem*: The immediate work environment, such as the ECE setting where the teacher operates.
- *Mesosystem*: Interactions and relationships among different microsystems (e.g., home-school, school-community connections).
- *Macrosystem*: Societal norms, pedagogical paradigms, educational policies, and teacher training frameworks that shape the broader context of ECE.
- *Chronosystem*: Temporal dimensions reflecting historical changes in curriculum reform and professional development over time.

These systems interact dynamically to either support or constrain pedagogical practices. Understanding and evaluating professional development within this ecosystemic framework allows for a more holistic, objective, and context-sensitive perspective of ECE teachers' practice and growth.

3. Research Methodology

3.1. Data Collection Methods

This study adopted a mixed-methods approach that incorporated both quantitative and qualitative methods [29] to obtain comprehensive insights into preschool teachers' professional competencies in implementing the competency-based ECE curriculum.

Quantitative data were collected through structured self-assessment questionnaires, which examined participants' understanding of the competency-based curriculum and their perceived readiness to implement it. The surveys were distributed online via Google Forms to both preschool teachers and educational administrators. Descriptive statistics were employed along with statistical tests such as the Mann-Whitney U test and independent samples t-test to compare responses across different groups [30].

Qualitative data were collected through semi-structured in-depth interviews and focus group discussions with preschool teachers to supplement and contextualize quantitative findings. Each interview or discussion session lasted between 40 and 50 minutes and was designed to explore in depth the aspects that were not fully captured through the questionnaire. Interview questionnaires were used to explore participants' conceptualization and actual practices related to competency-based teaching. Additionally, classroom observations were conducted to assess observable behaviors associated with pedagogical competence. Further evidence was gathered from a review of institutional documentation, including teaching plans, professional logs, and activity records maintained at both school and classroom levels.

All participants provided informed consent prior to data collection. Teachers involved in observed classroom activities were briefed about the research objectives and ethical assurances in advance, according to established research ethics protocols.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 1577-1595, 2025
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3.2. Sample and Sampling Strategy

This research employed combined convenience and random sampling methods across two provinces (names anonymized to respect participant confidentiality): one representing a northern region (Province 1) and one representing a southern region (Province 2). Both provinces are major economic, industrial, and educational centers of Vietnam, reflecting rich cultural diversity and serving as key hubs in the national education system.

For the direct field survey, each province included two districts randomly selected from all administrative units: one representing an economically and socially disadvantaged area and one from a more advantaged area.

- In the disadvantaged districts, two public ECE institutions were selected (as these areas typically lack private institutions).
- In the advantaged districts, one public and one private ECE institution were randomly chosen from their respective official lists.

The fieldwork included in-depth interviews and focus group discussions with the following participants: 2 administrators from the Departments of Education and Training (DoET), 4 administrators from district-level Bureaus of Education and Training (BoET), 6 administrators from 6 public ECE institutions, 2 administrators from 2 private ECE institutions, and 40 ECE teachers who participated in focus group discussions.

3.3. Observation Sample

A total of 62 educational activities were observed. Each observation spanned the entire duration of an activity, from the teacher's classroom entry to the activity's completion. There were 32 activities observed in Province 1 and 30 in Province 2. 59.7% of observations were conducted in economically advantaged areas, and 40.3% in disadvantaged areas. The proportion of observations from advantaged areas in Province 2 (66.7%) was higher than in Province 1 (53.1%); 64.5% of observed sessions took place in public schools and 35.5% in private schools (Table 1). Observations were balanced across different types of activities, including both play-based and structured learning sessions in both provinces.

Table 1.
The observed educational activities sample.

Observed sample			**Province 1 (n = 30)**	**Province 2 (n = 32)**	**Total (n = 62)**
Socioeconomic Region	Advantaged	Count	17	20	37
		Percent	53.1%	66.7%	59.7%
	Disadvantaged	Count	15	10	25
		Percent	46.9%	33.3%	40.3%
Type of School	Public	Count	21	19	40
		Percent	65.6%	63.3%	64.5%
	Private	Count	11	11	22
		Percent	34.4%	36.7%	35.5%
Experimental School	Non-experimental	Count	21	14	35
		Percent	65.6%	46.7%	56.5%
	Experimental	Count	11	16	27
		Percent	34.4%	53.3%	43.5%
Type of Activity	Playing	Count	15	15	30
		Percent	46.9%	50.0%	48.4%
	Learning	Count	17	15	32
		Percent	53.1%	50.0%	51.6%

Edelweiss Applied Science and Technology
ISSN: 2576-8484
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3.4. Survey Sample via Questionnaire

A total of 329 ECE teachers and educational administrators participated in the questionnaire-based survey. The distribution between disadvantaged and advantaged areas was relatively balanced in the two provinces. Public institutions dominated the sample in both provinces—95% in Province 1 and 87% in Province 2. Province 1 had a higher proportion of ECE teachers participating in the survey (75.6%) compared to Province 2 (43.2%). Conversely, administrators comprised a larger share of respondents in Province 2 (56.8%). Regarding the competency-based ECE curriculum, both provinces reported relatively high levels of participation in piloting and training activities (approximately 63%–73%), with Province 1 showing a higher training participation rate (73.1%) compared to Province 2 (67.5%) (Table 2). These differences reflect the disparities in local conditions, staffing structures, and the degree of access to educational reforms between the two regions.

Table 2.
Summary of the questionnaire survey sample.

Questionnaire Survey Sample		**Province 1**		**Province 2**	**Total**
Socio-economic Region	Advantaged	Count	49	65	114
		Percent	30.6%	38.5%	34.7%
	Disadvantaged	Count	111	104	215
		Percent	69.4%	61.5%	65.3%
Type of School	Public	Count	152	147	299
		Percent	95.0%	87.0%	90.9%
	Private	Count	8	22	30
		Percent	5.0%	13.1%	9.1%
Respondent Type	ECE teacher	Count	121	73	194
		Percent	75.6%	43.2%	59.0%
	Administrator	Count	39	96	135
		Percent	24.4%	56.8%	41.0%
School Participated in Piloting the ECE Curriculum	Yes	Count	111	108	219
		Percent	69.4%	63.9%	66.6%
	Non	Count	49	61	110
		Percent	30.6%	36.1%	33.4%
Participation in Training on the ECE Curriculum	Yes	Count	117	114	231
		Percent	73.1%	67.5%	70.2%
	Non	Count	43	55	98
		Percent	26.9%	32.5%	29.8%

3.5. Data Analysis Methods

Quantitative data collected through questionnaires were cleaned, coded, and compiled into a single dataset. Qualitative data from in-depth interviews, focus group discussions, and document analysis were transcribed and coded according to predefined thematic categories developed by the research team. These themes were designed to support the interpretation of quantitative results. Observational data were also carefully coded to ensure participant confidentiality; identifiers of teachers and children were anonymized and are not disclosed in any form.

A combination of analytical methods was employed. For quantitative data, the research team used JASP software to assess the internal consistency reliability of the scales using Cronbach's Alpha (α), with the acceptable threshold set at $\alpha > 0.70$ [31]. Further analyses included descriptive statistics (percentages, means, and standard deviations) and group comparisons using the independent samples t-test. In cases where data were not normally distributed or group sizes were unequal, the non-parametric Mann-Whitney U test was applied to enhance analytical robustness.

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Qualitative analysis of observations, interview transcripts, and institutional documents provided triangulated evidence and deeper interpretation of the patterns emerging from the quantitative findings. This integrated approach enabled a more nuanced assessment of preschool teachers' competencies and their implementation in practice.

3.6. Research Instrument

3.6.1. Self-Assessment Tool for ECE Teacher

The ECE teacher's professional competency framework was organized into four core domains, with 30 competencies clearly described through observable performance indicators (Table 3). The scale levels were defined as follows:

- Level 1. No observable demonstration of the competency
- Level 2. Infrequent or inconsistent demonstrations
- Level 3. Always, clear, and natural demonstration of the competency in daily professional practice

These explicit descriptors were intended to ensure consistent interpretation across participants and enhance the reliability of self-assessment responses.

Table 3.
Core domains and specific professional competencies of ECE teachers.

Items	Competency
(1) Cognitive competency in the professional activitive	
P1	Understanding the ECE curriculum and its implementation
P2	Understanding how to develop localized curricula
P3	Understanding competency-based education methods
P4	Understanding children's rights and stakeholder responsibilities in ECE
P5	Understanding child development and how children learn at each stage
P6	Understanding inclusive education in ECE
P7	Understanding the importance of monitoring child development
P8	Understanding laws, local culture, and family characteristics of children
P9	Understanding teacher qualities, required competencies, and career development
(2) Professional practice competency	
P10	Using knowledge of child development to design and implement appropriate programs
P11	Identifying diverse developmental needs and planning appropriately
P12	Applying appropriate methods for children with different backgrounds and abilities
P13	Encouraging play to support learning and development
P14	Applying classroom management strategies that reflect children's diverse profiles
P15	Designing learning activities that foster creativity, critical thinking, and autonomy
P16	Using technology tools in child care, education, and self-development
P17	Applying strategies to develop discipline and positive attitudes in children
P18	Monitoring and analyzing individual children's progress and feedback
P19	Creating developmental routines for safety and healthy habits
P20	Creating a safe, healthy, and emotionally supportive environment
P21	Providing materials that stimulate exploration and creativity
P22	Engaging stakeholders in nurturing, caring, and educational activities
P23	Demonstrating pride and confidence in professional work
(3) Professional attitudes	
P24	Complying with institutional and sectoral regulations
P25	Communicating appropriately in professional relationships
P26	Treating children fairly and respectfully, with trust
P27	Demonstrating responsibility and seriousness in professional duties
(4) Competency in professional development	
P28	Accurately self-assessing one's own competencies
P29	Planning and participating in professional development activities
P30	Sharing knowledge and skills from professional development with peers

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The internal consistency reliability of the questionnaire was verified using Cronbach's alpha, which yielded a score of $\alpha = 0.988$, with a confidence interval (CI) of 0.980–0.993 and a very small standard error of measurement (0.003) (Table 4). These results indicate an excellent level of reliability, suggesting that the instrument is highly suitable for use in self-assessment of professional competencies by preschool teachers.

Table 4.
Frequentist scale reliability statistics (Unidimensional reliability).

			95% CI	
Coefficient	**Estimate**	**Std. Error**	**Lower**	**Upper**
Coefficient α	0.988	0.003	0.980	0.993
Mean	20.174	1.280	17.665	22.683

3.7. Classroom Observation Tool

The second instrument used in this study was a classroom observation tool adapted from the TEACH Early Childhood Education (TEACH ECE) framework developed by the World Bank Group [32]. This tool focuses on three domains and nine elements that reflect preschool teachers' pedagogical competencies in classroom practice:

3.7.1. Classroom Culture:
(1) Supportive Learning Environment
(2) Positive Behavioral Expectations

3.7.2. Guided learning
(1) Facilitation of Learning
(2) Checks for Understanding
(3) Feedback
(4) Critical Thinking

3.7.3. Social–Emotional Skills:
(1) Autonomy
(2) Perseverance
(3) Social & Collaborative Skills

3.8. Interview questions

The study employed semi-structured interview questions and focus group discussion guides targeting ECE teachers. These tools aimed to explore:

- Teachers' understanding of the competency-based approach in early childhood education
- Their perceptions of the competencies required to implement the new curriculum
- The facilitators and challenges they encounter in acquiring and applying such competencies
- Recommendations made by both administrators and teachers for improving professional competencies

These qualitative tools were used to supplement and triangulate the findings from the questionnaire and classroom observation, providing deeper contextual insights into teachers' lived experiences and implementation practices.

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4. Results

4.1. ECE Teacher Professional Competencies

The self-assessment results indicated that preschool teachers rated their professional competencies at a high level. Over 80% of teachers reported that they "always" demonstrated competencies clearly and naturally in daily work, while fewer than 20% indicated "infrequent" competency demonstration. However, insights from in-depth interviews (IDI), focus group discussions (FGD), classroom observations, and review of professional documentation revealed notable limitations in actual teaching practice. Teachers reported experiencing difficulties and challenges in developing competencies aligned with the learner-centered curriculum approach, which were often inconsistent with their self-assessments. The following observations emerged from the perspective of the four key competency domains required for implementing a competency-based ECE curriculum:

4.1.1. Cognitive Competency in the Professional Domain

Self-assessment results of ECE teachers indicated that most teachers demonstrated the listed cognitive competencies (from 77.8% to 87.1%); the highest-rated items were understanding the ECE curriculum and children's rights. However, a significant proportion (10–18% of teachers) demonstrated these competencies only occasionally or infrequently, and 3.1% of teachers self-assessed as having no observable competency at all. Notably, up to 18.6% of teachers showed low confidence in competencies related to supporting children with special needs. Feedback from administrators and teachers through interviews and group discussions emphasized the lack of profound understanding of the new curriculum among both teachers and leaders. This gap was considered a significant obstacle requiring greater support and effort to address. The following are illustrative quotes from interviews and focus groups:

"The curriculum is already available; we just take the content from the framework and implement it." (Administrator & Teacher, pilot public school, Province 2)

"The old curriculum is topic-based, with achievable goals for children. The pilot curriculum is project-based, but the goals seem too ambitious." (Teacher, pilot public school, Province 1).

"Teachers need to understand the curriculum, but not all administrators do. Without understanding, they cannot guide or reassure teachers. Some just copy and paste the expected learning outcomes and content from the current curriculum. What concerns us is that both administrators and teachers don't fully grasp the concept of the competency-based curriculum. Many don't take the time to read, analyze, or explore it deeply." (Principal, pilot public preschool, Province 2)

Further evidence from classroom observations revealed more nuanced limitations in preschool teachers' cognitive professional competencies. Specific weaknesses were observed in teachers' understanding of inclusive education for children with disabilities. These tasks require not only technical observation skills but also a strong theoretical foundation and professional sensitivity. Additionally, there was a recurring misunderstanding of child-centered education, which was often interpreted as merely documenting surface-level behaviors rather than using observations to guide pedagogical strategies that support meaningful change in children's learning and development.

"If there's a problem with the child that day, we observe. If not, we skip it. Observing individual children isn't necessary—it just adds more paperwork." (Teacher, pilot public preschool, Province 2)

Although teachers rated themselves highly, feedback from both teachers and administrators indicated that the curriculum was being implemented in a superficial manner due to inadequate subject matter knowledge and poor utilization of inclusive practices and learning environment design. These competencies are currently underrepresented in both pre-service teacher education programs and in-service training, indicating an urgent need for specialized training and practical support to enhance the depth and effectiveness of teachers' cognitive competencies.

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4.1.2. Professional Practice Competency

In this domain, questionnaire results showed that most teachers (78.9% to 88%) reported frequently demonstrating competencies, 9–18% of teachers only occasionally or infrequently demonstrated competencies, and fewer than 3.1% of teachers showed no observable competency, particularly in developing individualized classroom management strategies and effectively integrating technology into teaching. Classroom observations under the domain of guided learning with TEACH ECE criteria [32] focused on four indicators—facilitation of learning, checks for understanding, feedback, and critical thinking—that were used to assess how effectively teachers fostered active learning environments, monitored student comprehension, and provided meaningful feedback to deepen children's understanding. Some exemplary practices were observed, but the consistency and depth of implementation varied significantly across settings, reflecting uneven pedagogical practice limitations among the teaching staff.

4.2. Facilitation of Learning

Classroom observation results revealed that ECE teachers have begun to demonstrate emerging competencies in facilitating learning. Many teachers employed various pedagogical tools and techniques to clarify concepts and connect lesson content to children's lived experiences, such as verbal gestures, visual aids, physical objects, sounds, and music. In some cases, teachers explicitly stated the name and purpose of the activity, helping children orient themselves to the learning goals. For example, one teacher introduced an art activity by saying, "Today we are going to decorate with beautiful flowers to make gifts for our mothers, to show our love on the upcoming March 8th." (P1.VD3). In some lessons, teachers successfully facilitated conceptual connections between classroom content and real-life contexts. For instance, in one observed activity, a teacher in Province 2 encouraged children to reflect on plant care by asking, "What do plants need to grow? What happens when we water them and put them in the sunlight? So, do our bodies need water and sunlight? What can we do to stay healthy?" (P2.VD27). This line of questioning expanded the topic from plant care to personal health, illustrating an effective integration of concepts. In another example, while children were constructing a model of a movie theater, the teacher asked, "Can I sit in the VIP seat in this theater? Where is the VIP seat? Where would you place it?" (P2.VD22). Such prompts enabled children to engage in spatial reasoning and critical thinking through play-based experiences. However, in most cases, teachers either only mentioned the activity name or provided a vague introduction without clearly articulating learning objectives. For example, "Today our topic is building a fruit garden and a flower garden" or "In today's session, we'll practice writing letters." (P1.VD35). These observations suggest that while preschool teachers are beginning to adopt learner-centered strategies and integrate real-life contexts into instruction, greater emphasis is needed on articulating learning objectives clearly and strategically connecting concepts to support more profound understanding and cognitive development.

4.3. Checks for Understanding and Feedback

Teachers employed various methods to assess children's understanding, including systematic monitoring during individual and small-group activities, as well as during free play. These strategies were intended to ensure that most children grasped the intended content. Some teachers offered prompts and feedback to identify misunderstandings, guide thinking processes, and foster critical thinking. For instance, during free play, one teacher asked, "What should we open playing areas today? What's in the construction area? What is P.T. building? What about you, S.? What else can we build?" (P2.VD22). Other teachers posed open-ended questions that required reasoning, explanation, or generalization, often allowing for multiple correct responses: "Who likes Brown Rabbit? Why? Why didn't Brown Rabbit let Bear take shelter? What happened to Brown Rabbit? Why do you like White Rabbit?" (P1.VD30). These types of questions prompted children to actively process and analyze

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ISSN: 2576-8484
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content, rather than simply recall or repeat information. However, teachers did not consistently demonstrate such practices.

Nevertheless, many teachers were observed to follow rigid, pre-designed lesson plans, with limited adjustment to the pace or structure of the activities. As a result, few provided children with additional opportunities for deeper engagement or extended learning. In several classrooms, feedback was minimal or superficial, failing to clarify children's errors or reinforce their successes. For instance, a teacher presented a model drawing and instructed children to recreate it step-by-step, offering no open-ended questions or opportunities for children to express their ideas, or during a spring flower drawing activity, the teacher gave generic or no feedback in response to children's questions or answers, and teachers delivered activities according to predetermined lesson plans.

Comparative analysis between public and private teachers and between advantaged and disadvantaged areas showed no statistically significant differences across the assessed indicators (Mann-Whitney test, $p > .05$). Nonetheless, teachers in public schools and those located in more advantaged areas tended to score slightly higher on average across most dimensions.

In conclusion, ECE teachers demonstrated effective practices in facilitating learning, especially in providing concepts clearly through multimodal strategies, connecting learning tasks to children's real lives, asking open-ended questions, and encouraging critical thinking. Teachers need to improve their competencies in articulating learning objectives, adapting instructional pace, and using feedback as a tool for encouraging deeper thinking to enhance the quality of teaching.

4.4. Social and Emotional Skills

Three main benchmarks—autonomy, perseverance, and social and collaborative skills—were used to evaluate ECE teachers' social and emotional competencies. Results showed several teachers found it challenging to establish classroom environments where children might assume leadership roles or engage in peer projects. Nonetheless, some teachers effectively encouraged children's autonomy and communication by providing them with clear choices with more than two options—that is, by allowing them to participate freely, express their thoughts, and make decisions.

Across all three elements, private teachers performed better than public teachers, especially in autonomy (mean = 3.77 vs. 3.60) and social and collaborative skills (mean = 2.96 vs. 2.80). The differences were not statistically significant ($p > 0.6$), indicating that, across all types of schools, teachers' social and emotional competencies were relatively similar and institutional ownership had minimal impact on them. Additionally, more notable variations were observed by socioeconomic region. Teachers in advantaged areas scored significantly higher in autonomy (mean = 3.89 compared to 3.32), with this difference being statistically significant ($p = 0.036$) (Figure 1). This result indicated that teachers' behavior in encouraging children's autonomy varies by their regional environment. Teachers in advantaged areas also showed better scores in Perseverance and Social and Collaborative Skills; however, the differences were not statistically significant ($p > 0.1$).

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 1577-1595, 2025
DOI: 10.55214/25768484.v9i6.8197

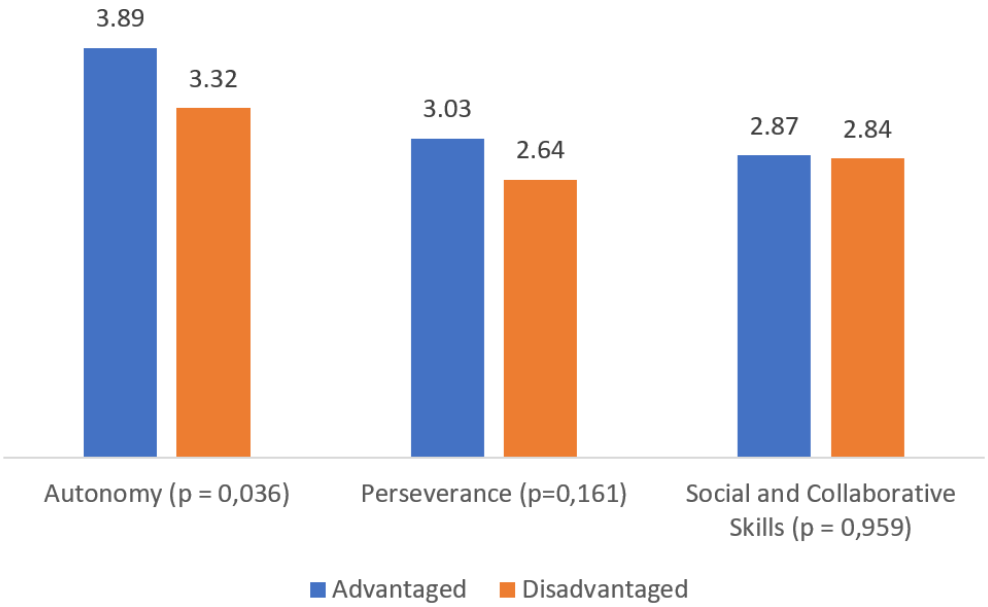

Figure 1.
Observations of Social Emotional Skills of teachers by socioeconomic region.

In the teacher survey regarding challenges in fulfilling professional tasks, most teachers reported difficulties at Level 2 on a five-point scale, with the majority of concerns centered around professional practice competencies. These self-reported challenges were largely confirmed through classroom observations and review of teaching portfolios, revealing consistent limitations.

First, implementing a competency-based curriculum requires flexibility between planned lessons and real-time classroom dynamics. However, most teachers—especially those in public schools—adhered strictly to pre-written lesson plans, some of which were prepared months in advance during summer break. Many acknowledged that adapting plans spontaneously required strong content knowledge, mastery of pedagogical methods, and professional confidence—competencies that not all teachers felt they possessed.

Second, the curriculum content was often fragmented into discrete activities, primarily connected by thematic links, with little attention to content continuity or integration. One teacher noted, "The structure of lessons and activities is sometimes ineffective. For example, trying to deliver content in a 5–7 minute learning slot is too short—children don't have time to process before the activity ends." (Teacher, pilot public preschool, Province 2) While project-based approaches were recognized for their potential to foster deeper learning, implementation remained limited. A school principal reported that only 4 out of 12 teachers at their school were able to design small-scale projects, and even those lacked the confidence to implement them effectively.

Third, most teachers designed generalized lesson plans for the whole class, targeting primarily the average group of children. Systematic classification of children by developmental levels or competencies was largely absent, resulting in educational activities that were not well adapted to the needs of diverse learners. As one school administrator noted:

"*Children are not yet classified according to their ability levels to plan differentiated and appropriate activities.*" (Principal, pilot public preschool, Province 2)

In addition, teachers encountered difficulties in designing and applying inclusive education methods, particularly for children from diverse linguistic, cultural, ethnic, and socioeconomic backgrounds. The

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ISSN: 2576-8484
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use of child observation—a core tool for assessment and personalized learning—was often implemented in a mechanical and overly technical manner, which reduced both its effectiveness and the teachers' motivation due to added administrative burden. Regarding the use of technology, most teachers limited their use of digital tools to basic tasks such as lesson planning and resource searching. Many expressed a desire for further training to integrate technology more effectively into classroom instruction, behavior management, professional development, and communication with families.

Finally, classroom management skills and the ability to establish positive discipline varied significantly among teachers. In many cases, teachers failed to establish clear behavioral expectations or maintain classroom routines, negatively impacting the quality of the learning environment. As one preschool principal commented, *"Teachers must thoroughly understand the curriculum, subject knowledge, teaching methods, and pedagogical skills and be flexible in handling situations. In particular, accurate observation and assessment of children is essential for developing an appropriate and responsive educational program."* (Principal, pilot public preschool, Province 1).

4.5. Professional Attitudes

Most preschool teachers demonstrated professional attitudes well and encountered few difficulties. Between 85.6% and 87.1% of teachers reported consistently demonstrating positive professional behaviors across all criteria. Teachers expressed pride in their profession, compliance with institutional regulations, appropriate communication, fairness in treatment, and a strong sense of responsibility in their work. Only around 10–12% acknowledged inconsistent demonstration of these behaviors, and fewer than 3% indicated they did not demonstrate them clearly.

Findings from in-depth interviews with school leaders confirmed that teachers generally complied with professional standards, exhibited care, and showed genuine respect and affection for children. Many teachers proactively communicated with parents upon noticing signs of concern in children, demonstrated non-discriminatory attitudes, and offered patient, responsible support to children with special needs. As one principal remarked, *"Teachers respect and protect children; they provide attentive, regulation-based care and are willing to collaborate with parents to provide timely support." (Principal, pilot public preschool, Province 1)* However, some limitations were still noted in teachers' professional demeanor. Several teachers exhibited unprofessional behaviors, such as raising their voices, scolding children, or using inappropriate body language during communication. Additionally, some teachers lacked sensitivity in their interactions with parents, especially during conflicts or when school messages were unclear. Administrators reported that some teachers were still passive in their responsibilities and did not consistently engage with or support families.

Classroom observations confirmed these results. Most teachers established classroom culture at moderate to high levels, especially in the elements of supportive learning environment and positive behavioral expectations. Mean scores ranged from 3.5 to 4.09. Teachers responded to children's basic needs, including access to drinking water and learning materials, and routinely used encouragement such as "Great job!" or "Well done!" Isolated incidents were noted, however, whereby teachers either neglected children entirely or delayed responding to their requests for help. Although most teachers displayed no evidence of gender bias, some of them failed to provide equitable opportunities or expressed low expectations, resulting in discriminatory attitudes toward children with disabilities. "He has muscle atrophy and can't join any games—just let him sit here," said one teacher. Most teachers gave clear, specific instructions regarding behavioral expectations: "Please listen to the question and raise your hand to answer" or "I want everyone to put their chairs away and sit quietly in front of me." To redirect children quickly back on task, they used moderate and effective behavior management strategies, including making a "shushing" gesture or providing positive reinforcement. Comparative findings also showed that private teachers scored better in supportive learning environments than their public peers (4.09 vs. 3.73, $p = 0.024$). Teachers in advantaged areas also outperformed those in

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 1577-1595, 2025
DOI: 10.55214/25768484.v9i6.8197

disadvantaged areas across both elements, indicating that socioeconomic conditions significantly affect the competence of ECE teachers in establishing the classroom environment. (Figure 2 and Figure 3).

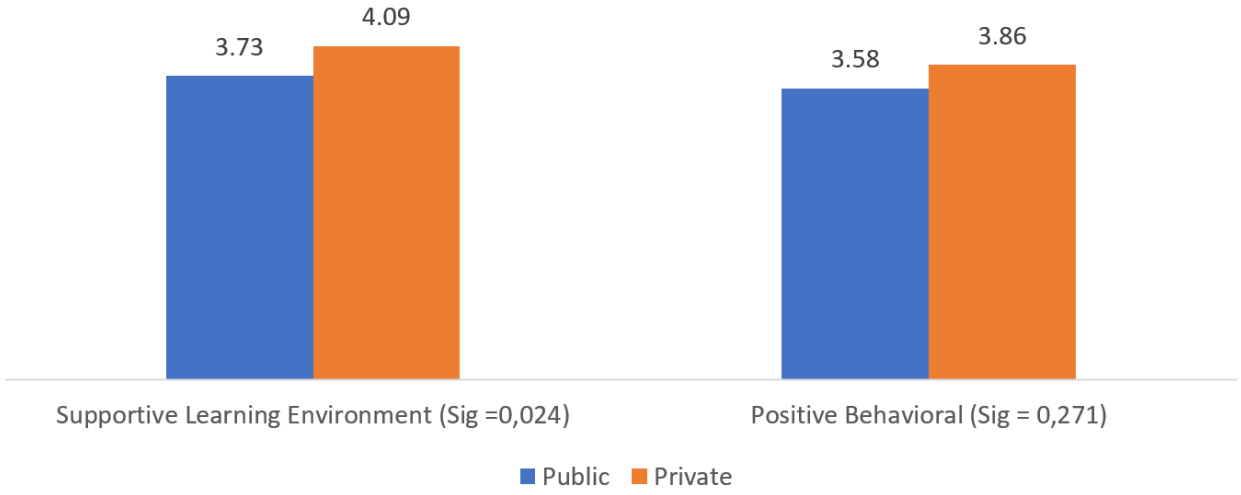

Figure 2.
Observations of classroom culture by school type

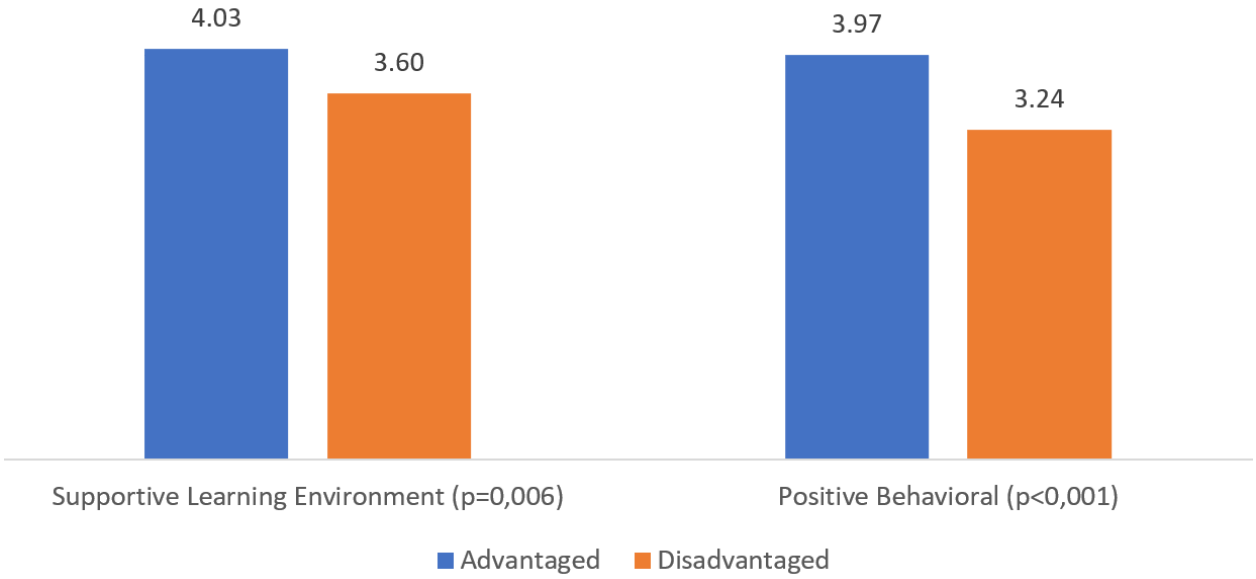

Figure 3.
Observations of classroom culture by socioeconomic region.

The results showed consistent patterns in the professional attitudes and ethical behavior of preschool teachers. Nonetheless, continuous support is needed to ensure consistency in professional ethics and attitudes of all teachers in the ECE system.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
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4.6. Competency In Professional Development

Most preschool teachers believe they regularly and clearly exhibit competencies connected to continuous professional development in their daily work. Reflecting great reflective awareness, 84.0% of teachers replied they actively plan and participate in professional development programs to improve their abilities; 81.4% of teachers said that they always share new knowledge and skills with colleagues via conferences, seminars, or professional forums; and 85.1% of teachers reported always engaging in accurate self-assessment of their professional competencies. Nonetheless, some teachers (2.1–3.1%) assessed no observable demonstration of the competency, and around 14–16% of others assessed themselves at infrequent or inconsistent demonstrations.

Feedback from administrators responded that older teachers tend to show greater resistance to change and are less motivated to update their knowledge. One principal shared, *"Teachers have taken the initiative to pursue higher education, especially younger ones, partly due to salary incentives based on qualifications. About 60% of teachers are highly responsible, self-directed, and active in applying technology in their teaching."* (Principal, pilot public preschool, Province 2)

Another district-level administrator noted, *"Some teachers are willing to learn and engage, but individual capacity varies. Technology adoption is uneven—some older teachers still depend on their colleagues rather than taking initiative."* (District-level Administrator, Province 1). When asked whether their institution functions as a professional learning community, 60.1% of teachers and 47.1% of administrators responded positively, indicating effective peer support and professional collaboration. However, 14.4% of teachers and 49.3% of administrators noted that building a strong learning community remains challenging and requires additional external support. In terms of access to expert consultation, 42.9% of administrators and 23% of teachers reported facing significant difficulties in finding professional support from external specialists.

5. Discussion and Recommendations

Survey findings reveal that the competency level of preschool teachers in Vietnam is moderately satisfactory, with significant disparities observed across socioeconomic regions, training qualifications, and types of ECE institutions. Core professional competencies such as curriculum development, planning for group and individual learning, organizing educational activities, and assessing child development remain limited. Notably, competencies in designing personalized curricula, integrating ethical values, and applying educational technologies have not been effectively utilized.

These disparities are closely associated with variations in working conditions, access to professional development opportunities, and the quality of initial teacher education. Teachers in public schools, particularly in advantaged areas, often benefit from superior infrastructure and more supportive learning environments than their counterparts in remote or private institutions. However, a substantial proportion of teachers have not participated in any professional development programs in the past three years, indicating a disconnect between professional development policies and the actual needs of educators.

Current professional development practices, typically implemented through a top-down "cascade" model from the Ministry of Education and Training to local institutions, have significant limitations. Training sessions are often brief (half-day per topic), heavily theoretical, lacking practical application, and subject to message distortion due to the limited number and varying qualifications of direct participants. Interviews and focus group discussions with school administrators and teachers further revealed that gaps in leadership understanding of learner-centered approaches constitute a major barrier to adopting innovative teaching methods in classrooms.

Additional constraints include administrative burdens, excessive workloads (with working hours exceeding labor law limits), and inadequate compensation, all of which diminish teachers' motivation for self-directed learning and pedagogical innovation. The shortage of teachers and high child-teacher

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 6: 1577-1595, 2025
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ratios also impede the implementation of individualized pedagogical approaches. According to the national review of ECE curriculum implementation for the 2022–2023 academic year, the number of ECE teachers increased by nearly 200,000 compared to 2010–2011. Nevertheless, the average teacher-to-class ratio remained only 1.86 teachers per class, falling short of the official requirement of 2.2 teachers per class for kindergartens and 2.5 teachers per group for nurseries [33].

To address these challenges and support the development of professional competencies among ECE teachers in Vietnam, the following recommendations are proposed:

1) Develop and adopt national quality standards for early childhood education. Although Vietnam has issued a comprehensive legal framework, an overarching set of ECE quality standards is still lacking. At the institutional level, Vietnam has developed training frameworks for teacher education programs, but there remains a pressing need to review, refine, and update existing policies to ensure alignment between training quality, policy coherence, and the demands of the competency-based ECE curriculum.

2) Establish clear regulations to balance teaching and caregiving responsibilities, ensuring compliance with national labor laws regarding working hours. It is critical to enhance inter-ministerial coordination and engage local authorities in improving working conditions and maintaining appropriate child–teacher ratios and class size.

3) Recognize professional competencies as a central determinant of educational quality. It is essential to define a comprehensive competency framework for ECE teachers, with clearly articulated indicators that allow for accurate assessment of existing competencies, identification of strengths and weaknesses, and planning of individualized professional development pathways.

4) Enhance the quality of professional training programs for both school leaders and teachers. Competent school management is a prerequisite for high-quality teaching. Training initiatives should be informed by assessments of current competencies and grounded in real-world demands, avoiding superficial or quantity-focused approaches.

5) Foster collaborative ecosystems in ECE, ensuring effective linkages among key stakeholders: ECE regulatory bodies, teacher training institutions, ECE providers, researchers, local authorities, and parents. Such networks are essential for building a sustainable, supportive system that nurtures the professional development of early childhood educators.

6. Conclusion

This study highlights the ongoing challenges facing Vietnam's ECE teaching workforce, particularly in areas requiring deep professional expertise and pedagogical innovation. Existing regulatory frameworks related to ECE quality and curriculum implementation reveal significant limitations and inconsistencies. Working conditions, training opportunities, and socio-economic disparities between regions and school types are critical factors that influence the quality of human resources in ECE.

To enhance ECE teacher competencies, a comprehensive and integrated approach is required that includes restructuring teacher education and professional development programs toward more practical, individualized, and reflective models; expanding the use of technology in teaching and management; improving working conditions and incentives; and establishing robust systems for monitoring and evaluating teacher professional growth. Strategic and sustained investment in the ECE teaching workforce will serve as a cornerstone for the long-term development and sustainability of Vietnam's ECE sector.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
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Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Acknowledgements:

This paper is part of the results of the ministry-level research project titled *"Professional competency framework for ECE teachers in response to the new ECE education curriculum"*. Code: B2024-VKG-05. Sponsored by The Ministry of Education and Training

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ISSN: 2576-8484
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