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Management of Experiential Learning Activities in Secondary Education: A Systematic Review and Implications for Ethnic Minority Boarding Schools in Vietnam's Mekong Delta

Van De Nguyen[1], Van Thong Ho[1], Van Dat Tran[2], and Trung Danh[1*]

[1]Dong Thap University, Cao Lanh 870000, Vietnam

[2]An Giang University, Vietnam National University Ho Chi Minh City, Vietnam

[*]Corresponding author, Email: dtrung@dthu.edu.vn

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Abstract

Experiential learning is increasingly recognized as a key pathway for developing students' competencies, agency, and socio-emotional growth in secondary education. In Vietnam, it is mandated by the 2018 General Education Curriculum, but the quality of implementation remains uneven across contexts. Although existing studies largely focus on instructional design, evidence on school-level management, including planning, leadership, resource allocation, partnerships, and assessment, remains fragmented. This review aims to systematically synthesize existing Vietnamese and international scholarship to clarify major management dimensions, identify research gaps, and generate contextualized implications for ethnic minority boarding schools in Vietnam's Mekong Delta. Following the PRISMA 2020 guidance, this systematic literature review synthesizes 41 studies (19 Vietnamese and 22 international) to provide a balanced account of both the pedagogy and governance of experiential learning activities. Descriptive mapping shows a rapid increase in Vietnamese publications after 2018, alongside a mature international evidence base covering achievement, motivation, civic learning, and technology-enhanced experiential environments. Thematic synthesis identifies five recurring themes: (1) pedagogical designs and outcomes, (2) planning and curriculum alignment, (3) leadership and professional capacity building, (4) partnerships and resource governance, and (5) assessment and program evaluation. To bridge learning theory and management theory, the review proposes an integrated analytical framework that embeds Kolb's experiential learning cycle within the Context-Input-Process-Output management system. Implications are discussed for ethnic minority boarding schools in the Mekong Delta, emphasizing culturally responsive experiential design, equity-oriented resource planning, co-governance with communities, and competency-based evaluation routines.

1. INTRODUCTION

Competency-based reforms have accelerated globally as education systems seek to prepare learners for uncertainty, complex problem spaces, and rapid socio-technical change. Policy frameworks increasingly emphasize learning that integrates cognitive, practical, and socio-emotional development rather than the accumulation of inert knowledge (Organisation for Economic Co-operation and Development, 2019). Experiential learning (EL) is frequently highlighted in this shift because it provides a mechanism for bridging disciplinary knowledge and authentic practice through cycles of experience and reflection (Dewey, 1938; Kolb, 1984).

In Vietnam, the 2018 General Education Curriculum (GEC 2018) institutionalizes EL as a compulsory component of education designed to develop key competencies and personal qualities, strengthen career orientation, and enhance civic engagement. In principle, EL is expected to be coherent, progressive across grade levels, and aligned with competency assessment. In practice, schools report uneven design quality, inconsistent resourcing, limited teacher capacity for facilitation and assessment, and large differences across geographic and socio-cultural contexts, issues that are also highlighted in Vietnamese empirical and practice-based studies (Au & Hoang, 2024a; Au & Hoang, 2024b; Do & Nguyen, 2023).

Internationally, EL research covers diverse activity types, including laboratory work, project-based learning, fieldwork, simulations, service learning, and interdisciplinary STEM/STEAM designs. Evidence suggests that well-designed EL can improve achievement and scientific process skills (Alkan, 2016), motivation and engagement (Bressler et al., 2019), academic self-efficacy and the quality of the learning experience (Bassi et al., 2007), and civic/critical thinking competencies (Yang & Chung, 2009). However, translating these pedagogical insights into sustainable school-wide programs requires effective governance, including planning, leadership, stakeholder coordination, partnership management, and evaluation systems (Young et al., 2008; Bush, 2003).

This review addresses a practical and scholarly challenge: how can schools manage EL so that experiential pedagogy is implemented coherently, equitably, and with measurable competency outcomes, especially in culturally diverse settings such as ethnic minority boarding schools? The Mekong Delta region combines cultural diversity with uneven socio-economic conditions, creating both opportunities (rich community contexts) and constraints (resource limitations) for experiential education. Management solutions, therefore, need to balance pedagogical quality with governance feasibility.

The review pursues three research questions. RQ1 examines publication patterns, methodologies, and theoretical foundations. RQ2 synthesizes the evidence on (a) pedagogical designs/outcomes and (b) management mechanisms enabling effective EL activities. RQ3 develops an integrated framework to guide balanced research and practice, with implications for ethnic minority boarding schools in Vietnam.

2. CONCEPTUAL FOUNDATIONS

2.1. Experiential Learning as a Learning Process

Experiential learning is typically anchored in pragmatist and constructivist traditions. Dewey (1938) argued that experience alone is not automatically educative; learning becomes educative when experience is subjected to reflection that reconstructs meaning for future action. Kolb (1984) formalized this logic as a four-stage learning cycle: concrete experience, reflective observation, abstract conceptualization, and active experimentation. Later work emphasizes that learning spaces and styles shape how learners move through the cycle and how experience is transformed into transferable knowledge (Kolb & Kolb, 2005).

Across secondary education, EL has been linked to outcomes beyond achievement. Studies report gains in achievement and scientific process skills in science-oriented experiential programs (Alkan, 2016), stronger engagement through narrative and service-learning contexts (Whitley et al., 2017), improved academic self-efficacy and a more positive quality of experience (Bassi et al., 2007), and enhanced critical thinking in civic education (Yang & Chung, 2009). Technology-enhanced experiential environments, including augmented or virtual laboratories, extend access to experiential practice when physical resources are limited and can increase engagement when combined with inquiry-based tasks (Chiu et al., 2015; Bressler et al., 2019).

Vietnamese studies frequently mobilize Kolb's cycle to justify experiential designs in subject teaching and cross-curricular activities. In addition, the GEC 2018 positions EL as a curriculum component that explicitly targets competency development through experience, reflection, and practice. Vietnamese publications increasingly explore procedural design steps and organizational arrangements for EL activities and career guidance activities, highlighting the need to align activities with competency outcomes and local contexts (Do & Nguyen, 2023; Tran, 2020).

2.2. Experiential Learning as a School-wide Program that Requires Governance

While Kolb's cycle explains how individuals learn, it does not specify how schools should govern EL activities as a coherent program. Educational management theories provide complementary lenses. School effectiveness research and organizational models emphasize that learning outcomes are shaped by contextual conditions, resources, and process quality, and that leadership mediates how inputs translate into educational outputs (Scheerens, 1992). Leadership theory highlights strategic direction, culture building, and capacity development as key levers for sustained improvement (Bush, 2003).

In Vietnamese educational management scholarship, systems-thinking approaches such as the Context-Input-Process-Output (CIPO) model are widely applied to analyze school management functions (planning, organizing, directing, coordinating, and evaluating) within specific socio-cultural and policy contexts. The CIPO model is suitable for EL activities because it explicitly connects (a) policy demands and community ecology (context) with (b) the school's human and material resources (input), (c) management routines and implementation fidelity (process), and (d) competency outcomes and school quality indicators (output).

Managing EL activities includes decisions about program scope and sequencing, safety and ethics, teacher workload, partnership coordination with external organizations, and assessment strategies that are compatible with competency-based learning. The evaluation of EL activities is itself a research strand; scholars have proposed criteria and tools to assess learning outcomes and program quality beyond conventional tests (Young et al., 2008). These governance tasks are particularly demanding in ethnic minority boarding schools where resources can be constrained and where culturally responsive approaches are necessary for legitimacy and engagement (Banks, 2015).

3. METHODOLOGY

3.1. Data Sources and Search Strategy

The searches were conducted on Scopus, Web of Science, and Google Scholar in October 2025. English search strings combined EL terms with secondary education and governance terms, for example: ("experiential learning" OR "experiential education" OR "service learning") AND ("secondary education" OR "high school" OR "middle school") AND (management OR leadership OR governance OR evaluation OR "school management"). Vietnamese searches used terms such as "hoạt động trải nghiệm", "trải nghiệm hướng nghiệp", "quản lý hoạt động trải nghiệm", and "đánh giá năng lực". Manual searches of reference lists were also conducted to identify highly relevant studies not captured by database indexing.

3.2. Eligibility Criteria

Inclusion criteria were: (1) the study addressed EL or EL activities in general or secondary education; (2) it discussed pedagogical designs, learning outcomes, and/or school-level management mechanisms relevant to EL activities; (3) it was published in a peer-reviewed journal, scholarly book chapter, dissertation, or conference proceeding with sufficient academic detail; and (4) the full text was accessible. Exclusion criteria were: (a) commentary or opinion pieces without analytical contribution, (b) studies unrelated to education, or (c) purely technical teaching tips without an EL rationale or without relevance to EL activities.

3.3. Review Design and Selection Process

This systematic literature review followed the PRISMA 2020 guidance for transparent reporting (Page et al., 2021). The review was designed as a mixed-language synthesis to capture both international and Vietnamese scholarship relevant to EL in secondary education and their management mechanisms.

Across databases and manual searching, 330 records were identified through database searches (n = 312) and manual searching (n = 18). After removing 58 duplicates, 272 records underwent title and abstract screening, resulting in the exclusion of 215 records. The remaining 57 full-text articles were assessed for eligibility; 16 articles were subsequently excluded because of a lack of direct relevance to the management of EL activities (n = 9) and insufficient methodological rigor (n = 7). Ultimately, 41 studies were included in the final synthesis, comprising 22 international and 19 Vietnamese sources. The selection process is illustrated in the PRISMA flow diagram (Figure 1).

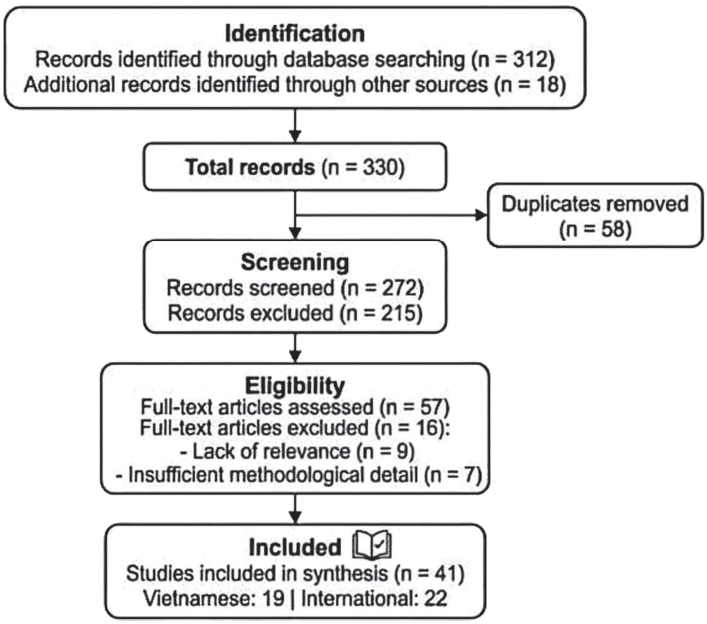

Figure 1. PRISMA Flow Diagram for Study Selection

3.4. Quality Considerations and Analytic Approach

Given the diversity of research designs, a full quantitative meta-analysis was not feasible. Instead, the review applied descriptive mapping and thematic synthesis. Studies were coded according to: year, country/region, educational level, domain (STEM, humanities, civic education, etc.), method (qualitative, quantitative, mixed, design-based), theoretical framework (e.g., Kolb, constructivism, CIPO), management

focus (planning, leadership, resourcing, partnerships, assessment), and outcomes (achievement, motivation, competencies, identity, civic engagement). The thematic synthesis proceeded in two stages: (1) generating descriptive codes from each study; and (2) aggregating these codes into higher-order themes that capture recurring findings and tensions across contexts.

4. RESULTS

4.1. Descriptive Mapping of the Evidence Base

The evidence base reflects three broad waves. Earlier international scholarship established EL as a theoretical framework and tested it in subject-specific and civic education contexts, producing empirical evidence that experience-based approaches can influence learning and developmental outcomes (Conrad & Hedin, 1981; Arum & Beattie, 1999). From the 2000s onward, research expanded into motivation, self-efficacy, civic education, service learning, and evaluation frameworks (Bassi et al., 2007; Young et al., 2008; Yang & Chung, 2009). During the 2010s and 2020s, technology-enhanced and interdisciplinary experiential models became increasingly prominent, including mobile and virtual laboratory designs (Chiu et al., 2015; Bressler et al., 2019) and STEM experiential learning frameworks (Choi et al., 2021).

Vietnamese research shows a sharp increase following the introduction of GEC 2018. Many Vietnamese studies document implementation experiences, propose procedures for designing EL activities, and analyze factors influencing the organization of experiential and career guidance activities (Au & Hoang, 2024a; ...)Au & Hoang, 2024b; Do & Nguyen, 2023). A smaller subset focuses explicitly on management functions such as planning, directing, evaluation, and resource assurance, often using CIPO logic to structure the analysis (Tran, 2020; Tran, 2024).

4.2. Overview of Experiential Learning Activities for High School Students

Experiential learning activities are identified as a mandatory and central component of the 2018 General Education Curriculum, aiming at the comprehensive development of learners' qualities and competencies (Ministry of Education and Training, 2018). Essentially, EL constitutes a guided educational process in which students directly participate in practical situations to mobilize knowledge, skills, and experience to solve problems, thereby developing new knowledge and competencies (Nguyen, 2021; Phan, 2019).

Studies both domestically and internationally show that EL is implemented through diverse forms such as learning projects, scientific research, laboratory practice, field experiences, simulations, debates, community service learning, and civic action projects. A consistent finding is that EL effectiveness strongly depends on pedagogical design, particularly the degree of connection between experience, reflection, and conceptualization (Alkan, 2016; Yang & Chung, 2009). When properly designed, EL activities not only improve academic performance but also develop process skills and higher-order thinking abilities.

In addition, many studies emphasize the role of EL in enhancing student motivation and participation. Technology-integrated EL environments, such as mobile learning and gamification, have the potential to enhance engagement through structured tasks and immediate feedback (Bressler et al., 2019). At the same time, community-based service-learning models help learners connect practical activities with academic reflection, thereby fostering meaningful learning experiences (Whitley et al., 2017). Factors such as self-efficacy, emotional experience, and cognition have been identified as important mediating variables influencing EL outcomes (Bassi et al., 2007).

In the Vietnamese context, studies have initially developed various EL models linked to subject

teaching and competency-based development orientations according to the 2018 GEC. However, most studies still focus on the lesson level and short-term assessment, without adequately addressing sustainability, program coherence, and the reliability of assessment systems (Tran et al., 2023; Vu & Nguyen, 2024).

Overall, studies agree that EL is an effective educational approach for developing students' holistic competencies, but it requires rigorous pedagogical design and a systemic approach to ensure long-term effectiveness.

4.3. Overview of Managing Experiential Learning Activities for High School Students

Effective management of EL activities is a crucial factor in determining the quality, sustainability, and effectiveness of their implementation in secondary schools. Studies conceptualize the management of these activities as a systemic process encompassing planning, organization, implementation, direction, and monitoring and evaluation (Le, 2019; Nguyen, 2020a; Nguyen, 2020b; Nguyen, 2020c).

One of the key aspects of EL management is program planning and adjustment. Studies show that EL activities are only truly effective when systematically integrated into the curriculum, ensuring alignment among competency goals, subject content, and sequences of experiences across grade levels. Without such coherence, these activities can easily become fragmented activities that fail to support the cumulative development of student competencies (Au & Hoang, 2024a; Do & Nguyen, 2023). International evaluation frameworks also emphasize the importance of clearly defining learning outcomes, designing assessment evidence, and monitoring program implementation (Young et al., 2008).

In addition, leadership and professional development are considered central elements in managing EL. School leaders not only provide strategic direction but also foster a learning culture, promote professional collaboration, and ensure the conditions necessary for implementing EL activities (Bush, 2003). Distributed leadership models, in which teachers are actively involved in designing and coordinating activities, are often associated with curriculum innovation and sustainability.

In addition, partnership and resource management are crucial components of EL management. EL activities require connections with real-world contexts outside the school, such as communities, businesses, and the natural environment. Studies show that effective partnerships can enhance students' citizenship and social skills when goals are clearly defined, and close coordination is maintained (Whitley et al., 2017). However, in the Vietnamese context, the management of these relationships often lacks a systematic approach and clear evaluation procedures (Au & Hoang, 2024b; Tran et al., 2025).

Another important issue is the evaluation system for EL. Studies show that assessing EL competencies requires the use of diverse tools such as rubrics, learning portfolios, reflection journals, peer reviews, and performance-based products (Young et al., 2008). However, teachers still face many difficulties in designing and implementing assessments, leading to inconsistencies across educational institutions (Tran, 2020; Do & Nguyen, 2023). Therefore, the management of EL activities should be approached as a holistic educational leadership process in which planning, team development, resource management, and assessment innovation are closely interconnected.

4.4. Factors Influencing the Organization of Experiential Activities for High School Students

Studies show that the effectiveness of EL activities is influenced by multiple interrelated factors, which can be grouped into three main categories: human factors, organizational and management factors, and contextual factors.

Firstly, human factors include teacher competence, leadership capacity, and learner characteristics. Teachers play a crucial role in designing and coordinating EL activities; however, many studies indicate that they still face difficulties in designing sequences of EL activities and assessing competencies (Tran, 2020; Doan & Nguyen, 2024). At the same time, school leadership capacity influences strategic direction, the development of a culture of innovation, and the creation of conditions that support the implementation of EL activities (Bush, 2003).

Secondly, organizational and management factors include program planning, coordination mechanisms, and evaluation systems. The lack of linkages between activities and the absence of mechanisms for consistent reflection and evaluation are common limitations that reduce the effectiveness of EL activities (Au & Hoang, 2024a; Young et al., 2008).

Thirdly, resource and environmental factors include infrastructure, finance, learning materials, and partnerships. Studies show that differences in resources lead to disparities in students' experiential opportunities, requiring flexible solutions such as leveraging local resources or applying technology (Coker & Porter, 2016; Tran et al., 2025).

Fourth, contextual and curriculum factors include policies, socio-cultural characteristics, and curriculum requirements. The implementation of EL activities should be appropriate to local conditions and the competency-based development orientation of the educational program (Ministry of Education and Training, 2018).

Based on a synthesis of research, an integrated approach combining pedagogical and managerial aspects can be proposed through the Kolb x CIPO framework. In this framework, Kolb's EL cycle (experience - reflection - conceptualization - application) reflects pedagogical logic, while the CIPO model (Context - Input - Process - Output) guides the management conditions to ensure EL activities are implemented systematically and effectively. This combination allows for a comprehensive explanation of the relationship between context, resources, organizational processes, and educational outcomes, thereby enhancing the quality and sustainability of EL in schools.

5. DISCUSSION

5.1. Pedagogical Design And Effectiveness of Experiential Learning Activities

Studies show that pedagogical design plays a central role in determining the effectiveness of EL activities. Learning experiences are only truly valuable when they are purposefully structured, linked to the process of reflection and conceptualization, thereby contributing to improved academic achievement and the development of process skills (Alkan, 2016; Yang & Chung, 2009). At the same time, EL also has a positive impact on students' motivation, participation, and self-efficacy (Bressler et al., 2019; Bassi et al., 2007).

However, most current research still focuses on designing individual activities at the lesson level, while lacking programmatic approaches to ensure the continuity and accumulation of competencies over time. Empirical evidence is primarily limited to short-term assessments, failing to clarify the mechanisms of sustainable competency transformation and development. Furthermore, the application of EL theories, particularly Kolb's cycle, is more illustrative than a systematic tool for design and assessment.

These limitations highlight the need to shift from a "single-activity" approach to a "structured series of experiences," while simultaneously developing research to verify the application of theory to practical teaching design. Based on this, the paper contributes by approaching EL as a continuous process in which the phases of experience - reflection - conceptualization - application are closely integrated to optimize learning outcomes.

5.2. Managing Experiential Learning Activities in Schools

Effective management of EL activities is considered a decisive factor in the sustainability and effectiveness of their implementation in educational practice. EL activities are only truly effective when integrated into the curriculum, with a link between competency goals, subject content, and implementation plans across all educational levels. Without this cohesion, activities can easily become fragmented and fail to generate cumulative value.

The role of educational leadership emerges as a crucial mediating factor, not only in strategic direction but also in fostering professional collaboration, creating an environment for innovation, and supporting teacher competency development (Bush, 2003). However, existing studies often approach governance factors such as leadership, planning, team development, or evaluation in isolation, lacking an integrated analytical framework to explain the interactive relationships between them.

In addition, the system for assessing competence in EL activities remains a significant challenge. Despite numerous proposals for assessment tools, implementation has been inconsistent and has not ensured the reliability and validity of the results (Young et al., 2008; Tran, 2020). This reflects a research gap in developing integrated assessment systems that are aligned with competency development goals.

In this context, the findings of this study underscore the significance of the Kolb x CIPO integrated framework in bridging the long-standing gap between pedagogical theory and managerial practice. Unlike previous fragmented approaches, this synergy allows for a holistic alignment where Kolb's stages experience, reflection, conceptualization, and application provide the learning depth, while the CIPO dimensions ensure the necessary organizational conditions. This integrated perspective not only clarifies the causal links between resources and outcomes but also establishes a rigorous foundation for the systemic and sustainable management of EL activities in schools.

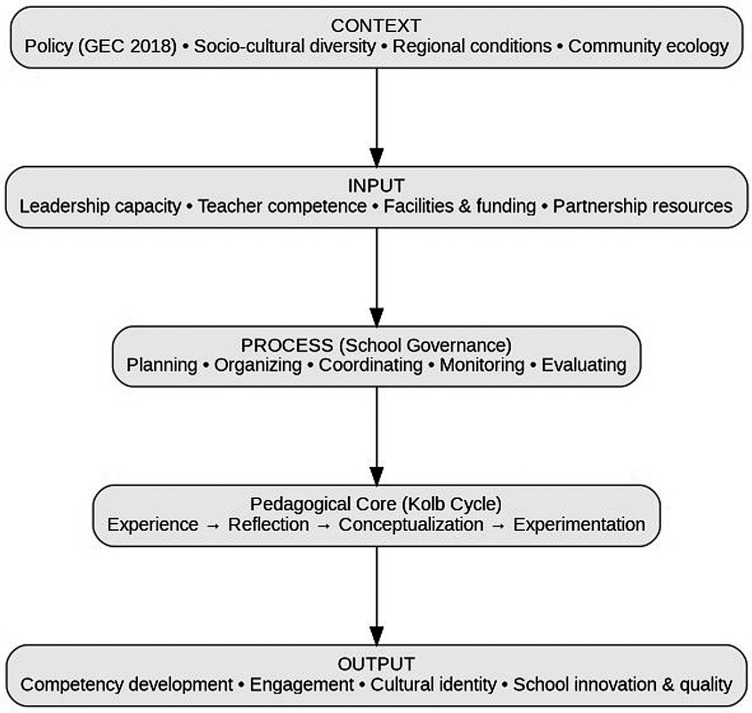

Figure 2. Integrated Kolb x CIPO Framework for Managing Experiential Learning Activities

5.3. Factors Influencing the Organization of Experiential Activities

The organization of EL activities is influenced by multiple interrelated factors, most notably teacher competence, leadership capacity, resource availability, and socio-cultural context. Teachers often face difficulties in designing EL activities and assessing competencies, while school leaders play a crucial role in creating an environment that supports innovation and coordinating resources (Tran, 2020; Doan & Nguyen, 2024).

Resources and partnerships also directly impact the quality of EL activities. Under limited conditions, educational institutions struggle to organize diverse and safe experiences and lack effective mechanisms to leverage community resources. Furthermore, the issue of equity in access to EL activities, particularly in multicultural and disadvantaged contexts, has not received sufficient attention in the literature.

Current research has not clarified how context and organizational processes influence EL outcomes or analyzed the interactions between key factors. This gap prevents the development of theoretical models that explain and predict effectiveness under varying conditions.

This article contributes to addressing this gap by approaching EL from a systems perspective, integrating contextual, input, process, and output elements within a unified analytical framework. At the same time, the emphasis on cultural factors and educational equity broadens the perspective on EL not only as a teaching method but also as a tool for holistic and inclusive development (Banks, 2015).

6. SIGNIFICANCE FOR ETHNIC MINORITY BOARDING SCHOOLS IN THE MEKONG DELTA

Ethnic minority boarding schools serving these students often face numerous socio-economic disadvantages as well as cultural and linguistic barriers. In this context, EL can become a crucial strategy to promote educational equity, provided that these experiences are culturally appropriate and accessible. Based on a culturally responsive approach to education (Banks, 2015) and EL characteristics, several key implications can be drawn.

First, the design of EL activities needs to be closely linked to the local cultural context. Integrating traditional livelihoods, crafts, indigenous knowledge, and cultural heritage into learning projects or community service activities not only enhances the authenticity of the experience but also contributes to strengthening students' cultural identity and civic responsibility (Tran et al., 2024; Vu & Pham, 2020). This approach helps transform EL activities from a general educational activity into a meaningful learning process for learners within a specific context.

Second, resource planning needs to be guided by the principle of equitable access. Education administrators should prioritize safe, low-cost, and feasible EL forms, such as school-based projects, small-scale research projects, or community mentoring programs. At the same time, developing and maintaining partnerships with local organizations can help reduce financial barriers and expand learning opportunities for students.

Third, enhancing teachers' capabilities in a multicultural context is a key requirement. Professional development activities should focus on culturally responsive teaching methods, multilingual communication skills, and the ability to organize experiential activities linked to local realities. In addition, developing teachers' critical thinking skills also plays a crucial role in improving the quality of designing and implementing EL activities.

Finally, it is necessary to promote a model of co-governance with the community. Establishing sustainable collaborative relationships with local authorities, cultural stakeholders, and students' families

not only expands the learning space but also enhances the legitimacy and sustainability of EL activities. In this context, the school is not only a place for organizing learning but also a hub for connecting social resources to serve education.

7. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Although the review has synthesized and analyzed a diverse body of literature, the study still has certain limitations. Firstly, the evidence used varies in methodological rigor, with many domestic studies being descriptive in nature and lacking clear experimental or quasi-experimental designs to test effectiveness. Furthermore, the integration of theoretical frameworks in the analysis remains limited, reflecting the general trend in current experiential research.

In the coming period, research needs to focus on several key directions to improve the quality and depth of scientific knowledge in this field. First, empirical studies should be conducted to validate the Kolb x CIPO integrated analytical framework through mixed methods and multilevel models, thereby clarifying the relationship between management factors and student competency development outcomes. Second, competency assessment tools in EL activities need to be developed and standardized, ensuring reliability and validity while also aligning with the guidelines of the 2018 GEC.

Furthermore, in-depth research is needed on the role of partnership management and resource allocation in ensuring educational equity, especially in challenging contexts. Finally, comparative studies across regions and school types, including ethnic minority boarding schools and general schools, will contribute to clarifying the impact of context on the effectiveness of partnership implementation, thereby providing a basis for developing appropriate policies and management models.

8. CONCLUSION

This systematic literature review provides a balanced synthesis of research on EL activities in secondary education, integrating pedagogical and management perspectives. The literature supports positive learning outcomes from experiential approaches but highlights persistent governance challenges: weak strategic planning, uneven teacher capacity, limited resources and partnerships, and underdeveloped assessment systems. By proposing an integrated Kolb x CIPO framework, the review offers a coherent lens for designing, managing, and evaluating EL activities in competency-based curricula. The framework is particularly useful for guiding context-sensitive experiential education in ethnic minority boarding schools in Vietnam's Mekong Delta.

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