# Assessing Educational Tourism's Capacity to Support Sustainable Principles via the ELT Framework: A Systematic Review

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### **ABSTRACT**

**Purpose of the study:** This Systematic Literature Review (SLR) analyzes research trends in Educational Tourism (2019–2024) by applying Kolb's Experiential Learning Theory (ELT) framework. The study specifically investigates how the Educational Tourism approach supports the principles of Sustainable Tourism and its positioning in addressing the complex issue of Climate Change.

**Methodology:** The research employed an SLR supported by bibliometric analysis and thematic synthesis of 447 Scopus-indexed articles. The ELT framework (comprising Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation) was used as a conceptual lens to test the balance of thematic focus across the literature.

Main Findings: The analysis revealed a systemic imbalance within the literature. While the Abstract Conceptualization and Concrete Experience stages show strong documentation, the Reflective Observation is the most minimally discussed theme (65.55%). This gap indicates that current research tends to bypass the critical evaluation process, thus failing to methodologically validate the internal mechanism required to link direct experience to lasting sustainable behavior. This methodological weakness hinders the sector's ability to effectively tackle complex, large-scale issues like Climate Change and Environmental Protection.

**Novelty/Originality of this study:** This study contributes by being the first to systematically apply the ELT framework to diagnose the thematic maturity of Educational Tourism, explicitly identifying Reflective Observation as the most critical theoretical and methodological gap.

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## 1. INTRODUCTION

At the global level, tourism continues to grow and has an impact on the economy and development of a region or country [1]. Global tourism includes activities in the fields of education, environment, socio-culture, sustainable development and attracting business people so as to open up labor opportunities [2], [3]. Public interest in the tourism sector is also increasing, both in terms of the community as consumers and the community as tourism activists. The community actively encourages the development of local tourism. Tourism development is carried out by various countries and they make investments, procurement of infrastructure that supports tourism activities to bring in tourists and carry out economic activities in tourism destinations [4].

The development of local tourism has given rise to many tourism destinations that were initially only enjoyed by local tourists to become destinations visited by inter-regional tourists and foreign tourists.

Sustainable development planning brings benefits to the progress of a region or country by carrying out environmental conservation practices so as to minimize the negative impact of the industry [5], [6]. Tourism development in the region maximizes and utilizes existing tourism resources and potential. Tourism potentials include natural, cultural, historical, culinary and religious potential [7]. This tourism potential can be synergized with the concept of education which is later known as educational tourism. Educational tourism is a program where tourists visit a location with the main purpose of gaining learning experience directly at the tourist attraction [8]. Educational tourism includes tourism activities carried out by individuals who stay during vacations or take short trips, where education and learning are the main or secondary goals of their trip [9], [10].

Talking about educational tourism is interpreted as a tourism activity to learn a number of tourism potentials in a destination. Educational tourism can be connected with a lot of science depending on the tourism potential that you want to raise. Visitors can learn about the history of a historical site [11], learning biology on a variety of flora and fauna in a national park [12], studying geology in the geopark area [13] or even learn traditional arts [14]. Educational tourism can also be the basis for marketing a tourism destination [15] so that it is expected to attract tourists from the niche of the education sector [16]. Early educational initiatives focused on environmental topics are critical, as developing positive environmental awareness attitudes in primary schoolage children is essential for establishing long-term sustainable behavior [17]. Educational tourism includes various forms of travel that aim to acquire new knowledge, skills, and experiences. Some of the main categories include comparative studies, student exchange programs, cultural tourism, and research-based ecotourism. The study of educational tourism is important in understanding its role in human resource development, cultural preservation, and increasing understanding of global issues [18].

Despite the sector's recognition that Educational Tourism is crucial with combining formal education, travel, and tourism management, the existing literature suffers from a critical academic deficiency: a lack of a strong theoretical-pedagogical foundation. This systematic literature review (SLR) is necessary due to two critical research deficiencies in the Educational Tourism literature: a Theoretical Gap and a Thematic Gap. The literature lacks robust theoretical frameworks, failing to systematically evaluate how on-site activities actually translate into measurable sustainable behavior [19] and a deeper understanding of long-term global issues [20]. This gap is compounded by a Thematic Gap, where initial analysis confirms that key global challenges, particularly Climate Change [21] and Environmental Protection [22], are significantly under-represented, with existing discourse predominantly focusing on established areas like Ecotourism and Geotourism.

The urgency of this research lies in transforming educational tourism from a descriptive activity into a proactive, transformative pedagogical mechanism [23]. Failure to connect field experience with deep learning risks creating activities that are non-transformative and ultimately ineffective in supporting genuine sustainable development. To address this gap, this study develops and applies an analytical framework based on the Experiential Learning Theory (ELT) by David Kolb. ELT serves as the unifying conceptual lens to systematically evaluate how learning through concrete field experience is transformed into abstract conceptualization and active experimentation (sustainable action) [24]. By using the ELT cycle, this research repositions Educational Tourism as a powerful, transformative learning system.

Theoretically, we integrate Sustainable Tourism principles with the Experiential Learning Theory (ELT) cycle to provide a structured framework for assessing the learning effectiveness of destinations, which meets the demand for strong theoretical grounding. Practically and thematically, we offer novelty by explicitly linking the under-researched issues of Climate Change and Environmental Protection to the ELT continuous cycle of four stages [25], [26]. ELT four stages are: Concrete Experience (CE), where the traveler engages directly with the destination (e.g., ecotourism activities or visiting a national park); Reflective Observation (RO), where the traveler steps back to reflect on that experience and its implications; Abstract Conceptualization (AC), where reflective insights are used to form general theories, principles, or knowledge (crucial for integrating complex issues like Climate Change into curricula); and finally, Active Experimentation (AE), where the acquired knowledge is tested in new contexts, leading to measurable sustainable behavior and action.

By mapping the literature against these four phases, we transition the analysis from a descriptive account to a rigorous pedagogical evaluation, ensuring the findings offer profound implications for both theory and practice. This approach yields specific, data-driven curricular implications and innovative teaching materials, providing a clear problem-solving plan for the sector. The systematic literature review thus aims to examine Educational Tourism development by answering two key research questions: 1) How does the Educational Tourism approach support the development of Sustainable Tourism principles? and 2) How is Educational Tourism positioned in addressing under-researched issues such as Climate Change and Environmental Protection, and what are the implications for curricula and teaching materials?

## 2. RESEARCH METHOD

In research in general, there are various purposes and situations in which scholars or researchers write literature reviews. Typically, the purpose of a literature review is to summarize and integrate existing knowledge

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about a topic [27]. This study uses a systematic literature review method with bibliometric analysis. Systematic literature review can be the first step in research to find out all the study themes from all scientific sources that we are interested in and want to explore [28]. This method has been widely used in the social sciences, including in the field of hospitality and tourism and is suitable to help understand the existence or absence of research in a particular topic field [29].

Bibliometrics is the analysis of published information, such as books, journal articles, and data, along with their associated metadata (abstracts, keywords and citations) using statistics to describe or show relationships between scientific works [30]. This method allows researchers to trace the development of a topic, measure the impact of publications, and has similarities with the use of statistics and correlation studies [31]. Bibliometric analysis determines the correlation between articles by analyzing the frequency with which an article is cited by other articles in a particular study domain and furthermore, the data files are imported into VOSviewer to extract authors, articles, journals, research papers, and institutions [1].

The purpose of using the systematic document analysis is twofold; first, is to investigate how the educational tourism approach expand the development of sustainable tourism recently (research question 1); second, to explore the implementation of educational tourism on climate change issues or environmental preservation (research question 2).

The stages in conducting a systematic literature review are collecting articles, filtering data and analyzing data. Data collection using the Scopus database uses search terms for article titles, keywords and abstract sections. The keyword used is "Educational Tourism" with restrictions on the scope of publication search to include scientific articles and review articles in English published between 2019 and 2024 and open access. Publications in the form of books, book chapters and statements are not included. The search results obtained 448 publications with details of the publication year of 43 articles in 2019, 65 articles in 2020, 65 articles in 2021, 70 articles in 2022, 101 articles in 2023 and 104 articles in 2024.

The next stage is the article filtering stage by adding a number of keywords in the Scopus search feature. The keywords used in this study are all keywords that contain the words "Tourism", "Tourist", "Recreation", Travel as the limitation of the theme of the article. The next stage is to conduct an analysis by first saving the results of collecting articles in .ris and .csv format through Scopus. From the data that has been stored, trend analysis will be carried out using the VOSviewer application, including analysis of cluster mapping of educational tourism study themes, mapping the distribution of articles, analysis of the network of article authors, and analysis of citation levels and looking at the novelty of this theme [32].

The Systematic Literature Review in this study includes three stages, namely the stage of data collection with keywords, data screening and data analysis. In stages, it can be seen in the following figure:



Figure 1. Systematic Literature Review Stages on Educational Tourism (Source: Author (2024))

The number of articles published from 2019 to 2024 shows a growth in interest in educational tourism studies. This field is still in a period of growth and expansion; this result shows that there is a gradual growth in publications (Figure 2).

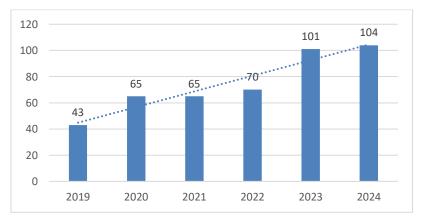


Figure 2. Distribution of Article Publications in 2019-2024 (Source: author (2025))

Significantly, the journal Sustainability (Switzerland) dominates the publication landscape by contributing 72 articles, far exceeding other journals. The next level of productivity is filled by journals focusing on geography and natural heritage, namely the Geojournal of Tourism and Geosites (21 articles) and the International Journal of Geoheritage and Parks (20 articles). Other journals in the moderately productive group include PLoS ONE (17 articles), Geoheritage (15 articles), and the International Journal of Environmental Research and Public Health (14 articles). Generally, the publication distribution is broad, with the remainder of the list dominated by journals with relatively small contributions, ranging between 3 and 8 articles. This concentration indicates that research on Educational Tourism primarily affiliates with, and has the largest publication volume in, journals oriented towards sustainability and environmental/geographic aspects, aligning with the focus of this SLR study.

This data also shows that 448 articles were published in 208 journals with the journal Sustainability from Switzerland having the most articles on the theme of educational tourism, namely 72 articles. The following is a table of the list of the 21 most journals representing 226 journals, equivalent to 50.4% of the total (Table 1).

Tabel 1. Top 21 Journal of Educational Tourism

Journal Name	Number of Articles
Sustainability (Switzerland)	72
Geojournal of Tourism and Geosites	21
International Journal of Geoheritage and Parks	20
PLoS ONE	17
Geoheritage	15
International Journal of Environmental Research and Public Health	14
Land	8
Forests	6
International Journal of Sustainable Development and Planning	6
Cogent Social Sciences	5
Heritage	5
Resources	5
Animals	4
Applied Mathematics and Nonlinear Sciences	4
Journal of Tourism Futures	4
Quaestiones Geographicae	4
Water (Switzerland)	4
Geojournal of Tourism and Geosites	3
Journal of Critical Reviews	3
Journal of Hospitality and Tourism Education	3
Journal of the Geographical Institute Jovan Cvijic SASA	3

Table 1 clearly demonstrates the journal Sustainability (Switzerland) is the dominant outlet for educational tourism research, publishing the highest number of articles at 72. This pattern suggests a strong prevailing focus on the environmental and social dimensions of this tourism sub-field across academic discourse. The selected data were analyzed using two complementary methods: Bibliometric Analysis and Thematic Qualitative Synthesis. VOSviewer software was employed to map the relationships among keywords (co-occurrence), countries/institutions of authors, and citations. This bibliometric mapping enables the identification of publication trends, dominant thematic clusters, and research gaps that remain underexplored.

Thematic Qualitative Synthesis, The qualitative synthesis was conducted on the selected articles to address the Research Questions (RQ). This process functioned as the main instrument to unpack the findings and was carried out deductively, using David Kolb's Experiential Learning Theory (ELT) as the thematic categorization framework. The full content of the key articles was synthesized and organized into the four ELT stages to examine how Educational Tourism facilitates sustainable learning: 1) Concrete Experience (CE), At this stage, the analysis focused on identifying the types of tourism activities and field-based interactions provided within the reviewed studies. These activities represent the foundation of experiential learning, as learners directly engage with the destination environment. Examples include ecotourism practices, participation in conservation initiatives, or community-based tourism programs. Such immersive encounters provide authentic learning opportunities where participants are exposed to real-world sustainability issues, serving as the basis for deeper reflection and conceptual understanding. To achieve educational excellence, institutions are increasingly utilizing innovative learning models, such as Education Hotels, to provide students with the practical, real-world exposure necessary for skills improvement [33]. Keywords on articles: experience, activity, participation,

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practice, field, ecotourism, conservation, volunteering, interaction, engagement, hands-on, community tourism, destination, site visit; 2) Reflective Observation (RO), The second stage emphasizes the mechanisms of reflection and evaluation embedded in educational tourism experiences. Here, the analysis identified how participants critically assessed their encounters and considered the broader implications of their involvement. Practices such as journaling, group discussions, or facilitated debriefings encouraged learners to reflect on sustainability challenges and the personal relevance of their experiences. This reflective process is crucial for transforming raw experiences into meaningful insights, ensuring that participants develop critical awareness of environmental and social dimensions of tourism. The necessity of fostering environmental conscious attitudes among students remains paramount, serving as a key measure of educational success in promoting sustainable practices [34]. Keywords on articles: reflection, reflective, observation, evaluation, assessment, journaling, feedback, critical thinking, perception, attitudes, awareness, review, impact evaluation, interpretation; Abstract Conceptualization (AC), In this stage, the synthesis examined how participants developed theoretical insights or conceptual frameworks from their reflections. The process involved abstracting concrete experiences into broader ideas and understanding complex issues such as climate change, biodiversity loss, or sustainable development strategies. For instance, educational tourism activities were shown to foster integrative thinking, enabling learners to connect local phenomena with global sustainability challenges. By moving from observation to conceptualization, participants constructed a more structured and theoretical comprehension of sustainability in tourism contexts. The diffusion of innovation through digital technology transformation is a pervasive force in higher education, fundamentally impacting lecturer performance and enhancing the overall learning framework [35]. Keywords on articles: conceptualization, framework, model, theory, knowledge development, learning outcome, curriculum, understanding, integration, pedagogy, sustainability concepts, climate change framework, education model; Active Experimentation (AE), The final stage focused on identifying behavioral outcomes and the development of sustainable action plans that emerged from participants' learning journeys. This involved translating conceptual insights into practical applications, such as adopting eco-friendly travel practices, supporting conservation initiatives, or advocating for sustainable tourism policies. The reviewed studies highlighted how educational tourism not only raised awareness but also motivated tangible changes in behavior and long-term commitments to sustainability. Beyond environmental goals, effective tourism management must be strategized to tackle local socio-economic challenges, explicitly contributing to the reduction of poverty and unemployment in support of regional resilience [36]. In this way, active experimentation ensures that the learning process culminates in measurable impacts on individual practices and community engagement. Keywords on articles: action, implementation, behavior, practice adoption, innovation, strategy, sustainable practices, policy, intervention, experimentation, action plan, impact, transformation, solutions.

To systematically assess the academic rigor and thematic focus of the collected literature, a quantitative thematic analysis was performed on the abstracts of the 448 articles. This analysis employed Kolb's Experiential Learning Theory (ELT) cycle—specifically Concrete Experience (CE), Reflective Observation (RO), Abstract Conceptualization (AC), and Active Experimentation (AE)—as a structured analytical framework. The aim was to map the research content against these four learning stages to reveal which components of the educational tourism process are most frequently discussed and, crucially, which are neglected.

In summary, the quantitative thematic analysis clearly outlines the current research landscape: the literature is robust in defining theoretical models (AC), documenting tourist activities (CE), and proposing future strategies (AE). However, the pronounced shortfall in coverage for Reflective Observation (RO), the critical stage linking direct experience to conceptual understanding, reveals a significant methodological and theoretical limitation. This finding serves as a powerful evidence base for the research gap identified in this SLR, suggesting a vital future research direction focusing on the processes of critical reflection, evaluation, and attitudinal impact within educational tourism studies.

# 3. RESULTS AND DISCUSSION

## 3.1. Co-Occurence Analysis

In its development, educational tourism Discussing Geotourism, Ecotourism and Cultural Tourism within the scope of sustainable tourism development. Ecotourism concept for educational tourism helps build a strong identity of the place, as students become aware of the beauty and uniqueness of the environment they live in and gives them an understanding of the value of the place and the reasons why it is suitable for ecotourism destinations [37]. The development of educational tourism creates a concept of geotourism that includes geoheritage and geoeducation as part of promoting sustainable tourism [38]. Geoheritage, encompassing significant geological sites and landscapes, is crucial for scientific understanding, education, and the development of geotourism [39]. Geoeducation is vital for raising awareness about geological heritage and promoting its conservation, often integrated within the framework of geotourism and community involvement [40].

The development of educational tourism for cultural tourism, especially in museums, is experiencing the challenge that the value of education is no longer a significant influencing factor to access cultural and creative products of museums, so museums need to create innovative activities that provide experiences for visitors [41]. Innovations in the museum can be in the form of digitization and digitization such as the use of virtual reality (VR), augmented reality (AR), the museum web to improve the visitor experience and strengthen the educational aspect [42].

An advanced analysis using VOSviewer is a network visualization analysis on topics within the scope of educational tourism (figure 3). The network visualization analysis showed 6 clusters formed by distinguishing the colour of the clusters. Cluster 1 consists of 84 orange items with prominent items such as tourism, education, ecotourism, geotourism and tourist development. Tourism is connected to human items in cluster 2, environmental protection in cluster 3 and human experiment in cluster 4.

Cluster 2 has 37 items in green with the dominant items being human, educational status, and adult. Educational status is related to perception in cluster 1, personal satisfaction in cluster 4 and awareness in cluster 3. In dark blue cluster 3, there are 27 items with prominent knowledge, conservation and environmental protection. The yellow colour for cluster 4 consists of 18 items with human experiment and satisfaction. Cluster 5 in purple has 9 items, including motivation and social participation. And the last cluster of 6 light blue colours only has 2 items, namely rural area and rural tourism.

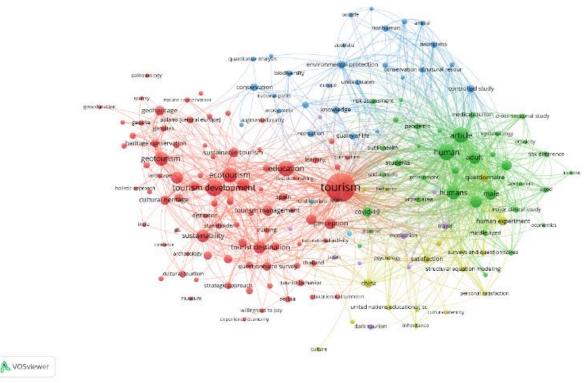


Figure 3. Network Visualization of Educational Tourism (Source: Author (2025))

The next analysis is Overlay Visualization which indicates the year of publication of the keyword with yellow having a more recent publication year. From figure 4, we can see that the keywords originating in cluster 2 dominate the latest publications compared to the keywords in cluster 1. The keyword Sustainability in cluster 1 with blue colour provides a connection to the main topics in educational tourism such as tourism, education, ecotourism, geotourism and tourist development with a larger circle. The diversity of topics discussed in the yellow nodes such as dark tourism, medical tourism, physical activity, communication, student shows the wider research scope of educational tourism although it is still small. Physical activity is crucial for health and wellbeing across all age groups, with various factors, including global events like the COVID-19 pandemic, influencing participation levels and necessitating targeted interventions [43]. Medical tourism involves individuals traveling to other countries to receive medical care, often driven by factors such as cost, access to specialized treatments, or higher quality services [44].

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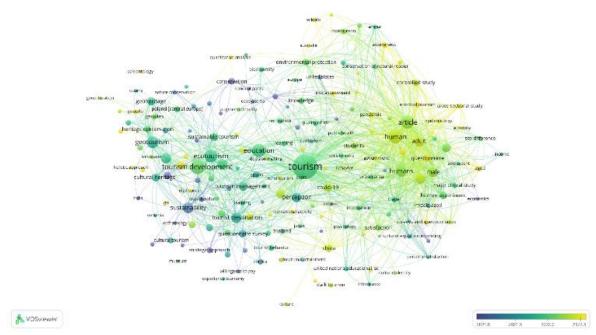


Figure 4. Overlay Visualization of Educational Tourism (Source: Author (2025))

Next is the Density Visualization analysis to find out what keywords already have a lot of discussion by being marked with solid yellow [28]. From figure 5, we can see that the key glass of "Tourism", "Education", "Ecotourism", "Tourism Development" and "Human" has a yellow colour so that it can be said to have a level of research density and indexed by Scopus. Topics such as "Conservation", "Environmental Protection", "Cultural Tourism", "Tourist Behaviour", "Communication", "National Parks", "Climate Change" and "Dark Tourism" are still rarely done related to educational tourism. Tourist behavior encompasses the actions and decisions of individuals during their travel, including their choice of accommodation, transportation, and activities [45]. Understanding tourist behavior, such as attitudes towards local issues like wildlife-vehicle collisions, is crucial for developing effective mitigation strategies and enhancing the overall visitor experience [46]. By looking at this density visualization map, researchers can use it as a basis to discuss research topics that are still few.

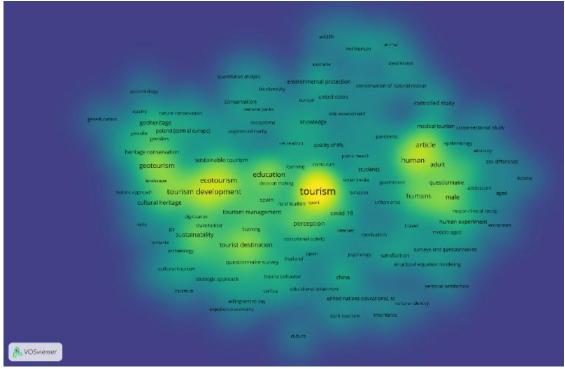


Figure 5. Density Visualization of Educational Tourism (Source: Author (2025))

# 3.2. Thematic Syntesis

The study applied the ELT stages Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation as a guiding conceptual lens to classify and analyze educational tourism implementation. By structuring the analysis around these four stages, the framework offered a systematic pathway for addressing the research questions. The analysis measured the frequency of keywords related to the four ELT stages to diagnose the thematic balance of research within Educational Tourism. Table 2 presents the net results of this frequency analysis, showing the number and percentage of abstracts that covered themes relevant to each stage.

Tabel 2. ELT Stages Mapping

ELT Stage	Core Theme Represented	Number of Abstracts (N=448)	Percentage (%)
CE (Concrete Experience)	Activities, Destinations, Visits, Participation, Tourist	383	85.68
RO (Reflective Observation)	Reflection, Evaluation, Perception, Impact, Critical Understanding	293	65.55
AC (Abstract Conceptualization)	Theory, Model, Concept, Knowledge, Curriculum	438	97.99
AE (Active Experimentation)	Behavior, Action, Recommendations, Strategies, Implementation	326	72.93

The distribution presented in Table 2 clearly highlights a disproportionate thematic focus. Specifically, the data shows that Abstract Conceptualization (97.99%) is the most robust stage, while Reflective Observation (65.55%) is the least covered, indicating a significant theoretical and methodological limitation in the current body of research.

## Concrete Experience (CE)

The strong presence of the Concrete Experience (CE) stage, evident in 85.68% of the abstracts, confirms the literature's proficiency in describing the physical settings, on-site activities, and logistical aspects of educational tourism programs. As the initial stage of the ELT cycle, CE represents the direct engagement of the tourist with the destination—the 'what' and 'where' of the learning process. This high frequency indicates that researchers prioritize documenting the experiential base, ensuring the articles provide rich descriptive accounts necessary for practitioners seeking to design or replicate educational travel. This body of work successfully establishes the foundation from which higher-order reflection and conceptualization are theoretically intended to occur.

The synthesis of the abstracts reveals that the CE stage is predominantly framed around specific, tangible activities and sites, often emphasizing cultural or environmental themes. Common examples include comparative analyses of cultural tourism in urban destinations (e.g., National Park), and studies focusing on the effectiveness of site-specific initiatives, such as the implementation of the eco-tourism destinations. Furthermore, the literature frequently details engagement with distinct forms of niche tourism, such as geotourism through projects like the Chicamocha Canyon Geopark and Karst Geoheritage of Tara National Park, or the visitation of heritage sites to enhance destination loyalty [47]. These examples illustrate the robust focus on documenting both the location and the direct interaction between the tourist and the environmental or cultural assets, confirming the hands-on nature of the subject matter [48].

While the strong documentation of Concrete Experience is a necessary prerequisite for Educational Tourism research, it represents an insufficient condition for achieving sustainable behavioral change when viewed through the full ELT cycle. The high volume of CE studies provides rich data on exposure but, in isolation, cannot guarantee learning outcomes. This strong descriptive focus on the activity and destination, without a corresponding methodological commitment to the ensuing Reflective Observation (RO), results in a literature base that is highly detailed on the inputs and less certain about the quality of the cognitive processing. Thus, the CE stage highlights the literature's logistical strength while simultaneously underscoring its theoretical weakness regarding the internalization of sustainable principles.

## Reflective Observation (RO)

The Reflective Observation (RO) stage is the least covered theme in the literature, appearing in only 65.55% of the abstracts, which signals the most critical research gap in Educational Tourism. This stage in the ELT cycle is fundamental, as it represents the process where participants actively review and analyze the Concrete Experience (CE), turning direct engagement into subjective interpretation and forming new perceptions of the environment. The underrepresentation of keywords related to evaluation, critical reflection, attitudinal

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change, or impact assessment suggests that the field often documents the experiential inputs and the desired behavioral outputs, but systematically neglects the cognitive 'black box' that links the two. This deficit means that the claimed educational and transformative potential of tourism remains largely unvalidated in a structured, measurable way.

The scarcity of RO-focused studies creates a substantial theoretical vulnerability when addressing complex global imperatives, such as Climate Change and Environmental Protection (RQ2). Issues of this magnitude require deep, critical reflection that challenges pre-existing beliefs and leads to complex Abstract Conceptualization. However, the current literature often bypasses this critical stage; for instance, while a study might note the necessity of recognizing the attitude of park authorities towards sustainability [49] or exploring the role of social media in changing tourist behavior [50], it frequently fails to detail the rigorous methodological process of measuring *how* these attitudes or behaviors were influenced by the educational content itself. Consequently, the research struggles to move beyond generalized claims of 'awareness raising' to provide empirical evidence of sustained cognitive and evaluative shifts.

Fundamentally, the imbalance within the ELT cycle—where RO is the weakest link—means that the literature prescribes sustainable behavior (AE) without fully ensuring that the experience successfully fostered the internal processing necessary for that behavior to take root. This is the key insight of this SLR: the Educational Tourism research is highly effective at defining the learning objective and designing the activity, but lacks rigor in scientifically investigating the quality of the learning outcomes and the mechanism of internalization. Closing this RO gap is essential for future research to move from merely advocating for Educational Tourism as a tool for sustainability (RQ1) to providing empirical proof of its effectiveness in generating conscious, critically-informed, and lasting behavioral change.

## Abstract Conceptualization (AC)

The near-universal coverage of the AC stage (97.99%) in the abstract notes reflects the literature's necessary strength in establishing theoretical clarity and defining the intellectual contribution of each study. As the third stage in Kolb's cycle, AC represents the development of general principles and abstract knowledge from observations. Consequently, almost every abstract frames its purpose around identifying the main aspects of a concept, developing a new model, or testing established theory. This high frequency confirms that the field successfully articulates its core constructs, such as defining the scope of sustainable cultural tourism or outlining the components of a geopark project as a novel strategy for socio-economic development.

The AC stage is consistently demonstrated through the explicit use of established theoretical frameworks to anchor the research problem. For example, several studies utilize foundational behavioral models, such as the Theory of Planned Behavior (TPB), as a frame to develop constructs related to tourist behavior and the choice of a destination. Furthermore, a significant number of articles introduce or test integrated management concepts and strategies, such as proposing an "Ecological Beach" management model for coastal preservation or suggesting effective strategies for managing traditional restaurants to enhance destination loyalty [51]. These contributions are frequently situated within broader global agendas, utilizing the UN 2030 Agenda for Sustainable Development as the essential conceptual foundation for local sustainable development strategies [52].

In sum, the thematic synthesis reveals that the Educational Tourism literature is conceptually robust and effectively positioned to contribute new knowledge through the development of frameworks, theories, and models. This strength is vital for progressing the field academically. However, the high focus on conceptualization (97.99%) without a proportional commitment to the preceding Reflective Observation (RO) stage (65.55%) points to a systemic imbalance. The high AC coverage suggests that while the research is excellent at defining what should be thought and how it should be modeled, it often neglects to detail the crucial reflective process through which learners actually arrive at those new conceptualizations. This confirms that theoretical output is prioritized over the empirical validation of the learning mechanism itself.

## Active Experimentation (AE)

The significant coverage of the Active Experimentation (AE) stage, present in 72.93% of the abstracts, demonstrates the literature's strong commitment to practical application, policy relevance, and future orientation. As the final stage of the ELT cycle, AE focuses on applying the conceptual knowledge gained (AC) to new contexts, often resulting in concrete recommendations, strategies, or policy applications intended to influence sustainable behavior or industry practice. This emphasis confirms that researchers prioritize translating academic insights into tangible outcomes, directly addressing the implicit goals of RQ1 (supporting sustainable tourism) and RQ2 (implications for curriculum).

The synthesis reveals that AE often manifests through explicit calls for action across various levels. At the policy level, abstracts frequently recommend heightened awareness and educational efforts regarding low-carbon sports tourism or stress the importance of careful analysis to improve the promotion and capitalization of cultural tourism to increase sustainability. At the management level, studies focus on developing and testing

management protocols and educational programs to successfully implement models like the "Mobile GIS Application," [53] or propose innovative strategies to enhance destination loyalty [54]. This high frequency confirms the field's strong prescriptive nature, positioning educational tourism as a vital tool for driving necessary shifts in governance and operational practice.

However, the strength of the AE stage is compromised by the weakness of the preceding Reflective Observation (RO) stage. The literature tends to jump directly from describing the activity (CE) to prescribing the action (AE) without rigorously validating the mechanism of internalization (RO). For instance, numerous studies conclude with the need to reduce the financial barriers or foster greater accountability among tourists for their low-carbon activities. While these recommendations are crucial, the lack of robust RO data means there is often insufficient empirical evidence that the educational *experience* itself—rather than external incentives—is the primary driver for a tourist's subsequent *willingness* to adopt these new behaviors. Thus, while AE provides strong external validity through its practical relevance, its internal validity as a product of the learning cycle remains vulnerable.

## 3.3. From Activity to Action: Diagnosing the Missing Link in Educational Tourism

The analysis of Educational Tourism literature using Kolb's Experiential Learning Theory (ELT) reveals a critical systemic imbalance. While the field demonstrates robust coverage of Abstract Conceptualization (AC) (97.99%) and Concrete Experience (CE) (85.68%)—meaning it is strong in defining theories and describing activities—it significantly neglects the stage of Reflective Observation (RO) (65.55%). This deficit in measuring critical reflection, attitude change, and subjective interpretation is the central finding. The core interpretation is that research prioritizes inputs and desired outputs while systematically ignoring the crucial cognitive mechanism that links hands-on experience to abstract knowledge and eventual sustainable behavior. This means the transformative potential claimed for educational tourism remains largely unvalidated at the empirical learning level.

This imbalance has significant theoretical and practical implications. Theoretically, the weak RO stage compromises the internal validity of the entire body of work; the literature may prescribe actions (Active Experimentation or AE) without sufficient evidence that the educational experience itself—not external factors—is the primary driver of behavior change. This stands in contrast to previous studies that often offer only normative accounts of sustainability. Practically, the finding implies that current Educational Tourism programs may be highly engaging but ineffective in generating deep, critical understanding. Program designers must move beyond mere description of sites and activities to integrate formal, structured reflection techniques (like guided journaling or facilitated debriefing) to ensure learning is internalized.

The novelty of this research lies in its systematic, quantitative application of the ELT framework to diagnose a process gap, rather than just a thematic one. By pinpointing the Reflective Observation stage as the "missing link," the study provides a specific blueprint for methodological improvement. Furthermore, the analysis highlighted under-researched topics such as "Climate Change," "Conservation in National Parks," and "Dark Tourism." Integrating these pressing global issues with a renewed methodological focus on the neglected RO stage presents a powerful opportunity for future research to become more relevant and impactful.

To address these findings, the study puts forth specific recommendations. Future research must adopt mixed-methods designs that explicitly measure the four ELT stages, particularly through pre- and post-intervention assessments of attitude (RO) and behavior (AE). Academics are urged to target the identified gaps in topics like Climate Change to broaden the field's scope. Finally, policymakers and industry practitioners must invest in training for guides to facilitate reflective learning, ensuring that the educational experience is not just a passive site visit but a rigorous process that intentionally moves participants through all stages of the learning cycle, leading to conscious and lasting behavioral change.

# 4. CONCLUSION

This Systematic Literature Review, guided by the Experiential Learning Theory (ELT) cycle, affirms that while Educational Tourism is conceptually robust and actively implemented, its effectiveness in driving sustainable behavior change is compromised by an imbalanced learning process. The synthesis of 447 articles demonstrated that research excels in documenting the Concrete Experience (CE) and defining the Abstract Conceptualization (AC), while showing a strong commitment to Active Experimentation (AE) through policy recommendations. The key finding, directly addressing the core research questions (RQ1 and RQ2), is that the Reflective Observation (RO) stage is the weakest link in the literature. This deficiency means that the claimed support for Sustainable Tourism and the ability to tackle complex issues like Climate Change currently rests on descriptive accounts and prescriptive recommendations, rather than empirically validated internal learning processes. By systematically applying the ELT framework, this research contributes theoretically by providing a diagnostic tool for evaluating the maturity of Educational Tourism studies. Our finding highlights that the field has prioritized the 'what' (activity design) and the 'why' (conceptual goal) over the 'how' (the mechanism of

internalization). This study serves as a crucial call to action, repositioning the debate from mere advocacy of educational tourism to the rigorous validation of its pedagogical efficiency. This framework explicitly answers how Educational Tourism is positioned (RQ2): it is well-positioned conceptually but poorly prepared methodologically to measure the deep reflection required to handle issues of global complexity. Building on the identified Reflective Observation (RO) gap, future research should engage in rigorous empirical and methodological validation to strengthen the educational impact claims of this sector. A promising direction for future research lies in developing mixed-methods studies focused intently on the learning process itself within educational tourism. This effort should primarily encompass Methodological Development, which involves creating and rigorously testing new instrumentation and protocols specifically designed to accurately measure participants' reflective capacity and attitudinal change both during and immediately following the educational tourism activities.

Furthermore, Empirical Validation is necessary, taking the form of comparative case studies that assess the sustainability behavior of tourists who underwent a structured reflective intervention (Reflective Observation, or RO) versus those who did not. This approach would effectively isolate the true, measurable impact of the reflection stage on Active Experimentation (AE) outcomes, providing robust evidence of its pedagogical value. Complementing these research avenues are practical applications essential for both curriculum developers and destination managers. These applications must prioritize Curriculum Integration, designing educational tourism programs that mandate structured journaling, group debriefs, or post-trip reflection assignments to move participants from Concrete Experience (CE) to Abstract Conceptualization (AC) more effectively and cement long-term behavioral change. These empirical and practical explorations would provide grounded evidence to fully support the conceptual claims made in this paper, enabling practitioners and policymakers to design educational tourism experiences that generate genuine, measurable, and lasting sustainable behavior.

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