# Emerging Research Trends in Experiential Learning in Higher Education: A Scopus Database Bibliometric Analysis

I Komang Mertayasa<sup>1</sup>, Abdullah Pandang<sup>1</sup>, Arismunandar<sup>1</sup>, Ansar<sup>1</sup> <sup>1</sup>Universitas Negeri Makassar, South Sulawesi, Indonesia

Corresponding author e-mail: <a href="mailto:kmertayasa19@gmail.com">kmertayasa19@gmail.com</a>

Article History: Received on 8 September 2025, Revised on 6 October 2025, Published on 22 November 2025

Abstract: This study aims to map global research developments on experiential learning (EL) in higher education by employing a bibliometric approach. Experiential learning has gained increasing attention as a transformative pedagogy that connects theoretical understanding with real-world application. Research data were collected from the Scopus database for the years 2023–2025 and analyzed using VOSviewer and Biblioshiny to examine publication trends, citation patterns, author productivity, and thematic clusters. The findings reveal a sharp and consistent increase in EL-related publications worldwide, with the United States, Canada, and the United Kingdom emerging as the most productive countries, while Southeast Asia – particularly Indonesia – shows relatively limited contributions. The analysis also identifies several emerging thematic clusters, including the integration of EL with immersive technologies such as artificial intelligence, virtual reality, and the metaverse, as well as applications in service learning, entrepreneurship education, and authentic assessment. The novelty of this study lies in its focused examination of the 2023–2025 publication period, capturing the latest global trends shaped by digital transformation and sustainability agendas. Practically, the results highlight the need for stronger institutional and policy support to systematically embed EL within higher education curricula. Overall, this study contributes to strengthening evidence-based, studentcentered learning and informs future research opportunities in experiential education.

**Keywords:** Authentic Assessment, Educational Policy, Experiential Learning, Immersive Learning Technologies, Student-Centered Learning

#### A. Introduction

Experiential learning (EL) has long been recognized as an educational approach that emphasizes students' active involvement in the learning process through direct experience, reflection, and the application of knowledge in real-world contexts. This approach is believed to strengthen the link between theory and practice while also developing critical thinking, collaborative, and adaptive skills, which are key demands of 21st-century competencies (Shore & Dinning, 2023). In the context of higher education, experiential learning is seen as a bridge connecting conceptual

knowledge with professional skills relevant to the world of work and global society. Conceptually, experiential learning leverages the power of experience in the educational process, engaging students in high-impact practices that contribute to the formation of their mindset, competencies, and skills (Saggar et al., 2023). This approach is based on the four main phases of the learning cycle proposed by David A. Kolb: concrete experience, reflective observation, abstract conceptualization, and active experimentation. These four phases are interconnected to create a reflective, indepth, and contextual learning process, where students gain understanding through hands-on practice and critical reflection on their learning experiences (LaVan & Carley, 1984; Rahmi, 2024). Thus, EL places students as active subjects who construct knowledge through interaction with an authentic learning environment.

Within that framework, various studies confirm that EL can change the cognitive structure and attitudes of learners and expand their existing skills (Pamungkas et al., 2021). Learning becomes a continuous process where students bring their personal experiences and integrate them with social and academic contexts (Lebert & Vilarroya, 2024; Isnawati & Jalinus, 2020). This view is based on the classical thinking of John Dewey, Kurt Lewin, and Jean Piaget, who emphasized the importance of experience as the foundation for the formation of individual knowledge and character (Mandeville, 2001). In a modern context, this theory has transformed into a constructivist approach, which states that learning is an active process of building meaning through direct engagement and reflection on experience (Kolb & Kolb, 2005).

The contextual learning model, rooted in EL principles, also emphasizes the importance of real-world experience in shaping students' understanding (Intisari, 2024). Through this approach, students actively connect learning materials with everyday life, deepen their higher-order thinking skills, and foster learning independence (Antara et al., 2019; Zannah et al., 2024). Thus, learning becomes more meaningful because it allows for the transfer of knowledge from the classroom to authentic situations (Putri, 2023). Despite extensive empirical evidence supporting the effectiveness of EL, its implementation in higher education still faces challenges in terms of standardization, institutional capacity, and long-term evaluation of student learning outcomes.

However, most empirical and theoretical studies on experiential learning still focus on the context of higher education in Western countries such as the United States, Canada, and the United Kingdom. This condition creates a knowledge gap regarding how the relevance, adaptability, and effectiveness of EL theory and practice are applied in other regions, including Southeast Asia, including Indonesia, which has different social, cultural, and pedagogical characteristics (Stock et al., 2024). The paradigm shift from conventional to contextual learning emphasizes the importance of real-world experience as the core of the learning process, shaping holistic understanding (Hoiriya et al., 2021). However, research systematically examining the

application of EL in the context of higher education in Indonesia is still very limited, both in terms of curriculum design, its impact on the development of 21st-century skills, and its relevance to the Merdeka Belajar–Kampus Merdeka policy (Syafriani et al., 2025). In fact, empirical evidence shows that this approach positively contributes to improving students' critical, analytical, and reflective thinking abilities in dealing with real-world, evidence-based situations (Mertayasa et al., 2024).

Recent developments in global research indicate that experiential learning is expanding in meaning and application with the advancement of digital technology. Various studies have explored the integration of EL with immersive technologies such as virtual reality (VR), artificial intelligence (AI), and the metaverse, offering interactive and authentic learning experiences (Salinas-Navarro, Arias-Portela, et al., 2024; Hwang et al., 2023). Additionally, the application of EL is increasingly linked to the fields of education for sustainable development, service learning, entrepreneurship education, which reinforces EL's position as a multidisciplinary approach contributing to educational innovation and sustainable development (Zainuri & Huda, 2023; Fang & O'Toole, 2023). With the increasing global attention toward experiential learning, a scientific mapping is needed to describe the development, thematic direction, and global distribution of EL research contributions. This kind of analysis is important not only for understanding the position of EL research within the educational science landscape but also for identifying new research opportunities relevant to digital transformation and the needs of 21st-century learning. Without systematic mapping, the development of EL research risks being fragmented and not integrated with the broader educational innovation agenda, especially in developing countries like Indonesia.

This research uses a bibliometric approach to systematically analyse the development of experiential learning research in global higher education during the period 2023-2025. This approach allows for the identification of publication trends, citation patterns, author productivity, and thematic clusters that illustrate the direction of EL research development. This analysis also reveals research areas that are still open for exploration, such as the integration of EL in digital learning, the development of authentic experience-based assessments, and its application in the context of education in developing countries. This research provides an empirical overview of the global experiential learning scientific landscape while also strengthening the theoretical foundation of student-centered learning. Additionally, the findings of this research also provide a foundation for educational institutions and policymakers to strengthen the integration of EL into the curriculum, develop authentic assessments, and promote cross-disciplinary and cross-country collaboration. Thus, this research is expected to make a significant contribution to the direction of higher education transformation toward a reflective, innovative, and sustainable learning system in the digital age. The research questions posed in this study are as follows: 1) How have research trends and publication patterns on experiential learning in higher education?

2) What are the most influential themes, citation patterns, and conceptual clusters that characterize current research on experiential learning in higher education? 3) How do recent studies on experiential learning contribute to the future direction of educational research, and what challenges and policy recommendations emerge from this body of work?

#### **B.** Methods

This study uses the Scopus database as a data source for research publication documents. Scopus was chosen because it allows researchers to monitor the development of global studies related to the trends in the development of experiential learning literature in higher education. The search process will be conducted on October 28, 2025. The document type used is an article, written in English, and published between 2023 and 2025. The subject area is limited to the field of social sciences. The search was conducted using the following query: ("experiential learning" OR "experiential learning model" OR "Kolb learning cycle" OR "experiential teaching") AND ("higher education" OR "university"). These keywords were selected because they represent the core terminology most frequently used in foundational and contemporary literature on experiential learning, ensuring that the search captures studies grounded in the Kolb learning cycle as well as its pedagogical applications in higher education. The keywords were reviewed through several initial trial searches to confirm that they successfully retrieved publications aligned with the intended research focus. They were also chosen to maintain conceptual specificity while remaining broad enough to accommodate variations in how experiential learning is described across disciplines. Although related terms such as "workintegrated learning," "service learning," and "community-based learning" are closely connected to experiential learning, they were not included in the main query to avoid retrieving studies centered on specific sub-models rather than the overarching EL framework. However, these concepts emerged naturally during the analysis phase through keyword co-occurrence mapping, indicating that the selected search terms were sufficiently comprehensive to capture the broader thematic landscape of experiential learning research. To ensure transparency in the document identification and screening process, the data selection procedure is presented using a PRISMA flow diagram. This diagram illustrates each stage of the process from the initial identification of records in the database to screening, eligibility assessment, and the final inclusion of studies for analysis.

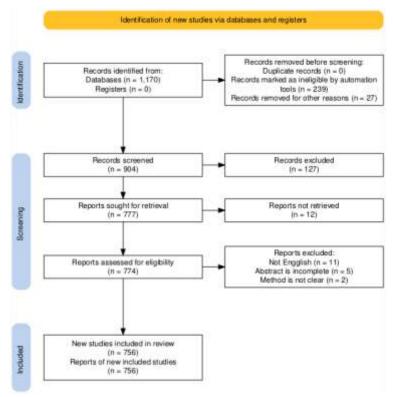


Figure 1. PRISMA Flow Diagram of the Study Selection Process

Figure 2 shows the data analysis process focused on using research documents listed in the Scopus database. The Scopus database was chosen for its popular and selective reputation. This database adheres to strict policies and a rigors selection process for research documents by an editorial board of independent scientists to ensure the highest quality before indexing. By using Scopus as a data source, researchers can access high-quality research documents. After going through a filtering process, the collected data was then cleaned using OpenRefine software. The cleaned data was then entered into the analysis software VOSviewer and Biblioshiny. VOSviewer is a bibliometric analysis tool used to identify literature published in the Scopus database (Ma'arif et al., 2023). With the help of VOSviewer, data can be visualised and analysed in depth to answer the research questions posed. Meanwhile, Biblioshiny is used to supplement data on productive authors and other data visualisation needs.



Figure 2. Data Analysis Process

#### C. Results and Discussion

## Research and Publication Trends on Experiential Learning in Higher Education

The results of the bibliometric analysis show a consistent and significant increase in the number of publications related to the topic of experiential learning (EL) in the context of higher education during the period from 2023 to 2025, totaling 756 document. Based on this data, the number of documents indexed in the Scopus database increased from 209 documents in 2023 to 238 documents in 2024 and reached 309 documents in 2025. This increase indicates that academic interest and attention toward the application of experiential learning models are growing globally. This phenomenon indicates growing recognition of the importance of EL as a core pedagogy, along with its increasing adaptation across various study programs (Saggar et al., 2023). The rising number of research studies also demonstrates an evolution in the theoretical understanding of how learning experiences influence student motivation, particularly within the context of social interaction and the campus environment (Maulidina et al., 2025). This trend reflects the increasing urgency for learning that emphasizes active student engagement, reflection, and direct application in real-world contexts.

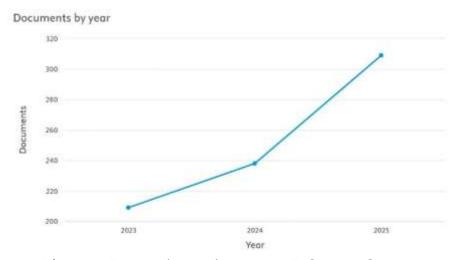


Figure 3. Research trends 2023-2025, Source: Scopus

This trend of increasing publications can be attributed to a number of global changes in the higher education system. Post-pandemic transformations have prompted universities in various countries to adopt active and authentic learning approaches to address the challenges of adapting to drastic changes in the educational environment, including the increasing demand for flexible and innovative experiential learning (Utomo et al., 2024; Febriansah et al., 2024). This is also intended to facilitate the development of 21st-century skills and essential digital competencies in the era of Industry 4.0 digitalization (Ulfah, 2022). Additionally, outcome-based education policies and the needs of the workforce for graduates with practical competencies

further strengthen the position of experiential learning as a relevant and effective learning strategy.

Based on the analysis results of Trends in Research and Publications on Experiential Learning in Higher Education, it can be concluded that research on experiential learning shows a very positive and sustainable development direction. The year-overyear increase in the number of publications indicates that this topic is gaining significant attention from academics and higher education practitioners worldwide. This increase indicates that experiential learning is increasingly recognized as a vital method for enhancing students' contextual understanding and practical skills (Rahmi, 2024). This trend reflects that experiential learning is not only becoming a popular learning approach but is also evolving as an important paradigm in the reform of higher education systems that focus on practical skills, critical reflection, and active student engagement. The increase in publications across various countries indicates a global awareness of the importance of connecting theory with practice through direct experience in the learning process. Considering these developments, research on experiential learning is predicted to continue to increase in the future and has great potential to become an interesting and relevant topic for further discussion. This study not only contributes to the development of learning theory but also serves as a foundation for formulating policies and curriculum innovations that are oriented toward meaningful learning and the development of students' professional competencies in higher education. From a geographical distribution perspective seen in figure 4, the United States is the country with the highest number of publications on experiential learning in higher education, with 221 documents. The next position is held by Canada with 70 documents, followed by the United Kingdom (62), Australia (51), Spain (35), India (30), Indonesia (28), Malaysia (28), South Africa (28), and China (25). This finding indicates that although research on experiential learning is still dominated by Western countries, participation from Asian and African countries demonstrates the expanding application of this learning model across various higher education systems worldwide.

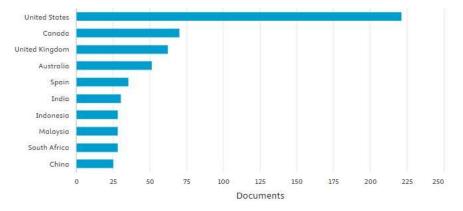


Figure 4. Document by country, Source: Scopus

The dominance of the United States and English-speaking countries reflects their long tradition in the development of applied learning such as service learning, work-integrated learning, and cooperative education. Meanwhile, the increasing contribution of publications from Indonesia, Malaysia, and China illustrates a regional shift toward strengthening experiential pedagogy practices in Asia. The application of this model is used to enhance students' practical skills, strengthen learning engagement in the classroom, and align learning outcomes with the needs of the working world. The geographical distribution of publications shows that Indonesia only contributes 28 documents related to research on experiential learning in higher education. This number is still considered low compared to countries like the United States (221 documents), Canada (70), or the United Kingdom (62). This condition indicates that although the concept of experiential learning is beginning to be adopted in various educational contexts in Indonesia, academic attention and the number of studies conducted are still relatively limited.

The limited number of publications indicates that there are still ample opportunities for research development in this field. Research in Indonesia still faces limitations in documenting best practices and the impact of experiential learning programs (Maritz et al., 2022). Indonesia has great potential to expand the study of experiential learning, considering the diverse characteristics of higher education and the need for learning models that can connect theory and practice in the field. Additionally, the implementation of experiential learning is highly relevant to the direction of national education policy, which emphasizes active learning, collaborative projects, and the enhancement of students' professional competencies. Geographically, research in Southeast Asia, including Indonesia, is still limited in quantity and diversity. Most of the literature is still dominated by Western contexts, while the application of experiential learning in different education systems, such as in Indonesia, presents unique social, cultural, and institutional contexts for further research. Topics such as EL adaptation in the national curriculum, its integration into Merdeka Belajar-Kampus Merdeka (MBKM), and its impact on the work readiness of Indonesian students are promising areas for study.

Based on a bibliometric analysis of publications from the past three years (2023–2025), ten authors were identified as the most productive in the field of research related to experiential learning in higher education. Data shows that their contributions play an important role in enriching the literature and expanding understanding of the application of experiential learning models in various academic contexts.

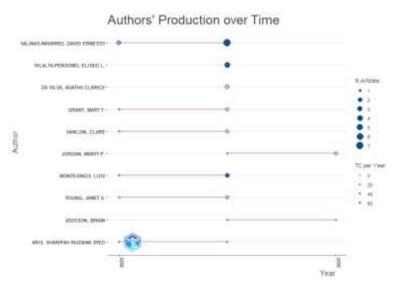


Figure 5. Ten most productive writers, Source: Biblioshiny

The most productive author is Salinas-Navarro, David Ernesto, with a total of 10 articles published during the period. His works largely focus on developing experiential learning models in the context of engineering, management, and projectbased education. The dominance of its publications highlights its central role in building a theoretical and practical framework that integrates direct experience into college learning. The second position is held by Vilalta-Perdomo, Eliseo L., who produced 4 articles. His research tends to highlight the reflective aspects and collaborative learning in experiential education, as well as how this approach can enhance students' critical and adaptive thinking skills. Next, there are six authors with a balanced number of publications, each producing 3 articles: Da Silva, Agatha Clarice; Grant, Mary T.; Hanlon, Clare; Jordan, Marty P.; Montesinos, Luis; and Young, Janet A. 1) Da Silva, Agatha Clarice, made significant contributions to research on experiential learning in professional education and teacher training; 2) Grant, Mary T., highlighted the application of experiential learning to enhance student engagement and self-reflection; 3) Hanlon, Clare, focused her study on the relationship between service learning and the development of social values in a university context; 4) Jordan, Marty P., examined the effectiveness of experiential learning in entrepreneurship and leadership training; 5) Montesinos, Luis, conducted extensive research on the application of EL in engineering education and engineering design projects; and 6) Young, Janet A., highlighted the implementation of EL in hybrid learning and its impact on students' collaborative skills. Meanwhile, Addison, Brian is in tenth place with 2 publications. Although their numbers are fewer compared to other authors, their contributions remain significant, especially in research on authentic assessment and experiential learning-based curriculum innovation. Overall, these ten authors represent an active and influential academic community in the development of experiential learning research in higher education. Their diverse research topics ranging from curriculum design and pedagogical reflection to

technology integration demonstrate that experiential learning continues to evolve as a multidisciplinary field of study relevant to the needs of 21st-century learning.

# **Highly Cited Documents and Influential Themes**

In an effort to understand recent research developments, an analysis of document citation data was conducted to identify the level of influence and direction of scientific publication trends in recent years. Citations are used as one of the main indicators to assess the extent to which a scientific work contributes to the development of knowledge in its field. The following table 1 presents a list of the 10 publications with the highest number of citations discussing experiential learning in higher education during the period 2023–2025.

Table 1. Document with the highest number of citations

Author	Title	Year	Citation
Salinas-Navarro, D.E.; Vilalta-	"Using Generative Artificial Intelligence Tools to		
Perdomo, E.; Michel-Villarreal,	Explain and Enhance Experiential Learning for		
R.; Montesinos, L.	Authentic Assessment"	2024	99
	"Conceptions of the metaverse in higher education: A		
	draw-a-picture analysis and surveys to investigate the		
Hwang, GJ.; Tu, YF.; Chu, H	perceptions of students with different motivation		
C.	levels"	2023	56
	"Empowering Cooperative Teamwork for		
	Community Service Sustainability: Insights from		
Zainuri, A.; Huda, M.	Service Learning"	2023	54
	"Embedding sustainable development goals (SDGs)		
	in an undergraduate business capstone subject using		
	an experiential learning approach: A qualitative		
Fang, J.; O'Toole, J.	analysis"	2023	50
	"The effects of a metacognitive intervention on lower-		
	proficiency EFL learners' listening comprehension		
Milliner, B.; Dimoski, B.	and listening self-efficacy"	2024	45
	"Out-of-the-Box Learning: Digital Escape Rooms as a		
Sidekerskienė, T.; Damasevicius,	Metaphor for Breaking Down Barriers in STEM		
R.	Education"	2023	44
van den Beemt, A.; Vázquez-			
Villegas, P.; Gómez Puente, S.;	"Taking the Challenge: An Exploratory Study of the		
O'Riordan, F.; Gormley, C.;	Challenge-Based Learning Context in Higher		
Chiang, FK.; Leng, C.;	Education Institutions across Three Different		
Caratozzolo, P.; Zavala, G.;	Continents"		
Membrillo-Hernández, J.		2023	41
Chiu, MC.; Hwang, GJ.; Hsia,	"Promoting students' artwork appreciation: An		
LH.	experiential learning-based virtual reality approach"	2023	39
Salinas-Navarro, D.E.; Vilalta-	"Designing experiential learning activities with		
Perdomo, E.; Michel-Villarreal,	generative artificial intelligence tools for authentic		
R.; Montesinos, L.	assessment"	2024	35
,,	"The mARC instructional design model for more		-
Radović, S.; Hummel, H.G.K.;	experiential learning in higher education: theoretical		
Vermeulen, M.	foundations and practical guidelines"	2023	29

Source: Scopus

The analysis results show a significant increase in the trend of scientific publications,

particularly on topics related to the utilization of artificial intelligence, higher education innovation, and sustainable development. Citation data indicates that works published in the last two years have a high level of influence in the academic realm. The document titled "Using Generative Artificial Intelligence Tools in Higher Education," written by Salinas-Navarro, et al., (2024), holds the top position with 99 citations. The high number of citations reflects the relevance of the topic and the significant attention academics are giving to the use of generative artificial intelligence (Generative AI) technology in the context of higher education. This aligns with global developments that position AI as one of the main drivers of transformation in learning and research processes. Additionally, several other publications, such as the work by Hwang et al., (2023) titled "Conceptions of the Metaverse in Higher Education" and Zainuri & Huda, (2023) titled "Empowering Cooperative Teamwork for Community Learning," also show high citation rates, reaching 56 and 54 citations, respectively. This phenomenon shows that issues related to the metaverse in education and collaborative empowerment in community learning are also becoming an important focus in contemporary academic discourse. Overall, the high number of citations for documents on experiential learning in publications from 2023 to 2025 indicates that research in this period is experiencing rapid growth, both in terms of quantity and thematic relevance. The dominance of topics related to digital innovation, learning technology, and sustainability indicates a shift in research direction toward issues that are more adaptable to technological developments and the needs of global society. Thus, it can be concluded that these documents not only have a high citation rate but also reflect dynamic scientific publication trends oriented toward technological advancement and sustainable development. A high citation rate reflects strong academic acceptance and significant research impact, indicating that more and more researchers and practitioners are recognizing and using related works as a basis for their studies (Saggar et al., 2023). This finding confirms that research in this field currently holds a strategic position in the global research landscape.

Besides the number of citations, based on the results of keyword co-occurrence visualization using VOSviewer software, it can be seen that research topics related to experiential learning in higher education form several main clusters that are closely interconnected. The keyword "experiential learning" is at the center of a network with strong connections to various themes such as student engagement, teaching and learning, design thinking, entrepreneurship education, and service learning. This indicates that experiential learning is understood as a cross-disciplinary learning approach and plays an important role in supporting educational innovation across various disciplines.

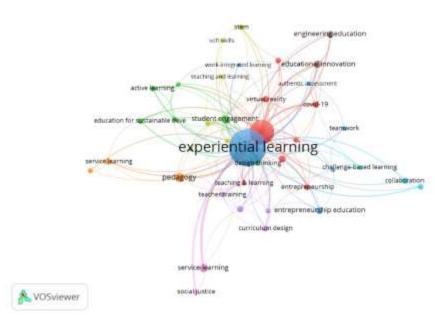


Figure 6. Themes related to experiential learning research in higher education, Source: Viosviewer

One of the main clusters relates to educational and technological innovation, encompassing terms such as educational innovation, virtual reality, authentic assessment, and engineering education. This theme highlights how experiential learning is utilized in the context of project-based learning, the use of interactive digital media, and performance-based assessment to enhance students' learning experiences. The next cluster relates to strengthening student engagement and active learning, characterized by the emergence of terms such as "student engagement," "active learning," "collaboration," and "teamwork." This relationship between keywords confirms that the success of experiential learning is highly influenced by students' active participation in collaborative activities that allow them to learn through real and reflective experiences. Additionally, there is a clear connection to the themes of service learning and education for sustainable development, indicating that experiential learning also plays a crucial role in developing social values, community care, and sustainability. Themes such as social justice and pedagogy further strengthen the humanistic and ethical dimensions of applying experiential learning in higher education. Meanwhile, another cluster points toward entrepreneurship and curriculum development, with keywords such as "entrepreneurship education," "challenge-based learning," and "curriculum design" emerging. This relationship reflects that experiential learning approaches are widely used to cultivate students' entrepreneurial competencies, creativity, and problem-solving abilities.

Based on the results of the research topic mapping through keyword co-occurrence analysis, overall, the visualization results show that research on experiential learning is developing in an increasingly multidisciplinary direction. The mapping results

identified that although studies on experiential learning in higher education have developed rapidly and cover various themes such as student engagement, entrepreneurship education, design thinking, and service learning, there are still a number of research areas that have not been relatively widely explored. This research gap can be an opportunity for researchers to make new contributions to the development of both theory and practice in experiential learning.

The theme of integrating experiential learning with digital technology is still relatively limited, despite the emergence of keywords such as "virtual reality" and "educational innovation." Further research could be directed toward utilizing immersive technologies such as augmented reality (AR), virtual laboratories, or metaverse learning environments to enrich students' learning experiences across various disciplines. This kind of study is important for addressing the challenges of higher education transformation in the digital age. The application of experiential learning in the context of online and hybrid learning still requires more attention. Most previous research has focused more on direct learning experiences (face-to-face experiential activities), while the application of EL principles in virtual or blended learning environments has been rarely studied in depth, particularly in the context of higher education in developing countries. In the dimension of evaluation and assessment, experiential learning is also an area that has not received much attention. The development of an authentic assessment model capable of comprehensively measuring experience-based learning outcomes is still highly necessary. This includes assessing student reflections, collaborative skills, and the ability to transfer knowledge from experience to professional contexts. The relationship between experiential learning and the development of character or social values such as leadership, empathy, and social justice is also still open for extensive exploration. This study is important for strengthening the relevance of EL not only as a pedagogical approach but also as a means of shaping personality and human values in higher education environments.

#### Contribution of Research to the Future of Educational Studies

Research on experiential learning (EL) in higher education makes a significant contribution to the development of educational studies, particularly in driving a paradigm shift from instructor-centered learning to student-centered learning. The results of the bibliometric analysis indicate that research on experiential learning not only enriches the theoretical framework regarding student engagement and reflective practice but also integrates cross-disciplinary innovations such as digital learning, education for sustainable development, and entrepreneurial education (Salinas-Navarro, et al., 2024; Lestari et al., 2025). This finding confirms that experiential learning serves as a bridge between pedagogical theory and professional practice, enabling students to develop critical thinking, collaborative, and adaptive skills—competencies highly needed to navigate the dynamics of the 21st-century world of

work (Hoiriya et al., 2021).

Additionally, this research enriches the discourse on educational transformation by introducing new paradigms in curriculum design and assessment models. The experiential learning approach encourages the implementation of authentic assessments that evaluate students' ability to apply knowledge in real-world contexts, not just through written tests (Shore & Dinning, 2023). This paradigm shift supports the formation of evidence-based education policies that emphasize practical learning outcomes, social responsibility, and ethical awareness (Rahmi, 2024). Thus, research on experiential learning provides a strong foundation for formulating policies and curriculum innovations that are oriented toward meaningful learning and the development of students' professional competencies (Lestari et al., 2025). Going forward, the contribution of experiential learning research will become increasingly important in deepening our understanding of how students construct knowledge through direct and reflective experiences. This approach also offers a conceptual framework for aligning educational practices with global challenges such as digital transformation, sustainability, and equitable access to learning (Ulfah, 2022). Through the integration of pedagogical innovation and empirical evidence, experiential learning research plays a strategic role in shaping the direction of educational reform and strengthening the relevance of higher education in an era of rapid change.

## **Challenges and Policy Recommendations**

Despite its increasing global popularity, the implementation and research on experiential learning still face various challenges. One of the main problems lies in the limited institutional support and understanding of how experiential learning can be systematically integrated into the higher education curriculum (Lestari et al., 2025). Many universities, particularly in developing countries, are still oriented toward traditional lecture-based learning approaches that limit the implementation of experiential learning strategies. Additionally, the assessment mechanisms for experiential learning outcomes are still not well-established, leading to inconsistencies in measuring students' reflective, collaborative, and applied abilities (Hoiriya et al., 2021). Another challenge is the unequal access to the technological and financial resources needed to support experiential learning activities such as internships, service learning, or virtual simulations. The integration of digital technology, including artificial intelligence and metaverse-based learning environments, requires significant investment, faculty training, and policy support to ensure effective and equitable implementation (Salinas-Navarro, et al., 2024). Additionally, limitations in cross-disciplinary collaboration and research capacity in some regions also restrict the scalability and sustainability of experiential learning implementation (Intisari, 2024).

To address these challenges, several policy recommendations can be proposed. First, universities need to develop a clear policy framework to integrate experiential

learning across all levels of the curriculum, with adequate funding support and professional development programs for faculty. Second, education policies need to foster strategic partnerships between universities, industry, and communities to create an authentic learning environment that strengthens student engagement in real-world contexts (Shore & Dinning, 2023). Third, accreditation bodies and governments need to establish assessment standards that recognize experiential learning outcomes as legitimate indicators of student learning achievement (Rahmi, 2024). Fourth, international collaboration in experiential learning research must be strengthened to expand global knowledge exchange and build research capacity, especially for developing countries that are striving to modernize their higher education systems (Lestari et al., 2025). With the implementation of this policy, experiential learning can become a sustainable, inclusive, and relevant educational strategy for the needs of global society.

#### **D.**Conclusions

The results of this study indicate that publications on experiential learning in higher education are rapidly increasing during 2023-2025, with Western countries contributing the most, while South-east Asia, including Indonesia, still plays a limited role. Bibliometric analysis reveals several emerging key themes, such as the use of immersive technology, strengthening service learning, developing entrepreneurship education, and implementing authentic assessment. This finding confirms that experiential learning is increasingly important as an approach capable of enhancing students' practical skills, reflective abilities, and professional readiness. Practically speaking, higher education institutions need to strengthen policies, provide resource support, and establish partnerships with industry and society to ensure the optimal and equitable implementation of experiential learning. Additionally, faculty training and the development of clear assessment designs are necessary to improve the quality of this model's implementation. For future research, it is recommended to explore more in-depth the application of experiential learning in diverse cultural and institutional contexts, test its effectiveness in online and hybrid learning, and develop more comprehensive assessment models to measure the success of experiential learning.

#### E. Acknowledgement

We acknowledge all stakeholders who helped us in this project.

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