

Integrating Education for Sustainable Development in Foreign Language Learning: A Systematic Review

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Abstract:

As global challenges like climate change, environmental degradation, and poverty grow more urgent, education has taken front stage in equipping students with the knowledge and skills needed to create a sustainable future. This research explores the integration of Education for Sustainable Development (ESD) into Foreign Language Education (FLE), examining recent trends, pedagogical approaches, and implementation challenges. Through a systematic review of empirical studies, this research highlights innovative strategies including Competency-Based Education (CBE), Content and Language Integrated Learning (CLIL), Content-Based Learning Instruction (CBI), and Problem-based Learning (PBL) that align language instruction with sustainability goals. However, and despite the potential of these approaches, practical obstacles still persist, mainly the lack of sustainability-oriented teaching materials, insufficient teacher training, and challenges aligning language and sustainability objectives. Accordingly, this study underscores the transformative potential of integrating sustainability into FLE, not only to promote language learning, but also to foster critical thinking and global citizenship.

Keywords: Education for Sustainable Development, Foreign Language Education, Sustainable Development, Sustainability Goals, Sustainability-oriented Teaching.



1. Introduction

The growing global challenges facing our planet today, such as biodiversity loss, the destruction of natural resources, climate change, pollution, social inequality, and economic instability, are largely the result of human activities and insufficient awareness; therefore, they can be understood primarily as an educational problem. Thus, a change in the educational systems is essential now more than ever to prepare individuals not only for personal and professional success, but also to actively engage in building sustainable world for themselves and for future generations.

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Within this context, Higher Education institutions play a vital role as knowledge providers and change promoters (Uggla & Soneryd, 2023). In response to the global crisis, the United Nations created the 2030 Sustainable Development Agenda with its 17 Sustainable Development Goals (SDGs) (Fu, 2023). At its heart lays the Education for Sustainable Development framework, designed for institutions and educators to empower students with the knowledge, skills, and attitudes needed to make decisions, take up responsibilities and devise solutions. It emphasizes critical thinking, problem-solving and collaboration to address sustainability challenges (Concina, 2019). In this effort, the attainment and display of sustainable development competence has become a desired result of higher education institutions. However, the way to enable students to be more sustainable-oriented and more flexible in their new environment has been under continuous debate.

Sustainable Development's (SD) interdisciplinary nature is not limited to the Science, Technology, Engineering, and Mathematics (STEM) fields, nor to the social sciences. Thus, the integration of ESD should not be limited to these fields only. Language, as an element of culture and a key component in the development of human relationships, can be a powerful tool for addressing global issues and challenges. Accordingly, the field of FLE provides a context for both language learning and content knowledge, making them an ideal avenue in advancing ESD (Sund & Gericke, 2020). Because of the diverse scope of disciplines found in Foreign Language (FL) programs, the environmental, social, and cultural dimensions of SD can be addressed from different perspectives: intellectual, moral, global, cultural and cross-cultural, linguistic, and cross-linguistic (de la Fuente, 2022)

Sterling and Huckle (1996) explained that language education driven by sustainability provides realistic contents and a practical way to do something about the inevitable problems of the global world today. In this regard, incorporating sustainability into language teaching not only enhances learners' linguistic skills but also deepens their understanding of global issues, promoting critical reflection on the interconnectedness of cultures and societies. De la Fuente (2022) argued that the obvious connection between ESD and FLE is that multilingualism and multiculturalism are part of today's world; as a result, monolingualism and monoculturalism can hinder sustainability global efforts. Thus, negotiating for sustainability requires the ability to comprehend and accept culturally diverse viewpoints, resolve conflicts, and foster cultural sensitivity.

Although interest in integrating sustainable development principles into foreign language education is growing, it remains underexplored compared to other field of education. Existing research often focuses on general educational settings or specific subjects such as science or geography; leaving a substantial gap in sustainability which can be effectively incorporated into language education. Hence, this research sought to address these gaps in literature by synthesizing current

research and offering insights into the trends, approaches and challenges of ESD in FL education.

The overall aim of this systematic review is to examine and synthesize the body of research on the integration of sustainable development principles into foreign language education specifically in higher education. It focuses on exploring the key trends, innovative approaches, and challenges when incorporating sustainability into foreign language instruction. By analyzing a wide range of literature, this study seeks to provide a comprehensive understanding of how Education for Sustainable Development is applied in foreign language classrooms and its implications for pedagogy, curriculum design, and learner outcomes. Specifically, it addresses the following research questions:

- 1- What are the prevailing trends in incorporating sustainability into foreign language education?
- 2- What pedagogical approaches and methodologies are employed to integrate sustainability into FLE?
- 3- What challenges do educators face when implementing sustainability education in language teaching?

2. Research Methodology

2.1. Searching Strategy

According to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), the search process goes through three phases: the identification phase, the screening phase, then the inclusion phase (Page et al., 2021). This systematic literature review was performed using three electronic databases that focus on educational research: ProQuest, Education Resources Information Center (Eric), and Google Scholar. To retrieve relevant works for this review, a combination of key words and phrases was used: Sustainability, Sustainable Development, Education for Sustainable Development, Foreign Language Education, and Language Education. Accordingly, in the identification phase 37 results were found for the database Eric, 2383 for ProQuest, and 4750 for Google Scholar. The duplicated results were discarded in this phase.

In the screening phase, through examining titles and abstracts, the results were carefully examined in order to assess their relevance to the research topics. Papers that did not cover all the topics mentioned in the keywords, or which covered them only as a secondary topic in the research, were not considered for the following phase. Thus, in this phase, six papers were selected from Eric, three from ProQuest, and twenty from Google Scholar. The full-text documents were retrieved for all papers.

In the last phase, the full texts were evaluated for their relevance to the main objective of this study. Through examining their key information, studies were categorized based on their content: general application of sustainability in FLE;

trends and pedagogical approaches of incorporating sustainability in FLE, main findings, and challenges. Also, research elements used in the studies were considered (research methodologies adopted, assessment tools used for collecting data, main topics, variables considered in the research questions, and main findings). After examination, 12 papers were discarded because they did not correspond to this study's search criteria, and only 15 papers were included in this review; 14 of which are articles, and one book.

2.2. Inclusion and Exclusion Criteria

This systematic analysis has been based on the model of PRISMA statement. In order to address the stated research questions and ensure the sources' relevance and quality, specific inclusion and exclusion criteria were established:

The inclusion criteria included are:

1. All documents published between the beginning of 2010 and the end of 2024 (14 years).
2. Only peer-reviewed documents were considered, in order to guarantee a high-quality standard.
3. Journal Articles and books were considered for this review.
4. Sources that focus on integrating sustainability or sustainable development in FLE higher education. These key words must be in the title, abstract, and full text.
5. Only works that provide empirical data and case studies were considered.
6. The full texts of the sources are available in English and not any other language.

The exclusion criteria included are:

1. Publications outside the specific period of time.
2. Non peer-reviewed documents.
3. Sources such as reviews, conference papers and websites were not considered.
4. Studies that are not related to the theme of sustainability integration in FLE/EFL.
5. Theoretical studies were excluded in this review, except for the book (it has some theoretical frameworks that are relevant to this study).
6. The non-availability of full texts in English.

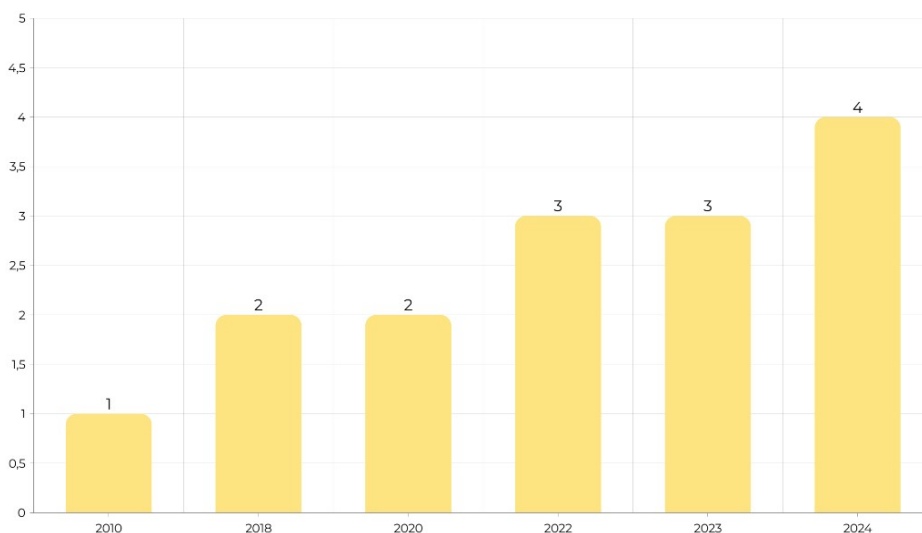
3. Results

The thirteen selected sources for this review were examined and analyzed quantitatively (frequencies) and qualitatively (thematic analysis of the main topics). The quantitative approach was used to analyze the frequencies of the publication year, geographical distributions of research, types of research, and themes reoccurrences. The thematic analysis involved coding the data based on themes and key topics of the papers in order to answer the research questions.

3.1. Years and Locations of Publications

Looking at the number of studies published each year since 2010, there has been an increase in the research focused on integrating sustainable development education in the field of foreign language education. Half the papers on this topic have been published in the last two years.

Year of publication



Fi

Figure 1- Frequencies of publications per year

The analysis of the regional distribution shows certain trends. Six studies originate from Europe; three were carried out in Russia and one in Lithuania. This highlights the significant contribution of Eastern Europe to the field of sustainable development in foreign language education. In Asia, six publications were conducted, demonstrating the region's increasing interest in integrating sustainability in FLE, with a focus on EFL education. There is only one paper from North America, which indicates that there is not much regional research focus on that topic.

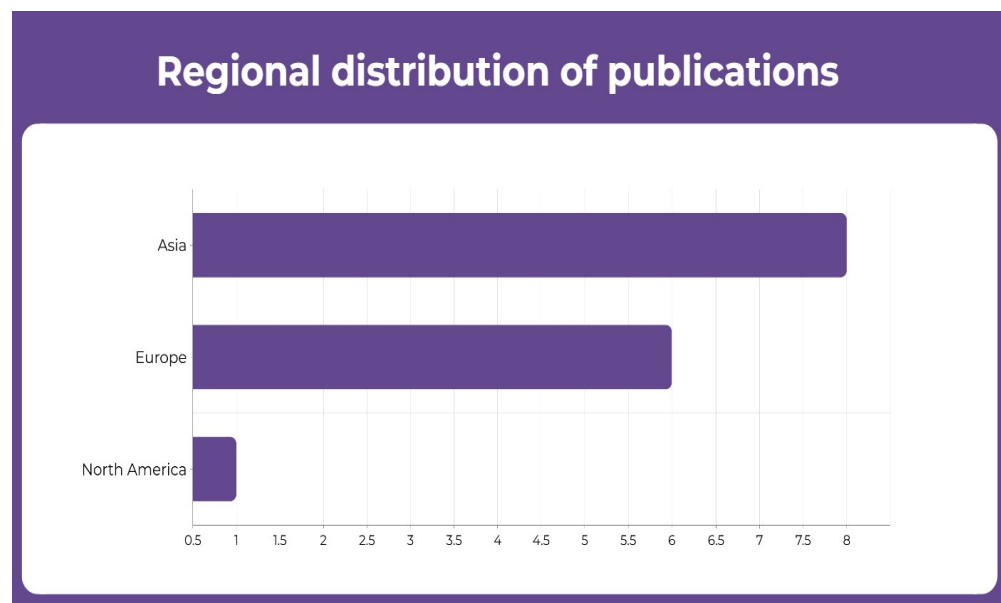


Figure 2- Frequencies of studies per region

3.2. Types of research and themes frequencies

This systematic review encompassed a total of 15 sources, all exploring the trends, possible approaches, and challenges of integrating sustainable development in foreign language education, specifically in higher education. 8 of the sources are case studies, and 6 studies used the qualitative method of research.

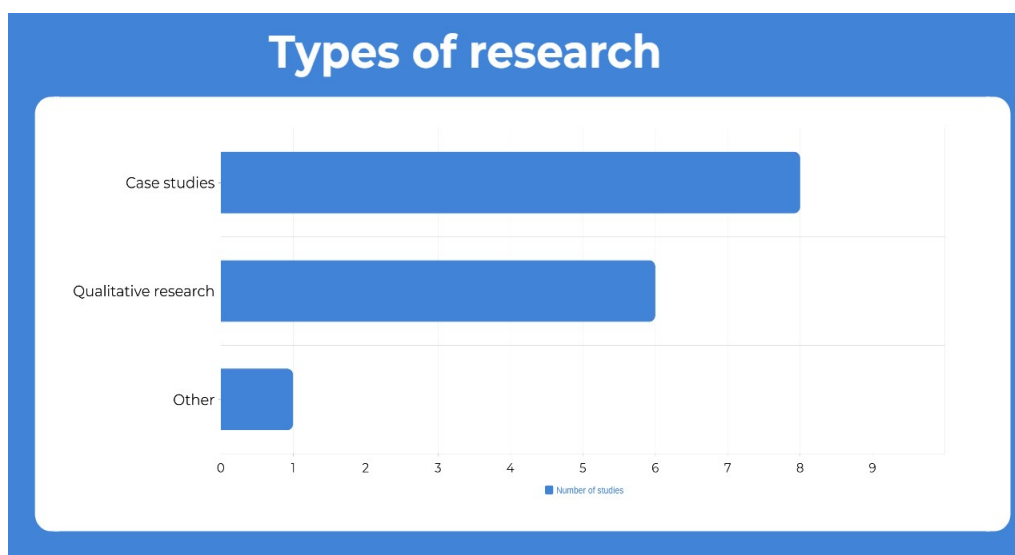


Figure 3- Frequencies of types of research

The analysis of recurring themes in the reviewed studies highlights several key trends and methods to integrating sustainability into foreign language education. These themes include educational approaches such as; Competency-Based Education, Content-Based Instruction, Problem-based Learning, Project-Based Learning (PjBL), Content and Language Integrated Learning, and intercultural approach/competency. Other studies focused broadly on incorporating sustainability topics into FLE without using a particular pedagogical method. Few articles addressed the challenges faced by educators when attempting to integrate sustainability into FLE. Less discussed topics included multi-literacies pedagogy and interdisciplinary collaborations.

Mentions of themes

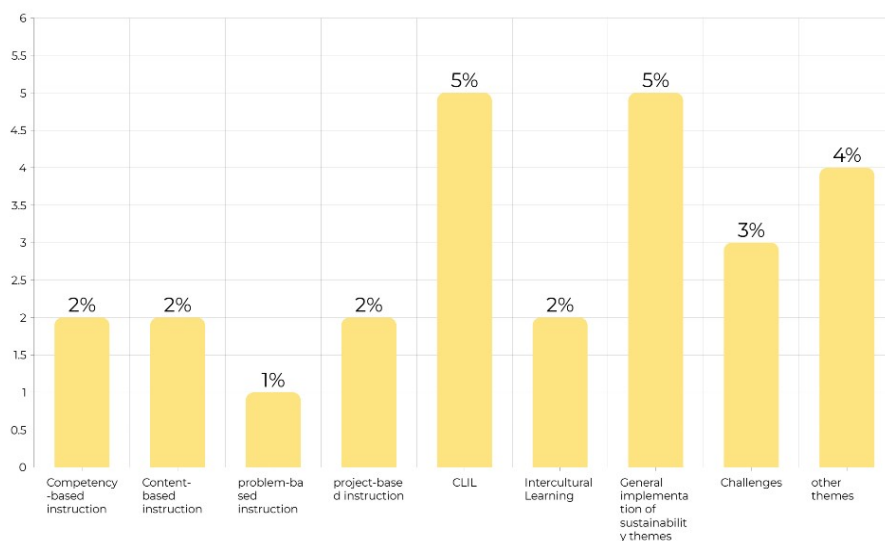


Figure 4. Frequencies of Mentions of Themes

A key contribution to this systematic review is De la Fuente's book *Education for Sustainable Development in Foreign Language Learning: Content-Based Instruction in College-Level Curricula*, which offers an in-depth examination of the efforts to include sustainability into foreign language education. Therefore, the prevalent themes found in this reviewed research, provide insightful analysis of several pedagogical models, including CBI, PBL, PjBL, and Intercultural Learning Approaches. By emphasizing a cross-disciplinary perspective, the book shows how foreign language education may be a platform for managing challenging socio-environmental concerns; hence, it is a fundamental tool for understanding both theoretical and practical uses of sustainability in language teaching. Its investigation into various approaches enriches the review by demonstrating how teachers can incorporate sustainability ideas into curricula, so supporting the goal of the study that

of identifying trends, strategies, and challenges in sustainable foreign language instruction (De la Fuente, 2022).

To answer the research questions on the trends, approaches, and challenges of integrating sustainability into foreign language education, the examined studies explored various themes. These themes can be grouped into three main sections: trends in Sustainable Foreign Language Education, pedagogical approaches, and challenges in integrating sustainability. The trends comprise the general integration of topics related to sustainability, interdisciplinary cooperation, and the role that intercultural competency in sustainability education. The pedagogical approaches include Competency-Based Language Learning, CLIL, CBI, PBL, and PjBL while the last theme that was discussed in the explored studies is the challenges encountered by educators when implementing these approaches, especially when trying to align language objectives with sustainability content. Each section is discussed in the following titles:

a. Trends in Sustainable FLE

The investigated studies showed several patterns in the implementation of sustainability within foreign language education. One significant trend is the overall incorporation of sustainability subjects, where educators embed social, economic, and environmental sustainability into their language lessons. Another trend is the focus on interdisciplinary collaborations which encourage teachers from different disciplines to foster a holistic approach to teach about sustainability. Finally, many studies highlight how learning a foreign language can spread awareness on global sustainability and promote cross-cultural discussion.

Various studies explored the relevance of course content to the SDGs in higher education. Makarova (2020) examined the general inclusion of sustainable development principles in foreign language education, emphasizing the integration of sustainability-related themes when designing language courses. However, selecting suitable course content remains a significant challenge, as many university students prefer to focus on industry-specific language skills rather than studying general foreign language courses (Enesi et al., 2021). Incorporating learning materials that address both local and global critical issues, such as biodiversity conservation, modern economic processes, and challenges faced by culturally diverse communities, enhances students' understanding of sustainability. Such content is valuable as it engages learners with real-world issues they already encounter in their everyday life and prepares them to develop solutions for these challenges in the future (Arslan & Curle, 2024).

Jayantini et al. (2024) argued that integrating sustainable development into foreign language education can be achieved by incorporating community values into teaching materials. This involves selecting topics that raise awareness of local cultures, social life, and environmental issues. They categorize these topics into

socio-legal and eco-cultural themes. Socio-legal topics examine the intersection of legal aspects with fields such as sociology, anthropology, history, psychology, and law, providing insight into how legal systems function in everyday life. Eco-cultural studies; however, focus on human interactions with nature and their environment. When language education incorporates local perspectives and values, it becomes more relevant and engaging for learners while enhancing its impact on ESD (Purnamasari & Hanifah, 2021; Seijas & Parra, 2022).

Nevertheless, many researchers argue that incorporating sustainability-related themes into foreign language curricula remains an isolated effort, as it primarily emphasizes acquiring knowledge about sustainability. In contrast, ESD goes beyond knowledge acquisition to foster the skills needed for its effective application (Bolmsten & Kitada, 2020). This suggests that approaches such as competency-based education are better to support sustainability by focusing on both skills and knowledge (Lozano et al., 2022).

Furthermore, the reviewed studies frequently highlight the use of interdisciplinary approaches in curriculum design, where sustainability themes are integrated into language education through subjects like environmental science, geography, and ethics (Ivanova & Polenova, 2021). This holistic strategy ensures that sustainability is embedded within the language learning process rather than treated as an additional component (Leal Filho et al., 2018). De la Fuente (2022) emphasizes that 'interdisciplinarity' is a shared characteristic of both sustainable development and foreign language education curricula that enables learners to develop a deeper understanding of sustainability issues through multiple perspectives. Courses that focus on sustainability and language can also build connections with target-language communities and encourage cultural comparisons. Moreover, this approach is believed to improve language proficiency while preparing students to become global citizens, an outcome that aligns with the broader objectives of ESD (Ter Horst & Pearce, 2010; Ivanova et al., 2020).

Finally, these broader shifts towards sustainability in foreign language education can only be achieved through specific educational approaches that bring value into everyday classrooms. When implemented effectively, these approaches serve as practical tools to translate the learning objectives into meaningful learning experiences.

b. Pedagogical Approaches

Various pedagogical approaches have been discussed in the literature to effectively integrate sustainability into foreign language education. These approaches include: Competency-Based Language Teaching, Content and Language Integrated Learning, and Content-Based Instruction; all of which embed sustainability topics within language instruction, enabling students to develop both linguistic and subject-specific knowledge. Additionally, Project-Based Learning and

Problem-Based Learning foster critical thinking, collaboration, and problem-solving skills by engaging students in real-world sustainability-oriented tasks.

To effectively introduce sustainability into foreign language classes, several studies suggest using competency-based teaching, which draws on Bloom's behaviorist principles. The use of CBLT for sustainability language education involves designing curricula that develop specific competencies enabling learners to effectively engage with sustainability topics. The importance of CBLT is emphasized by Griffith and Lim, who stated that it puts learners in real-world scenarios that they are likely to encounter beyond the classroom (2014). As an example, in sustainability-oriented language classes, students might be asked to write an argumentative essay advocating for an environmental policy, to give a presentation on sustainable practices within their community/neighborhood, or to participate in role-play scenarios where they negotiate green initiatives in a multilingual setting. This method emphasizes practical language use, enabling students to express sustainability concepts and apply them in real contexts.

Oraif (2024) conducted a study in which she integrated sustainability topics into EFL writing classes at a university in Saudi Arabia using CBLT. Under this approach, students' ability to write on sustainability-related subjects determined their level of understanding in sustainable development. The findings showed that students not only demonstrated comprehension of sustainability concepts, but also revealed their strong intention to engage in sustainability practices.

Moreover, among the pedagogical strategies explored, CLIL seems promising to integrate sustainability education in foreign language education. Defined as "a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language" (Coyle et al., 2010, p. 1), CLIL aligns closely with the objectives of ESD. Essentially, ESD aims to equip learners not just with the knowledge, but also with these skills needed to actively use that knowledge; this involves experiencing, envisioning, creating, and contributing to practical alternatives. Through the foreign language, CLIL allows students to acquire sustainability-related content rather than the language only. By engaging with environmental, economic, cultural, and societal issues in the target language, learners develop a deeper connection to global challenges, enhance their creativity and problem-solving abilities, and build a sense of responsibility toward sustainability (Ivanova & Polenova, 2021; Diavati, 2023).

Beyond linguistic proficiency, CLIL fosters a dynamic educational atmosphere where students enhance creativity, adaptability, professional communication, decision-making, teamwork, and critical thinking skills, all of which are highly needed in job market. By integrating scientific subjects such as science, energy, and resources into foreign language education, CLIL promotes ESD through encouraging students to engage with sustainability topics while building their

proficiency in the language. This approach provides a richer learning experience by developing both subject understanding and awareness of sustainability (Jodoin, 2020; Arslan & Curle, 2024). Additionally, studying professional subjects in a foreign language transcends mere acquisition of disciplinary knowledge; it also equips students with the skills essential for knowledge production within their field, thus boosting their autonomy and career readiness (Ivanova & Polenova, 2021).

Building on how that language and content work together in CLIL, Content-Based Language Instruction is another recognized approach to teaching sustainable foreign language. CBI permits students build linguistic competency by combining language acquisition with relevant subject matter so they can engage with cognitively stimulating content (Stoller, 2008; Snow & Donna, 2019). In addition, CBI helps students investigate urgent global concerns, such climate change through the lens of the target language. As a multidisciplinary issue, sustainability clearly aligns with CBI since it promotes critical thinking, cultural awareness, and interdisciplinary collaborations (Turpin, 2022).

Other research has shown that teaching methods as Project-based and Problem-Based Learning can be useful for including sustainability in foreign language classes (De la Fuente, 2022) put both approaches within the bigger picture of CBI, highlighting its importance in sustainability-focused language education. On one hand, project-based language learning engages students in authentic tasks to understand the nature of the in hand (Ferry, 2022). On the other hand, problem-based pedagogy is an inquiry-driven approach that presents students with complex scenarios requiring their critical analysis. Through this problem-solving process, they develop knowledge and higher-order thinking skills (Barkley et al., 2005). Together, when applied to sustainability education, these methods promote active learning, critical thinking, and problem-solving skills which learners will use to address environmental, social, and economic issues through foreign languages (Chang et al., 2018; Liu et al., 2019; Nguyen et al., 2024).

Furthermore, other research highlighted the importance of intercultural competence/learning in supporting sustainability goals within foreign language classes. Because sustainability challenges are global in nature, understanding diverse cultural perspectives is essential. Cultural differences shape how people view and react to these challenges so addressing such issues calls for collaboration among individuals from different cultural backgrounds. Language learning, therefore, prepares learners for a multilingual world, and enhances their intercultural communication. This comes in hand with the SDGs, which stress the need for knowledge and skills to advance global citizenship, cultural tolerance, and sustainable development. Therefore, enhancing intercultural competence can help build relationships and trust between people from different cultural backgrounds,

which is crucial to achieving shared sustainability goals (Ge et al., 2023; Omar & Shaalan, 2023).

c. Challenges in Integrating Sustainability in FLE

The reviewed literature highlights several challenges in this regard, including curriculum design and integration difficulties, lack of teaching materials, and inadequate teacher training (Asta & Margarita, 2018; Håkansson et al., 2019; De la Fuente, 2022;). To address these challenges, solutions have been suggested. Many language programs lack clear frameworks for incorporating sustainability, making it difficult to align sustainability content with language learning objectives. In addition, interdisciplinary collaboration demands institutional support and coordination. To overcome this, universities can develop structured guidelines, encourage cooperation between language educators and subject experts, and provide institutional backing to facilitate the integration and insure the achievement of language learning goals as well as the sustainability education goals (Asta & Margarita, 2018). To make up for the shortage of materials, Sun and Zhang (2022) suggested the use of Open Educational Resources (OER) that focus particularly on sustainability themes for FLE to help teachers enrich and access quality teaching materials. Finally, language teachers need professional development training programs such as targeted workshops, specialized courses, and learning communities designed to equip them with the necessary knowledge and skills to integrate sustainability effectively into their classrooms (Zeeshan, 2017).

4. Discussion

This systematic review sheds light on the growing interest in and great potential for incorporating sustainability into foreign language learning. It reveals both promising trends and practices, as well as ongoing challenges in the process of aligning language-learning objectives with those of education for sustainable development.

Considering the first question: what are the prevailing trends in incorporating sustainability into foreign language education?, there is a growing understanding of the connection between FLE and sustainability among teachers, which result in an increase of embedding sustainability into their curricula. This indicates a larger shift in FLE towards interdisciplinarity, global citizenship, and culturally sensitive instruction. In academia, it is essential to consider incorporating themes of all the dimensions of sustainable development since they cover all areas of human life. Thus, to overcome the difficulty of selecting the suitable materials to embed, it is best recommended to tackle both local and global issues, with a particular reference to the eco-cultural and socio-legal themes (Lozano et al., 2022; Prabawani et al., 2022). Nevertheless, despite the fact that many studies support the inclusion of sustainability-related subjects into FLE, it is shown that sustainability can be regarded as an isolated content, this creates a gap between understanding

sustainability and developing the skills to practice it. Accordingly, this trend stays limited to knowledge transmission, rather than engaging students in action-based learning of sustainability principles. Moreover, interdisciplinary collaborations are frequently mentioned as an effective strategy for embedding sustainability holistically into language instruction by integrating content from different disciplines.

Regarding the second research question: What pedagogical approaches and methodologies are employed to integrate sustainability into FLE?, the reviewed studies suggest that sustainability is reshaping how academia is making of language education; it is not just a tool for communication, but a gateway to active citizenship and global engagement. The findings revealed a strong emphasis on innovative techniques and approaches beyond the traditional FL instruction. CBLT, CBI, and CLIL emerged as effective approaches that help learners acquire the practical language needed to communicate sustainability in real-life settings. These methods do not consider language an isolated skill to be mastered, but rather a medium through which learners can explore global complex challenges. In addition, strategies like project-based and problem-based learning have proven useful in encouraging active inquiry, collaboration, and problem-solving, allowing students to critically engage with sustainability issues through the target language. Furthermore, the intercultural competence is also present in the picture since sustainability is more about communication and empathy than it is about laws and regulations. These teaching models, when applied effectively, do not only build language fluency but also they help shape the kind of global citizens the world urgently needs.

With reference to the third question: What challenges do educators face when implementing sustainability education in language teaching?, reflecting on the findings it is clear that the integration of sustainability within FLE is not without complexities. Difficulties include the lack of instructional resources, troubles in connecting sustainability themes to language learning goals, and inadequate teachers' training. Addressing these issues demands systematic, innovative approaches. As previously mentioned, solutions include: creating Open Educational Resources that are specifically designed for sustainability and FL can help make up for a lack of materials, collaborating with specialists from other fields, like environmental science, can also help make sure that sustainability content supports language goals instead of going against them. Tailored workshops can also be beneficial for teachers to gain the skills and confidence required to educate about sustainable development. Aside from these, other strategies can be applied such as; encouraging students to create their own sustainability content fosters their autonomy and level of engagement, contextualizing sustainability within the learners' local communities and cultures makes it more relevant. Additionally, gamified learning tools make the learning experience interactive and motivating; and

lastly, global collaborations promote intercultural awareness and a sense of shared accountability among students. Thus, all of these means work together to offer a more complete and effective plan to incorporate sustainability in FLE.

Accordingly, there is a great potential and urgent need to incorporate sustainability into FLE. Connecting language learning to contemporary pressing issues not only helps global efforts towards sustainable development but also makes its process more interesting for learners. The variety of the innovative pedagogical trends and techniques as well as interdisciplinarity illustrate how flexible and impactful this integration can be. The finding of this study responded directly to the research questions by revealing the main trends, approaches, and challenges of educating about sustainability in FL classes. Yet, research must go further and explore what, how, and when to use those pedagogical approaches effectively across different educational and cultural settings.

Some limitations can be identified in this review. It focused mainly on empirical studies, therefore excluding important theoretical contribution. Furthermore, although there is a good portion of research particularly focused on English as Foreign Language, this review have addressed studies on FLE in general, which may have limited the depth of insights into this context. Future studies should cover more databases, both theoretical and empirical research, and give EFL context more importance.

5. Conclusion

The urgency of the environmental, economic, and social global challenges calls all stakeholders to take action including education. In response, the UN has introduced its Education for Sustainable Development plan, highlighting the essential role of education in forming learners to face and find solutions to these challenges. The field of language education in particular, is an ideal avenue to advance ESD, as it not only fosters learners' linguistic competency, but also equips them with the skills to be environmentally conscious and socially responsible to decide for their present and future.

Accordingly, this review emphasize how integrating sustainability in foreign language education is not just possible but also increasingly essential in today's world. It explores the promising trends and pedagogical approaches that align language education with sustainability goals. The findings reveal various methods including competency-based learning, CLIL, CBI, interdisciplinary approaches, problem-based and project-based learning; yet, educators are still exploring how these approaches can be tailored to the educational and cultural contexts of the learners.

Nevertheless, this integration does not come without challenges; teachers often face a lack of instructional materials, difficulty in coordinating sustainability and language learning objectives, and insufficient training. For that, solutions such

as developing open educational resources, fostering interdisciplinary collaborations, and investing in professional development show great potential in addressing these barriers. Ultimately, integrating sustainability in FLE is not just a pedagogical choice but an effective opportunity to link language education with real-world issues, promote critical thinking, and form globally aware citizens.

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