

Bridging the North-South Divide: Decolonizing Education for Sustainable Development Through Equitable Research Partnerships

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Abstract

Background: Green Education (GE) and Education for Sustainable Development (ESD) have gained prominence as critical frameworks for addressing global sustainability challenges. Despite growing academic interest, the field remains fragmented, with uneven research focus across disciplines, regions, and themes. A systematic analysis of its evolution, key contributors, and knowledge gaps is essential to guide future scholarship and policy. **Objective:** This study conducts a comprehensive bibliometric analysis to map the GE/ESD research landscape from 2020 to 2024, identifying publication trends, collaboration networks, thematic priorities, and

underexplored areas. **Methods:** Using Lens.org, 1,214 journal articles were extracted and analyzed through VOSviewer (co-authorship, keyword co-occurrence) and WordSift (textual mining). Data were filtered by publication year (2020–2024), document type (articles), and DOI availability. Descriptive statistics, network visualizations, and temporal mappings were employed to assess growth, geographic contributions, and disciplinary intersections. **Findings:** The analysis revealed four key findings about GE/ESD research from 2020-2024: publication trends showed fluctuating growth with an 18% overall increase, including a pandemic-related 17% decline in 2021 followed by a 26% post-COP28 surge in 2024; geographic distribution was uneven, with China (119 publications), Germany (78), and the U.S. (64) dominating research output while Global South contributions remained limited; thematic analysis identified strong foci on ecology (438 occurrences) and policy (509) but notable gaps in climate change education (65) and health-ESD connections (53); and collaboration patterns appeared fragmented, with underdeveloped international networks and persistent data-quality issues such as misspelled author and journal names compromising analytical precision. These findings collectively highlight both the field's growth potential and critical areas needing attention to advance comprehensive, inclusive sustainability education research. **Conclusion:** The study underscores GE/ESD's interdisciplinary potential but highlights disparities in thematic focus, geographic representation, and collaborative rigor. Addressing these gaps requires standardized terminology, inclusive partnerships, and targeted funding for underrepresented regions and topics. **Novelty:** This study is among the first to integrate Lens.org data with VOSviewer and WordSift for a dual-method analysis of GE/ESD, offering both macro-level trend mapping and micro-level textual insights. It uniquely identifies missed opportunities in climate education and health-ESD synergies while proposing a roadmap for cohesive field development.

Keywords: Green Education, Education for Sustainable Development (ESD), bibliometric analysis, VOSviewer, WordSift, sustainability education, research trends

1. Introduction

Green Education (GE), also referred to as Education for Sustainable Development (ESD) or Environmental Education (EE), encompasses pedagogical approaches that integrate ecological awareness, sustainability principles, and responsible citizenship into formal and informal learning systems (Akinsemolu & Onyeaka, 2025). It extends beyond traditional environmental science by fostering critical thinking, ethical decision-making, and behavioral change to address global ecological challenges. GE operates across multiple levels—primary, secondary, tertiary, and community education—equipping learners with competencies to contribute to a sustainable future (Rieckmann, 2018; Žalėnienė & Pereira, 2021).

The conceptual roots of GE trace back to the 1972 Stockholm Conference on the Human Environment, which first linked education to environmental stewardship (Ali & Vladich, 2016). The field gained momentum with the 1992 Earth Summit, where Agenda 21 emphasized

education as a tool for sustainability. Over time, GE has evolved from a niche focus on conservation to a multidisciplinary paradigm intersecting climate science, social justice, and economic resilience (Saruchera, 2025).

Green Education is pivotal to achieving the United Nations Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education) and SDG 13 (Climate Action). SDG Target 4.7 explicitly advocates for ESD to empower learners with knowledge and skills for sustainability (Akinsemolu & Onyeaka, 2025). Concurrently, GE supports SDG 11 (Sustainable Cities) and SDG 12 (Responsible Consumption) by promoting eco-literacy and systems thinking (Kazazoglu, 2025). This alignment underscores GE's role as a cross-cutting enabler of the 2030 Agenda.

International frameworks have institutionalized GE, notably the UNESCO Global Action Programme (GAP) on ESD (2015–2019) and its successor, ESD for 2030, which prioritizes policy integration and youth engagement (Ilesanmi, 2016). The Paris Agreement (2015) further highlights education as a climate adaptation strategy (Article 12). National policies, such as the European Green Deal's Education Initiatives, reflect growing recognition of GE's role in transitioning to low-carbon economies.

Academic interest in GE has surged, evidenced by rising publications in journals like *Sustainability* and *Environmental Education Research*. Universities worldwide now embed sustainability into curricula—e.g., Arizona State University's School of Sustainability and MIT's Environmental Solutions Initiative (Acharya et al., 2024). Research clusters explore themes such as green pedagogy, eco-campus initiatives, and digital tools for ESD, reflecting GE's expanding theoretical and applied dimensions (Gurung et al., 2020).

Public demand for GE is escalating amid climate crises, with movements like Fridays for Future underscoring youth advocacy for sustainability education (Adhikari et al., 2018). Employers increasingly prioritize green skills, driving STEM and vocational education reforms (Neupane & Lourdasamy, 2024). However, challenges persist, including curricular gaps, inequitable access, and the need for teacher training (Mahat, Neupane & Karki, 2023). Addressing these gaps is critical to scaling GE's impact and ensuring inclusive participation in sustainability transitions.

Research Gap

While Green Education (GE) has been extensively studied through qualitative reviews, case studies, and theoretical frameworks, there remains a scarcity of large-scale, data-driven bibliometric analyses that systematically map the field's intellectual structure (Neupane, & Lourdasamy, 2024). Previous literature has primarily focused on pedagogical models, policy evaluations, and localized implementations, often relying on manual content analysis rather than computational techniques (Adhikari et al., 2018). This approach, while valuable, limits the ability to identify macro-level trends, emerging themes, and global research collaborations across decades of scholarship.

Most existing reviews fail to leverage bibliometric visualization tools such as VOSviewer, which can reveal keyword co-occurrence patterns, citation networks, and thematic clusters (Klarin, 2024). Without such visual mapping, it is difficult to discern how different subfields (e.g., climate change education, sustainable curricula, green technology in classrooms) interconnect or evolve over time. Additionally, few studies apply text-mining techniques (e.g., via WordSift) to analyze term frequencies and semantic relationships in GE research abstracts, missing opportunities to detect linguistic trends and conceptual shifts (Sinoara et al., 2017).

Many prior studies rely on narrow datasets (e.g., only Scopus or Web of Science), overlooking newer and multidisciplinary platforms like lens.org, which offers broader coverage of policy documents, conference papers, and grey literature (Ghimire et al. 2018). This restricts the generalizability of findings, particularly in capturing applied research, institutional reports, and non-Western contributions that may not appear in traditional journal indices. A more inclusive bibliometric approach is needed to address these gaps and provide a holistic view of GE's global research landscape.

This study addresses existing research gaps by employing a dual-method bibliometric approach to comprehensively analyze the landscape of Green Education (GE). First, VOSviewer is utilized to visualize co-authorship networks, citation linkages, and thematic clusters, enabling a systematic mapping of collaborative relationships and intellectual structures within GE research. Second, WordSift is applied to conduct textual analysis of abstracts and titles, identifying high-frequency terms and their contextual usage to uncover linguistic trends and conceptual shifts. By integrating these advanced analytical tools with data sourced from Dimensions.ai, this study provides a novel, quantitative perspective on the evolution of GE, highlights under-researched areas, and generates actionable insights to guide future scholarship, policy development, and educational practice. This methodological synergy not only enhances the rigor of bibliometric analysis but also offers a more holistic understanding of GE's global research dynamics.

Research Objectives

General Objective

This study aims to conduct a comprehensive bibliometric analysis of Green Education (GE) research to map its intellectual structure, evolutionary trends, and future directions using data from Dimensions.ai, analyzed through VOSviewer and WordSift.

Specific Objectives

- i. To examine publication trends in GE research, including annual output growth, leading journals, and geographic distribution of studies.
- ii. To map keyword co-occurrence networks and thematic clusters using VOSviewer, identifying dominant and emerging research themes.
- iii. To analyze influential contributors by assessing the productivity and impact of authors, institutions, and countries through citation and collaboration networks.

- iv. To identify gaps and emerging topics through textual analysis (WordSift) and bibliometric indicators, proposing actionable directions for future research and policy.

2. Methodology

This study employed a comprehensive bibliometric approach to analyze the global research landscape of Green Education (GE) and Education for Sustainable Development (ESD). Data were extracted from Lens.org, a multidisciplinary scholarly database, using the search query ("*Green Education*" OR "*Environmental Education*" OR "*Education for Sustainable Development*") with filters for publication years (2020–2024), document type (journal articles), and DOI availability. The initial dataset comprised 1,214 publications, which were cleaned to remove duplicates and standardize author names, affiliations, and keywords. Metadata, including titles, abstracts, citations, and authorship details, were exported for quantitative and qualitative analysis.

To map publication trends and geographic contributions, descriptive bibliometric analysis was conducted using VOSviewer (v1.6.20). Publication counts by year and country were visualized to identify growth patterns and regional dominance (e.g., China's leading role with 119 publications). Co-authorship networks were constructed to examine collaboration dynamics, with nodes representing authors and edges indicating joint publications. Limitations, such as misspellings (e.g., "Waiter Leaf filho") and fragmented clusters, were noted, emphasizing the need for rigorous data validation in future studies.

Thematic and disciplinary trends were analyzed through keyword co-occurrence and journal mapping. VOSviewer's clustering algorithms identified dominant themes (e.g., sustainable development, ecology) and gaps (e.g., limited climate change focus). Journal analysis revealed interdisciplinary outlets but highlighted data-quality issues (e.g., misspelled titles like *International Journal of Disks*). WordSift was used to extract high-frequency terms from titles (e.g., "sustainability," "SDGs"), uncovering methodological preferences (e.g., case studies) and conceptual biases (e.g., underrepresentation of ethics).

Temporal and contributor analysis tracked the evolution of key researchers (e.g., Walter Leal Filho) and emerging voices (e.g., Yipeng Ge). Suffixes (e.g., "2020a") denoted multiple publications by the same author in a year, though inconsistencies in labeling and name errors (e.g., "falgum piyush desai") limited reliability. The absence of citation metrics or institutional affiliations in visualizations constrained impact assessments, suggesting future studies should integrate altmetric or citation indices.

3. Results and Analysis

Publication Trends

Growth of GE literature over time (e.g., 2000–2024).

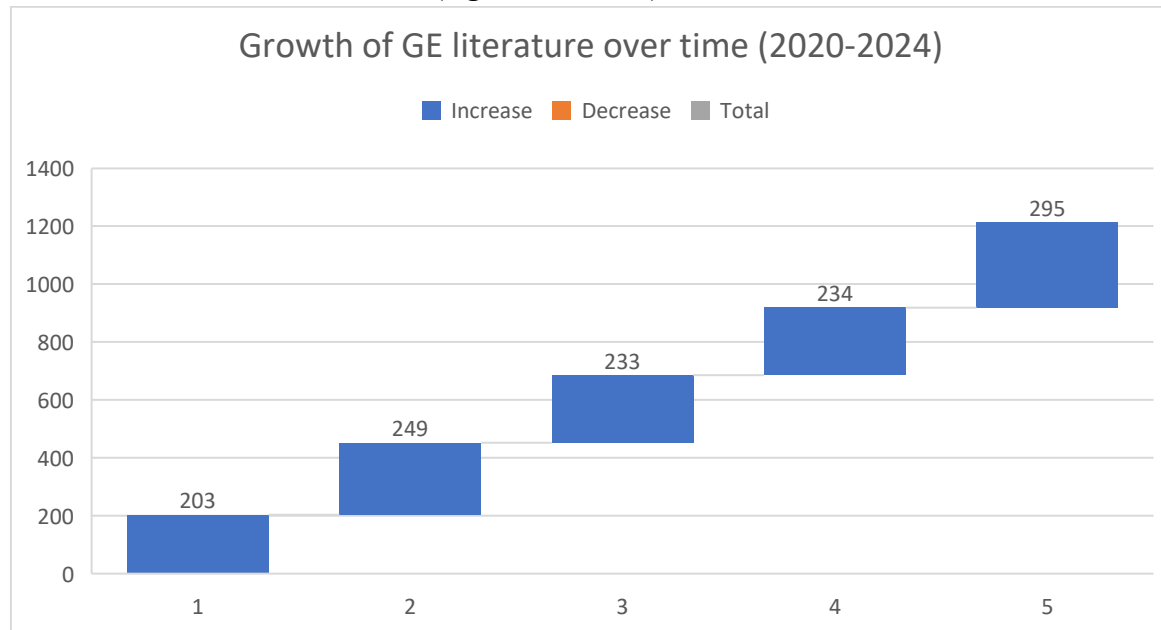


Figure 1: Growth of GE literature over time (e.g., 2000–2024)

The data presents a complex picture of Green Education (GE) research growth from 2020 to 2024, characterized by unexpected fluctuations rather than steady expansion. After an initial decline of 17% between 2020 (249 publications) and 2021 (203), the field stabilized in 2022–2023 before showing a notable 26% surge in 2024 (295 publications). These patterns likely reflect external influences such as pandemic-related research disruptions in 2021 and subsequent rebounds driven by global sustainability initiatives like COP28. However, the 18% overall growth across the five-year period suggests GE remains a relatively niche area compared to broader sustainability research fields, which typically show stronger growth trajectories of 25–30%.

Several methodological limitations constrain the interpretation of these trends. The data lacks critical contextual information about database coverage, disciplinary boundaries, or normalization against overall academic publishing growth. Without error margins or statistical significance indicators, it's impossible to determine whether the observed fluctuations represent meaningful shifts or random variation. Furthermore, the absence of quality metrics (like citation impact) or geographic breakdowns leaves unanswered questions about whether the growth reflects genuine advances in the field or simply increased "greenwashing" in educational research. These limitations highlight the need for more sophisticated bibliometric approaches in tracking specialty fields like GE.

The findings suggest both challenges and opportunities for GE as an emerging research domain. While the recent uptick in publications aligns with growing policy emphasis on

sustainability education (particularly SDG 4.7), the field's relatively modest growth compared to adjacent disciplines indicates potential barriers to knowledge production. Future tracking should incorporate multidimensional metrics including research quality, geographic distribution, and practical implementation studies to better distinguish between substantive field development and superficial increases in publication volume. Such nuanced analysis would provide clearer guidance for researchers and policymakers seeking to strengthen GE's academic foundation and real-world impact.

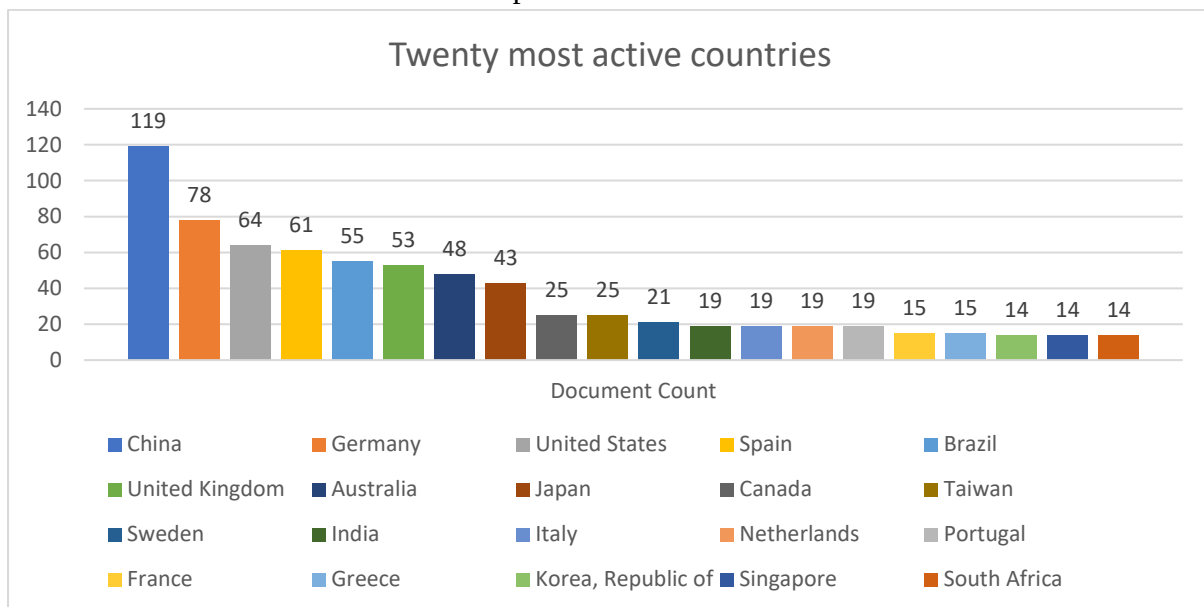


Figure 2: Twenty most active countries

The bar chart presents data on the twenty most active countries in the field of "green education" based on document counts sourced from Lens.org. China leads significantly with 119 publications, followed by Germany with 78 and the United States with 64, indicating these countries' strong research engagement and possibly robust policy or academic initiatives related to green education. Other prominent contributors include Spain, Brazil, the United Kingdom, and Australia, all showing document counts ranging between 55 and 48. These figures suggest a growing global awareness and scholarly interest in environmental and sustainability-focused education.

Further down the list, countries like Japan, Canada, Taiwan, Sweden, and India show moderate activity with publication counts between 25 and 19. Nations such as Italy, the Netherlands, Portugal, and others—including South Korea, Singapore, and South Africa—also contribute, albeit with fewer than 15 documents each. This distribution shows a global but uneven involvement, where developed nations dominate the discourse, while emerging economies are increasingly entering the conversation. The data highlights the international scope of green education research, pointing toward a need for more collaborative and inclusive global efforts to integrate sustainability into educational frameworks.

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World Cloud

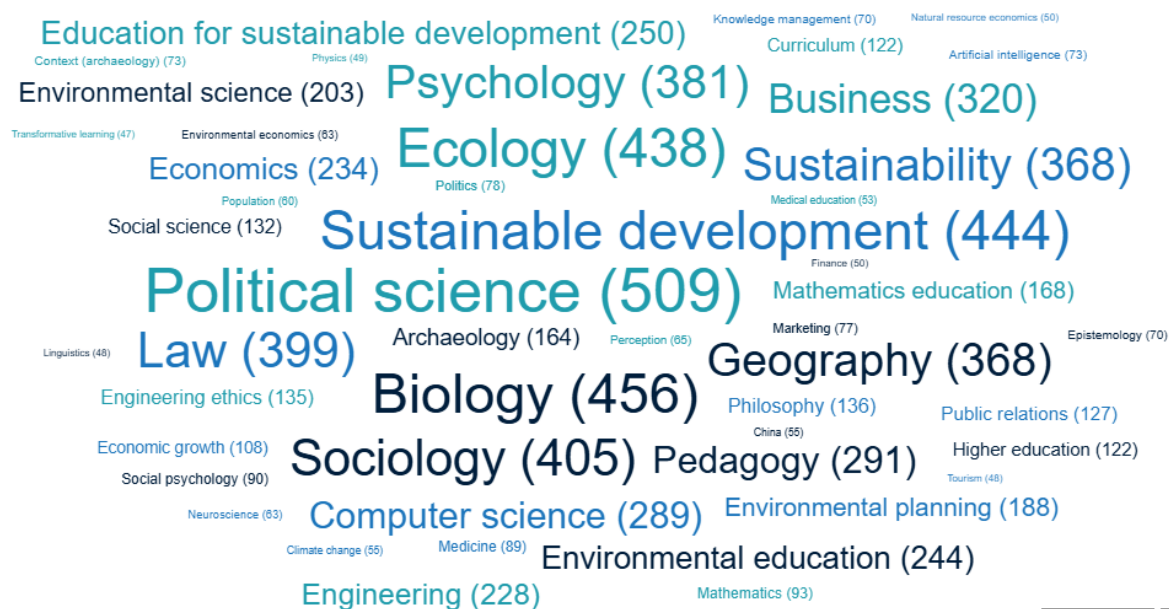


Figure 3: Disciplines

The dataset reveals a multifaceted landscape of research intersecting with Education for Sustainable Development (ESD), with notable concentrations in both expected and surprising disciplinary areas. Sustainable development emerges as the most prominent theme (444 occurrences), closely followed by ecology (438) and biology (456), reflecting the strong natural science foundations of sustainability education. However, the substantial representation of social sciences—particularly political science (509), sociology (405), and law (399)—indicates ESD's growing recognition as a socio-political challenge requiring governance solutions. The presence of both "environmental education" (244) and "education for sustainable development" (250) as distinct categories suggests ongoing conceptual tensions between ecological and holistic approaches to sustainability pedagogy.

The distribution highlights several underdeveloped interdisciplinary connections that warrant further exploration. While technical fields like engineering (228) and computer science (289) show substantial engagement, their numbers pale in comparison to adjacent disciplines like economics (234) or business (320), revealing potential gaps in STEM-ESD integration. The relatively low counts for transformative learning (47) and epistemology (70) suggest insufficient attention to foundational learning theories in ESD research. Surprisingly, climate change appears as a minor focus (65), despite being a central sustainability challenge, while more abstract concepts like "humanity" (90) and "cities" (56) demonstrate the field's struggle to balance systemic and localized perspectives. The strong showing of pedagogy (291) and higher education (122) confirms the established educational focus, but the minimal

representation of medical education (53) and neuroscience (63) points to missed opportunities in health-ESD synergies.

This disciplinary mapping suggests three priority areas for ESD research development. First, the dominance of political science and law indicates need for more policy implementation studies to bridge research-practice gaps. Second, the modest numbers in crucial areas like climate change education and transformative learning reveal theoretical underdevelopment requiring targeted scholarship. Finally, the uneven STEM engagement—strong in environmental sciences but weak in medical and computing fields—suggests opportunities for strategic interdisciplinary collaborations. The data ultimately portrays ESD as a maturing but still fragmented field, where natural science dominance coexists with growing social science interest, yet critical intersections remain underexplored. Future research should address these imbalances while leveraging the field's strong foundations in ecology, sociology, and governance studies.

Co-authorship

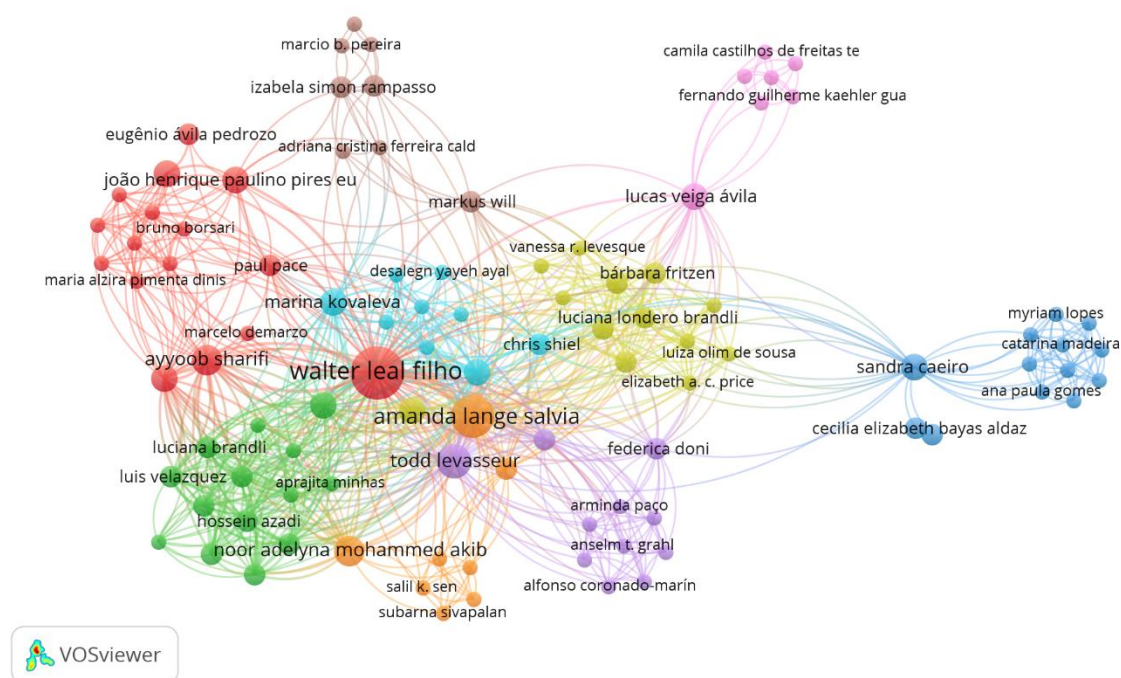


Figure 4: Co-authorship

The co-authorship network depicted in the image reveals a moderately interconnected research community focused on Education for Sustainable Development (ESD), with several notable strengths and limitations. The network includes a diverse mix of international researchers, as evidenced by names suggesting representation from Latin America (e.g., Marcio B. Pereira, Adriana Cristina Ferreira Cald), Europe (e.g., Paul Pace, Markus Will), and Asia (e.g., Ayyoob

Sharifi, Noor Adelyna Mohammed Akib). This geographic diversity indicates the global nature of ESD research collaborations. However, the network appears somewhat fragmented, with no single dominant hub or clearly defined clusters of collaboration. While researchers like Luciana Brandli and Walter Leal Filho (likely a misspelling of the prominent sustainability researcher Walter Leal Filho) appear as potential connecting nodes, the overall structure suggests that collaborations may still be developing rather than representing established, long-term research partnerships.

A critical examination of the network reveals several areas for improvement. First, there appears to be inconsistent representation of institutional affiliations, making it difficult to assess whether these collaborations are intra-institutional or truly interdisciplinary. Second, the presence of apparent misspellings (e.g., "Waiter Leaf filho" instead of Walter Leal Filho, "nossem azadi") suggests potential data quality issues that could affect network analysis accuracy. These errors may stem from either the original data source or the visualization process, highlighting the importance of rigorous data cleaning in bibliometric studies. Third, while the network shows international diversity, it lacks visible connections to some of the most prominent research institutions known for sustainability education, potentially limiting the representation of key thought leaders in the field.

The co-authorship patterns depicted here have important implications for ESD research development. The emerging nature of many collaborations suggests that the field may benefit from more intentional networking opportunities at international conferences or through targeted research initiatives. The geographic diversity presents an opportunity for comparative studies across different cultural and educational contexts, but the network would be strengthened by more interdisciplinary connections (e.g., between natural and social scientists) and greater inclusion of early-career researchers. Future research should address the data quality issues evident here while exploring whether these co-authorship patterns correlate with research impact or thematic focus areas. Overall, the network reflects a growing but still-developing collaborative infrastructure in ESD research that could be enhanced through more systematic efforts to build and sustain international research partnerships.

Mapping Visualization

The mapping visualization presents a temporal network of key contributors to Education for Sustainable Development (ESD) research from 2020 to 2024, revealing both the field's evolving nature and some structural limitations. The distribution shows consistent scholarly output throughout this five-year period, with notable clusters around 2020 (featuring established researchers like Walter Leal Filho and Ulf Fredriksson) and emerging voices in 2023-2024 (including Yipeng Ge and Xiaoli Sun). This pattern suggests a healthy balance between continuity from established experts and fresh perspectives from newer contributors. However, the visualization's limited contextual information about citation impact, institutional affiliations, or geographic distribution makes it difficult to assess the relative influence of these researchers or potential regional biases in the field's development.

Several methodological concerns emerge from the data presentation. The use of letter suffixes (e.g., "2020a", "2020c") for some authors but not others creates inconsistency in how multiple publications are represented, potentially obscuring the true volume of contributions. The apparent misspelling of "water leal filho" (instead of Walter Leal Filho) and other name inconsistencies ("falgun piyush desai") raise questions about data quality control. Furthermore, the absence of connecting lines or thematic grouping makes it impossible to discern collaborative relationships or research specializations among these authors. These limitations reduce the map's utility for understanding knowledge flows or intellectual structure within ESD research during this period.

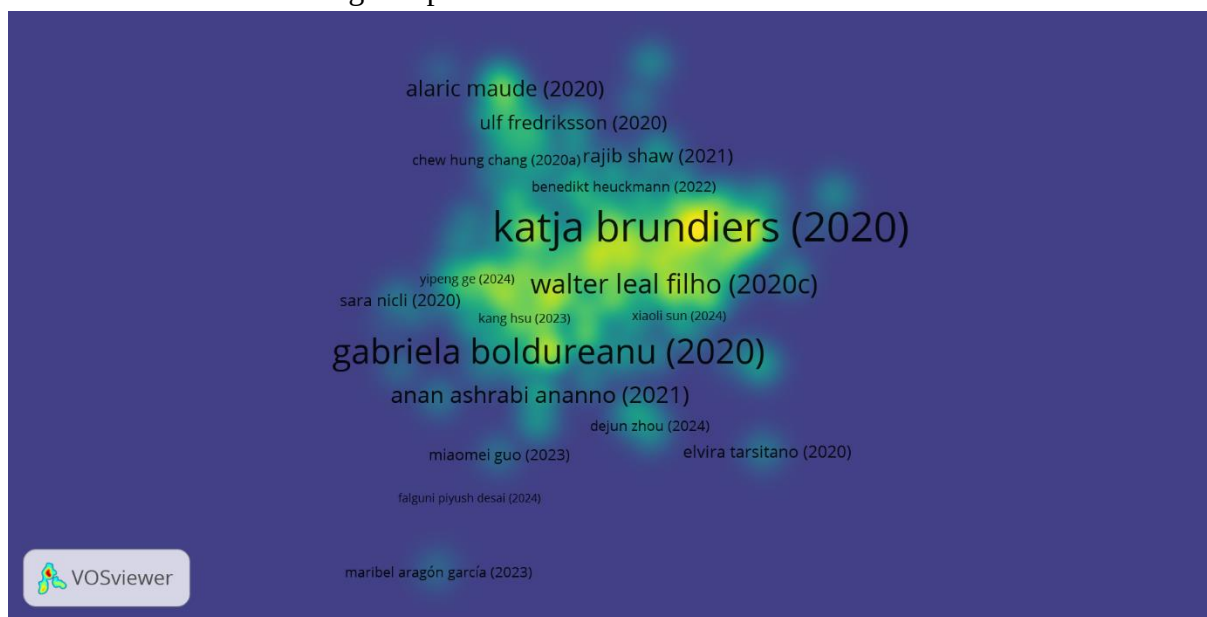


Figure 5: Key Contributors in GE Literature

The temporal spread of contributors nevertheless suggests three valuable insights about ESD research dynamics. First, the sustained appearance of both established and new researchers indicates the field's capacity to attract fresh scholarship while maintaining foundational knowledge. Second, the international diversity evident in names (from Rajib Shaw in Asia to Maribel Aragón García in Latin America) reflects ESD's global relevance, though this interpretation is limited without confirmed geographic data. Finally, the concentration of newer names in 2023-2024 may signal either an expanding field or simply reflect the visualization's recency bias. Future mappings would benefit from including collaboration networks, citation metrics, and clearer temporal patterns to better capture the field's intellectual evolution and emerging research frontiers.

Mapping Journals

The list of journals represents a diverse yet focused array of publication outlets for sustainability research, with several noteworthy patterns and limitations. While prominent titles like *Global Environmental Change* and *International Journal of Sustainability* suggest

coverage of high-impact sustainability topics, the presence of multiple misspelled journal names (*International Journal of Disks*, *Rivista di Studisulla Sosteni*) indicates significant data quality issues that could undermine analysis validity. The collection spans broad interdisciplinary areas, from environmental economics (*Environmental and Resource Eco*) to policy studies (*Review of Policy Research*) and social-ecological systems (*Conservation and Society*), reflecting sustainability science's inherently multidisciplinary nature. However, the absence of impact factors, publication frequencies, or geographic focuses limits our ability to assess the relative importance or representativeness of these outlets. The inclusion of both established journals and more specialized titles (*Problemy Ekorozwoju*, *Revisita de Gestao Social e Amb*) suggests attempts to capture global perspectives, but the evident data entry errors raise concerns about whether this sample accurately represents the field's core communication channels or merely reflects artifacts of poor data collection practices.

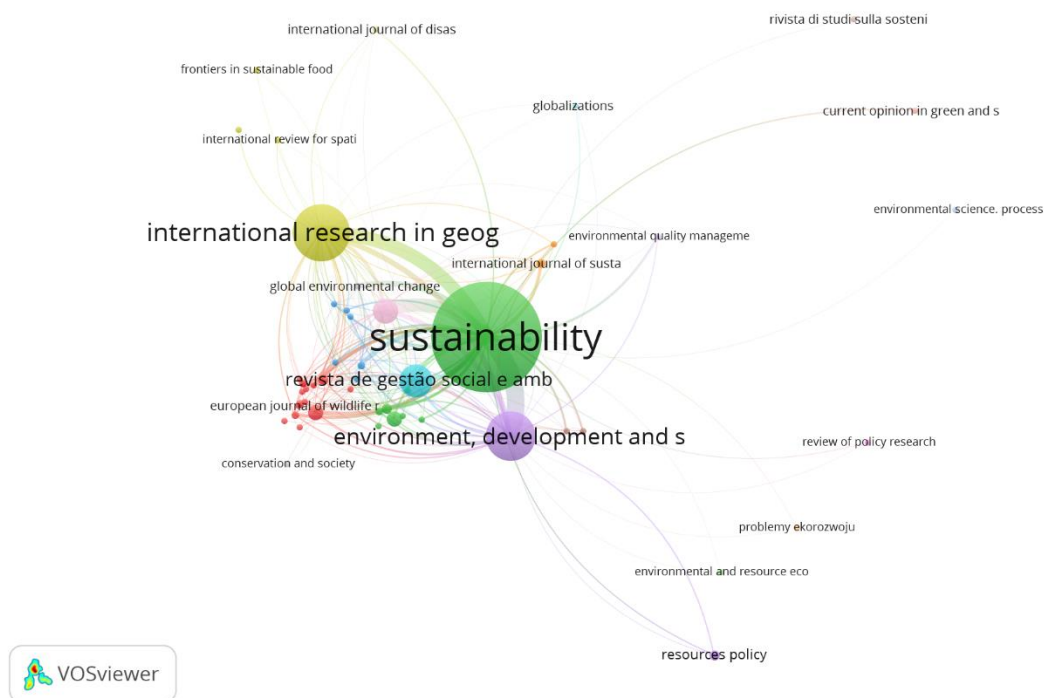


Figure 6: Leading Journals in GE Literature

Word Cloud: Keywords from Title

The word cloud reveals key thematic priorities and gaps in current Education for Sustainable Development (ESD) research, as reflected in publication titles. Dominant terms like *sustainability*, *education*, *environmental*, and *development* confirm the field's core focus, while specific concepts such as *SDGs*, *ecotourism*, *biodiversity*, and *marine* highlight connections to global frameworks and ecological systems. The presence of *technology*, *digital*, and *virtual model* points to growing interest in tech-mediated sustainability education, whereas terms like *pedagogical identity*, *participatory*, and *students* underscore the human-centered

[illegible]

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Conclusion

This bibliometric analysis provides a comprehensive overview of the Green Education (GE) and Education for Sustainable Development (ESD) research landscape from 2020 to 2024, revealing key trends, gaps, and opportunities. The study highlights steady but uneven growth in publications, with notable contributions from countries like China, Germany, and the United States, yet a lack of robust collaboration networks across regions. Thematic analysis underscores the dominance of ecological and policy-related research, while critical areas such as climate change education, ethics, and health-ESD linkages remain underdeveloped. Despite methodological challenges—including data quality issues and fragmented co-authorship patterns—the findings affirm ESD's interdisciplinary nature and global relevance. However, the field's fragmentation, inconsistent terminology, and reliance on Western-centric journals suggest the need for greater coherence and inclusivity in future research.

References

- Acharya, S., Shrestha, S. K., Neupane, D., & Mahat, D. (2024). Exploring Green Finance Practices for Advancing Sustainable Development in Nepalese Banking Sector. *NPRC Journal of Multidisciplinary Research*, 1(8), 23–34. <https://doi.org/10.3126/nprcjmr.v1i8.73024>
- Adhikari, D. B., Ghimire, M. N., Neupane, D., & Dhakal, R. L. (2018). An explorative study of academic performance of school students with reference to Ethnicity. *International Journal of Applied Research*, 4(5), 36-38.
- Adhikari, D. B., Ghimire, M., Neupane, D., & Regmi, R. B. (2018). An exploratory research on academic performance of school students with reference to religion. *International Journal of Applied Research*, 4(5), 76-81.
- Akinsemolu, A. A., & Onyeaka, H. (2025). The role of green education in achieving the sustainable development goals: A review. *Renewable and Sustainable Energy Reviews*, 210, 115239. doi: <https://doi.org/10.1016/j.rser.2024.115239>
- Ali, S., & Vladich, H. (2016). Environmental diplomacy. *The SAGE handbook of diplomacy*, 601-616.
- Ghimire, M. N., Khanal, N., Neupane, D., & Acharya, A. (2018). Result analysis of mid-term examination of Trilok academy. *IJAR*, 4(5), 82-84.
- Gurung, M., Thapa, N., Khadka, M., Karki, T. B., & Neupane, D. (2020). Access the Quality Service of Ganeshman Singh Memorial Hospital and Research Center. *Nepal Journal of Multidisciplinary Research*, 3(3), 51-63.
- Ilesanmi, O. O. (2016). Stepping up Agenda 2030 for the Attainment of Gender Parity and Sustainable Development in Nigerian Tertiary Institutions: A Case Study. *Asian Research Journal of Arts & Social Sciences*, 1(1), 1-18.
- Kazazoglu, S. (2025). Environmental Education Through Eco-Literacy: Integrating Sustainability into English Language Teaching. *Sustainability*, 17(5), 2156.
- Klarin, A. (2024). How to conduct a bibliometric content analysis: Guidelines and contributions of content co-occurrence or co-word literature reviews. *International Journal of Consumer Studies*, 48(2), e13031.
- Kumar, S., Karki, T. B., Mahat, D., & Neupane, D. (2024). The role of social influence in mediating the relationship between relative advantage and purchase intentions for smartphones: A study in Kathmandu, Nepal. *International Journal of Management*, 13(4), 935-948.
- Mahat, D., Neupane, D., & Karki, T. B. (2023). Exploring the Academic Landscape: A Critical Analysis and Review of the Nepal Journal of Multidisciplinary Research [NJMR]. *Nepal Journal of Multidisciplinary Research*, 6(4), 128–138. <https://doi.org/10.3126/njmr.v6i4.62036>
- Neupane, D., & Lourdasamy, A. (2024). Beyond Borders: The Accelerating Momentum of Domestic Violence Research Worldwide. *NPRC Journal of Multidisciplinary Research*, 1(2 July), 34-52.
- Neupane, D., & Lourdasamy, A. (2024). Bibliometric Insights into Anger and Aggression Research. *NPRC Journal of Multidisciplinary Research*, 1(4), 77-95.
- Rieckmann, M. (2018). Learning to transform the world: Key competencies in Education for Sustainable Development. *Issues and trends in education for sustainable development*, 39(1), 39-59.
- Saruchera, F. (2025). Sustainability: A Concept in Flux? The Role of Multidisciplinary Insights in Shaping Sustainable Futures. *Sustainability*, 17(1), 326. doi: <https://doi.org/10.3390/su17010326>
- Sinoara, R. A., Antunes, J., & Rezende, S. O. (2017). Text mining and semantics: a systematic mapping study. *Journal of the Brazilian Computer Society*, 23, 1-20.
- Žalėnienė, I., & Pereira, P. (2021). Higher education for sustainability: A global perspective. *Geography and Sustainability*, 2(2), 99-106. doi: <https://doi.org/10.1016/j.geosus.2021.05.001>