

# Methods and Trends in Higher Education Research: Bibliographic Analysis

Thanh Trung Pham<sup>1\*</sup>, Thi Thanh Do<sup>2</sup>, Manh Tien Vu<sup>3</sup>

<sup>1</sup>School of Economics - Hanoi University of Industry; PhD candidate - VNU University of Education, Vietnam - National University, Hanoi, 144 Xuan Thuy, Cau Giay, Hanoi, Vietnam

<sup>2,3</sup>Hanoi University of Industry

DOI: <https://doi.org/10.47772/IJRISS.2026.1026EDU0104>

Received: 28 January 2026; Accepted: 02 February 2026; Published: 02 March 2026

## SUMMARY

The article analyzed 1,583 publications (2006 –2025) from 563 Scopus sources, showing that higher education grew at an average rate of 13.66% per year. The average age of the documents was 6.23 years, with 17.05 citations per article. The US, UK, and Australia were the "supercenters," while Germany, China, South Africa, and Indonesia emerged as new power poles. Leading institutions included Lancaster University, HKU, and Incher-Kassel. Major journals such as the Journal of Higher Education, Teaching in Higher Education, Education Sciences, and the International Journal of Sustainability in Higher Education held high prestige. Malcolm Tight played a prominent role in disseminating ideas, along with Ulrich Teichler, Jung Jisun, and Hugo Horta within the academic network. The keyword "higher education" connected policy, governance, methodology, and learners, with new trends toward personalized experiences and the integration of AI and ML. The research provides a comprehensive perspective for identifying gaps, fostering collaboration, and designing data-driven policies.

**Keywords:** Educational research methods, bibliographic analysis, trends

## INTRODUCTION

The rapid development of scientific knowledge globally has been accelerated by the continuous growth of scientific research and new achievements in the field of technology ( Zupic, I., & Čater, T. 2015) . Like other scientific fields, educational research has witnessed remarkable growth in recent years. This rapid increase has created an urgent need for periodic reviews and evaluations of research literature in specific fields. This activity aims not only to provide an overview of the current state of the field but also to shape potential future research directions. Bibliometric analysis has emerged as a particularly effective methodology in providing a comprehensive overview of a scientific field, enabling the identification of knowledge gaps, generating new research ideas, and clarifying key contributions to the development of that field (Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, WM (2021).

In educational research, there have been many articles that follow a bibliographic analysis approach , but most remain isolated . Many works focus on topics such as research effectiveness (Diem & Wolter, 2013), augmented reality technology in teaching (Arici et al., 2019), or professional aspects of university administration (Xue & Zhu, 2022). Others synthesize information spatially and contextually, targeting specific geographic areas (Barrot, 2023) or content such as educational administration (Hallinger & Kovacevic, 2019) and higher education (Maral, 2024a; 2024b; 2024c).

Among the few comprehensive studies , notable examples include a survey of topic development based on 24 educational journals across nine fields on Google Scholar (Huang et al., 2020) and an analysis of highly cited articles in the SSCI "Education and Educational Research" category (Ivanovic & Ho, 2019). However, these studies are largely descriptive, failing to fully utilize knowledge mapping techniques and topic dynamics tracing. Furthermore, they largely rely on the Web of Science, while Scopus demonstrates superior scale and coverage:

over 77 million articles, nearly 24,000 peer-reviewed journals, and over 16 million author profiles. Cross-comparisons show that 84% of publications on the Web of Science appear in Scopus, but only 54% of publications on Scopus are present in the Web of Science. Specifically for social sciences, Scopus has approximately 60% higher unique publications (Gavel & Iselid, 2008).

In summary, the studies primarily contribute to depth in individual aspects but do not yet meet the need for a comprehensive overview of the field of educational research. Furthermore, Scopus data provides a more representative foundation for bibliographic analysis in education, suitable as a basis for systematic reviews and comprehensive synthesis.

Therefore, this study aims to comprehensively examine the scientific knowledge generated in educational materials, as well as clarify the contributions to this field and trends in the materials. Due to the large number of educational publications on Scopus, to obtain an overview of the scientific knowledge generated in this field, the study focuses on the last 10 years of research. This study seeks to answer the following research questions:

RQ1. What are the basic bibliographic metrics for educational publications, specifically the number of publications over time, and which journals, organizations, and countries have the highest publication productivity and the greatest impact?

RQ2. Who are the leading authors in the field of research on research methods in education?

RQ3. What topics have been identified in the educational materials?

## RESEARCH METHODOLOGY

This study uses bibliographic analysis to answer research questions, thereby providing an overview of methods and trends in higher education. This choice inherits and develops an approach that has been widely accepted in social sciences, especially in recent years (Pham, 2021). The application of bibliographic methods is methodologically sound. This approach both systematizes and clarifies the overall picture of a topic that is attracting the attention of the academic community.

### Identify data sources and collect data.

The choice of Scopus as a data source was carefully considered among large databases such as Web of Science and Google Scholar. Compared to Web of Science, Scopus covers a wider variety of document types, useful for reviewing and evaluating research in education and social sciences (Hallinger & Chatpinyakoo, 2019). Compared to Google Scholar, Scopus excels in its ability to export and process in-depth bibliographic data, supporting detailed analysis (Hallinger & Nguyen, 2020). For these reasons, data from Scopus was used for this study.

### Search criteria

In this study, the keyword phrase “research methods in education” was used as the central element for filtering information during the search process, applied simultaneously to the titles, abstracts, and keywords of publications. Initial searches on Scopus yielded 2,263 documents as of 10 PM on November 25, 2025. To transform this large dataset into a comprehensively analyzeable collection, the research team narrowed the scope by limiting the documents to the social sciences (SOCI) field. Only publications such as scientific papers, books, book chapters, and conference papers were retained, with a preference for English-language publications and those published up to 2025. Through a filtering and selection process based on research objectives, the number of publications was reduced to 1,583, creating a more streamlined database that ensures the necessary focus and depth for bibliographic analysis. The final query used in the Scopus tool was constructed as follows:

TITLE-ABS-KEY ( "Higher education research" OR "research methods in higher education" ) AND ( LIMIT-TO ( DOCTYPE, "ar" ) OR LIMIT-TO ( DOCTYPE, "cp" ) OR LIMIT-TO ( DOCTYPE, "ch" ) OR LIMIT-

TO ( DOCTYPE, "bk" ) ) AND LIMIT-TO ( SUBJAREA, "SOCI" ) AND LIMIT-TO ( LANGUAGE, "English" )

**PRISMA screening:**

The authors followed PRISMA guidelines for the search. The initial search on Scopus yielded 2,263 documents. Of these, 432 were removed after a screening step for not meeting the search criteria. Subsequently, 1,831 documents were read to check titles and summaries to determine the thematic relevance of each document. An additional 248 documents were removed from the Scopus list due to irrelevant topics, such as job security and the ideal graduate globally. The final database comprises 1,583 documents indexed on Scopus across various categories, focusing on employability (Figure 1).

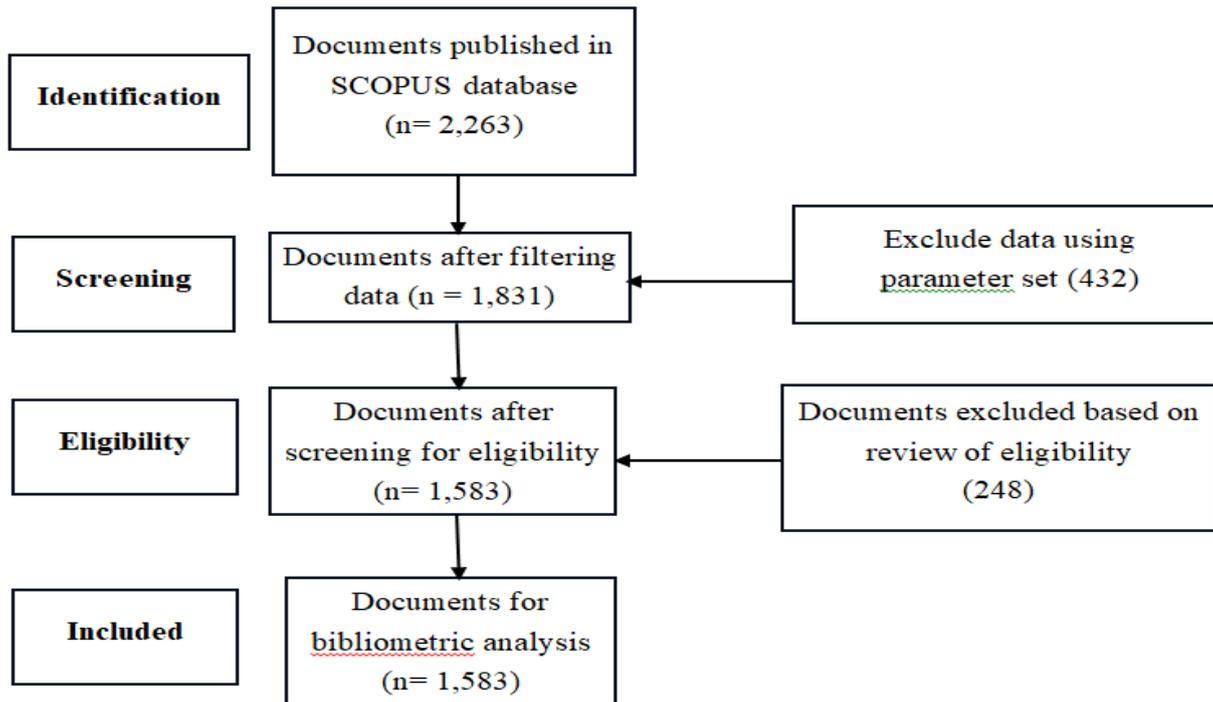


Figure 1. Data processing procedure for PRISMA screening.

**Data analysis**

The dataset, comprising 1,583 documents on educational research methods, was exported from Scopus to a single Excel file for descriptive statistics, recording the growth trajectory and geographic distribution of publications. The data was then imported into VOSviewer and R; VOSviewer was used for scientific mapping (Van Eck & Waltman, 2014), while R supported author identification, prominent literature, and cross-citation frequency calculation (Zupic & Cater, 2015). The study addressed the four questions posed in the introduction. Because citation behavior changes over time, bibliographic link analysis was limited to the period 2018–2022 to capture the current structure of the field (Glänzel & Thijs, 2012; Zupic & Cater, 2015). Colored clusters on the map represent conceptual groups, reflecting the thematic similarity between keywords and documents.

**RESULTS AND DISCUSSION**

**Overview of publications**

This content helps answer question 1. What are the basic bibliographic indicators of educational publications, specifically the number of publications over time, and which journals, organizations, and countries have the highest publication productivity and the greatest impact?

Table 1 provides an overview of publications over the past two decades. The aggregated data shows that this is a rapidly developing field of research, with an average annual growth rate of 13.66% over nearly two decades

(2006–2025). This is an impressive figure, confirming a long-term and sustainable trend of interest, rather than just a short-term boom. Among the 1,583 documents collected from 563 different sources (including journals, books, and others), the publication structure shows a reasonable distribution: not overly concentrated in a few major journals, nor as fragmented as less developed research fields. This indicates the existence of a stable academic community, balancing core elements with diversification. The average age of the documents is 6.23 years, indicating that the research collection is relatively recent. Most publications remain up-to-date but have had sufficient time to accumulate a certain number of citations, avoiding reliance solely on new articles that have not been widely validated by the community. This corresponds to an average citation rate of 17.05 per document.

Table 1. Description of the research document

Describe	Result
Time span	2006–2025
Source (Magazines, Books, etc.)	563
Document number	1,583
Annual growth rate (%)	13.66
Average age of documents	6.23
Average number of citations per document	17.05
References	11,698
Keywords Plus (ID)	2,138

Source: Results of running data on R software

Figure 2 is a graph showing the distribution of publications by year. The number of publications has been observed to be steadily increasing over the past decade.

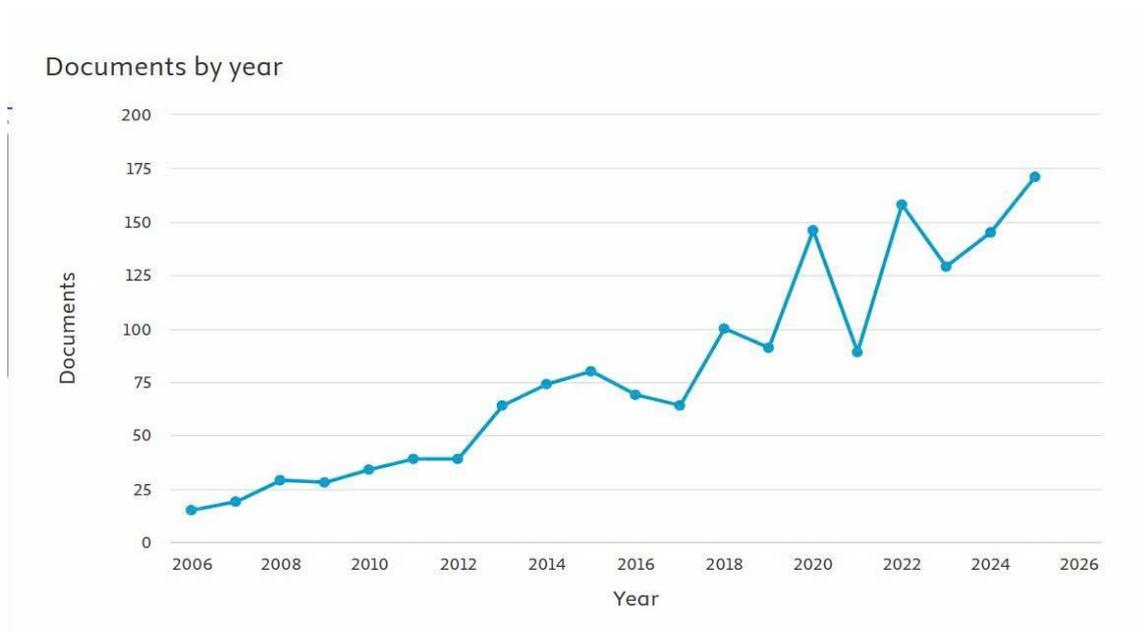


Figure 2: Chart showing the distribution of publications by year

Source: Scopus results

### The most productive and influential magazines

Data on the top 10 journals in higher education clearly illustrates both the scale of influence and the pace of academic growth internationally. The Journal of Higher Education stands out: 13 articles but with 537 citations,  $h = 8$ ,  $g = 13$ , indicating that each article has a very high reach and the journal serves as a benchmark in the field. The International Journal of Sustainability in Higher Education, although with only 7 articles, has accumulated 431 citations,  $h = 7$ , affirming its leading position in sustainable development research – a global topic. Education Sciences is the "new star": appearing since 2015, with 14 articles, 312 citations,  $h = 7$  and  $m = 0.636$ , indicating a rapid accumulation of influence and a trend towards becoming a new center. Teaching in Higher Education leads in output with 18 articles,  $h = 9$ ,  $g = 15$ ,  $TC = 235$ ;  $m = 0.474$  indicates both significant depth and strong growth. Higher Education Policy and Tertiary Education and Management (PY\_start 2006,  $h = 8$ ,  $m = 0.4$ ; TC 215 and 252 respectively) maintain a strong role in the policy and governance segment. Teachers College Record maintains its traditional position with 298 citations from 8 articles,  $m = 0.421$ , showing stable citation appeal. International Perspectives on Higher Education Research and Scientometrics have  $h = 7$  and 6 respectively, with high  $m$  (0.538 and 0.462); Scientometrics acts as a bridge between higher education and scientific/bibliographic measurement. Education and Training has a more modest index ( $h = 6$ ,  $TC = 112$ ,  $m = 0.333$ ) but broadens the perspective on training and human resource development. Overall, these journals form the core "knowledge infrastructure" of the field: some lead in citations and prestige, others excel in growth rate and specialization. This synergy is shaping research trends and policy in higher education globally.

Table 2. Data statistics on the top 10 journals in the dataset.

Source	Citation level.	Citation influence	The rate of increase affects each year.	Total number of citations	Number of articles in the dataset	Year of publication
Teaching in Higher Education	9	15	0.474	235	18	2007
Lower education policy	8	11	0.4	215	11	2006
Journal of Higher Education	8	13	0.571	537	13	2012
Teachers college record	8	8	0.421	298	8	2007
Tertiary education and management	8	10	0.4	252	10	2006
Education	7	14	0.636	312	14	2015
International journal of sustainability in higher education	7	7	0.368	431	7	2007
International perspectives on higher education research	7	9	0.538	92	15	2013

Education and training	6	6	0.333	112	6	2008
Scientometrics	6	7	0.462	136	7	2013

Source: Results of running data on R software

### The most productive and influential organizations

Table 3, which presents a dataset of the top 15 research institutions, reveals several "power centers" that strongly shape knowledge about higher education globally. Most notably, the Department of Educational Research at Lancaster University (UK) stands out with 36 publications, 1,638 citations, and a link rating of 299 – leading both in output and being the strongest link node in the network. Within the Lancaster cluster, Lancaster University itself achieved 14 publications, 284 citations, and a link rating of 135, demonstrating significant internal synergy. The Hong Kong cluster, comprising the Division of Policy, The University of Hong Kong, and The University of Hong Kong (Hong Kong, China), impresses with a relatively small number of publications (11 and 10 respectively) but a very high link rating (271 and 228), reflecting its role as an "Asian gateway" in the -international citation community. In continental Europe, INCHERKassel and Universität Kassel (Germany) form another important sphere of influence. American universities such as New York University, University of Massachusetts Amherst, The Ohio State University, University of Southern California, Indiana University School of Education, and the University of Iowa (USA) have a moderate number of publications but high citations per publication (many have over 170 citations per 5–8 publications), affirming their academic quality. Universities in Finland, Belgium, and Australia, such as the University of Jyväskylä (Finland), Universiteit Gent (Belgium), and the University of Queensland (Australia), play a central regional role with good citation counts but more modest TLS (Total Liaisons). Overall, the network is led by a few “supercenters” of output and connectivity (UK, Hong Kong/China, Germany), while many American, European, and Australian universities contribute fewer but more influential works, together forming the core knowledge infrastructure of global higher education research.

**Table 3. Data statistics for the top 15 research organizations in the dataset.**

No.	Organizations	Document	Quote	Total strength of alliances
1	Department of educational research, lancaster university, lancaster, lancashire, united kingdom	36	1,638	299
2	Division of policy, the university of hong kong, hong kong, hong kong	11	127	271
3	Indiana university school of education, bloomington, in, united states	5	161	47
4	International center for higher education research (incher-kassel), universität kassel, kassel, hessen, germany	7	162	141
5	Lancaster university, lancaster, lancashire, united kingdom	14	284	135
6	New york university, new york, ny, united states	8	174	64
7	The ohio state university, columbus, oh, united states	5	190	27
8	The university of hong kong, hong kong, hong kong	10	359	228



the remarkable growth of research education in Asia. South Africa leads Africa with 113 articles, playing a key role in connecting the region to global knowledge. With 109 publications emerging in Southeast Asia, Indonesia is closing the gap in research output compared to larger countries in the region.

### Country Scientific Production

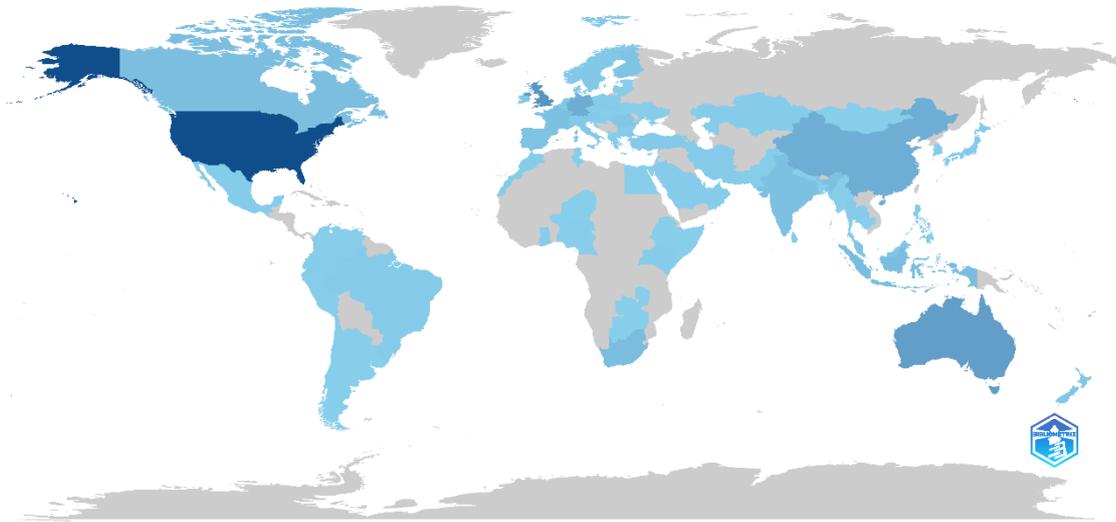


Figure 4. Map of scientific publication output by country.

### Results of running data on R software

South Africa demonstrates a strong transformation of its higher education system in a rapidly developing economy. Canada (106) continues to assert its role as the “third pole” in North America, both connected to Anglo-Saxon traditions and possessing its own identity in policy research and equity in education. In Europe, France (84) and India (83) have comparable output, but each represents a different development model: France, with its long-established grandes écoles and public universities, provides a stable research foundation, while India reflects the need to reform its university system to serve a huge labor market. Overall, the figures show that higher education research is concentrated in a few English-speaking “supercenters” (USA, UK, Australia, Canada), supplemented by traditional poles in Europe (Germany, France) and emerging economies (China, India, Indonesia, South Africa), thus forming a knowledge network that is both highly concentrated and increasingly multipolar as non-Western countries increase their contributions.

### Analysis of the main authors

This content helps answer question 2: Who are the main authors in the field of research on research methods in education? Because the number of nodes in the map created using VOSViewer software affects the map's readability, a threshold of 15 authors was selected. Figure 5 illustrates the influence of the authors on the world map.

Table 4. Leading authors in higher education research

Author	Document	Quote	Link
Tight, Malcolm	35	1,659	413
Teichler, Ulrich	15	503	194
Jung, Jisun	14	427	545
Horta, Hugo	14	272	533

Yonezawa, Akiyoshi	8	22	254
Hughes, Bryce Edward	7	426	7
Stensaker, Bjørn	7	306	9
Huisman, Jeroen	7	195	37
Bowman, Nicholas A.	7	175	13
Ashwin, Paul	7	87	44
Case, Jennifer M.	7	52	24
Kosmützky, Anna	6	314	127
Wells, Ryan S.	6	286	56
Huang, Futao	6	47	25
Välimaa, Justi	5	209	46

Source: Scopus data

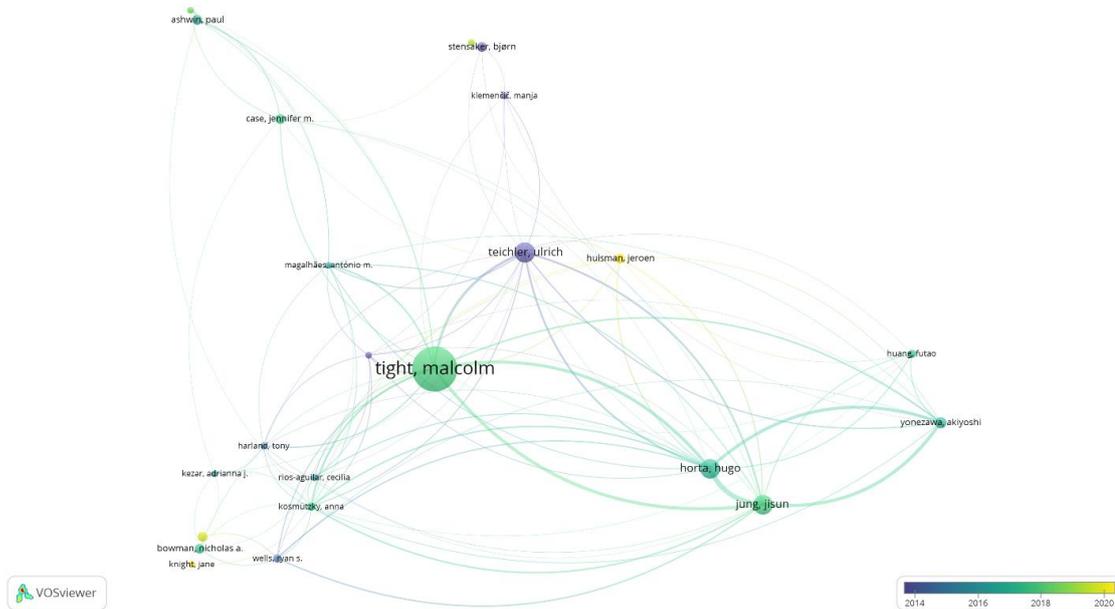


Figure 5. Chart showing the organizations involved in educational research.

### Results of running data on VOSviewer software

Based on the statistics in Table 4, Malcolm TIGHT stands out as the central author with 35 research papers cited 1,659 times, and possesses a very high level of linkage (413), affirming his important role as a key figure in the academic network. The group of authors with average research output but significant levels of linkage and citations includes Jung Jisun (14 papers, 427 citations, 545 links) and Hugo Horta (14 papers, 272 citations, 533 links). This demonstrates their international "hub" function, playing a crucial role in cross-national academic collaboration. Ulrich Teichler holds a foundational position with 15 papers, 503 citations, and 194 links, in which he acts as a bridge connecting research clusters in Europe. Some authors, such as Bryce Edward Hughes (426 citations, 7 links) and Bjørn Stensaker (306 citations, 9 links), despite having high citation counts, have limited



## Results of running data on VOS viewer software

The Trend Topics chart in Figure 7 illustrates the phased progression: from 2008–2012, the "data mining," "online systems," "information technology," "knowledge management," and "project management" classes laid the foundation for digital infrastructure and governance; 2013–2016 marked the rise of "higher education," "education computing," and "information management," along with the emergence of contextual terms like "Australia"; 2016–2020 saw an increase in the frequency of "students," "human(s)," "academic research," "articles," and "higher education researches," indicating the standardization of academic output and a shift towards learner-experience; from 2020 to 2024, "artificial intelligence," "contrastive learning," and "federated learning" exploded, confirming the leap to the AI/ML level. The larger point sizes (frequency) of "students," "academic research," "article," and "higher education" on the graph indicate that the content focus has converged on two pillars: standardized research and learners. The extended lines of "qualitative research" and "major clinical study" reflect the diversification of methods, from qualitative to clinical, alongside "bibliometrics" in the network, reinforcing the capacity for knowledge synthesis at the domain level. The early appearance of "societies and institutions" and "economics" followed by a gradual decrease suggests a shift from an institutional-economic framework to an experience-equity-technology framework, but still maintains links with "policy" and "competition" in the network map. Overall, the two figures show an interconnected knowledge structure: the system provides context, the research pillar provides methods and standards, learners provide evaluation data, and technology provides the impetus for transformation. This is the consistent development trajectory of the higher education sector during the period 2008–2024.

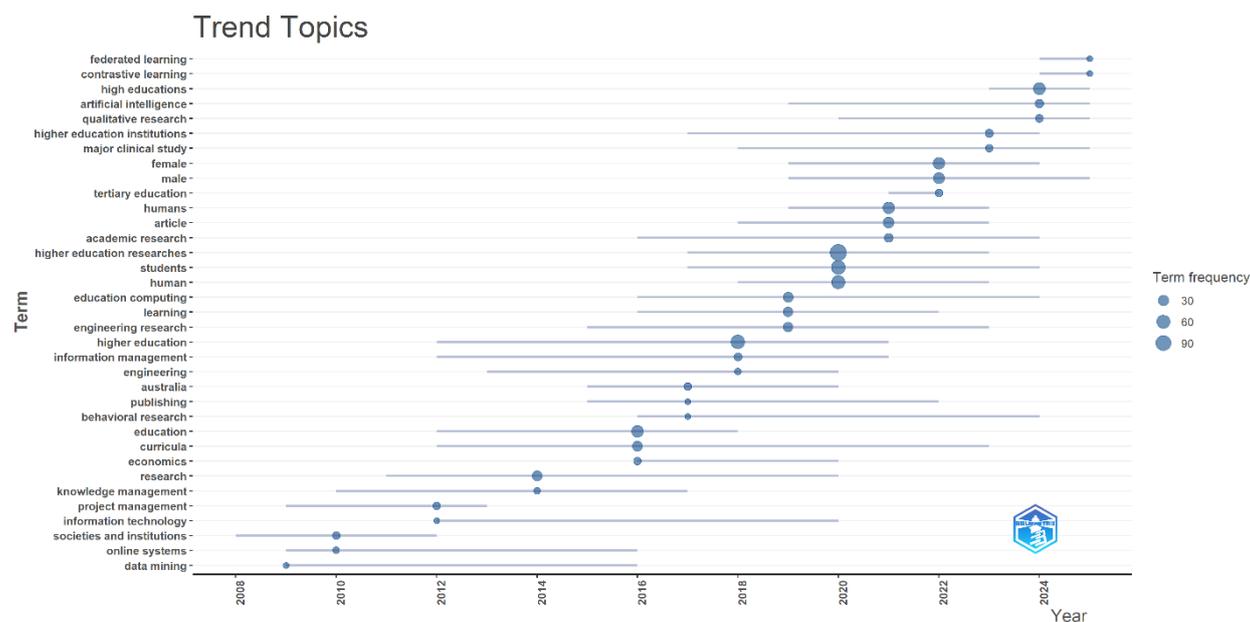


Figure 7. Chart showing research trends.

Source: Results of running data on R software

## CONCLUSION

Based on an analysis of 1,583 publications between 2006 and 2025, using VOSviewer and R tools, this study provides a quantitative and systematic overview of knowledge structures, collaborative networks, and the development of topics in the field of higher education research.

Firstly, the steady publication growth rate of an average of 13.66% per year, an average document age of 6.23, and an average citation count of 17.05 demonstrate that this field is not only expanding in scale but also ensuring the necessary academic maturity to build influence. The diversity of resources across 563 publishing channels has formed a rich "knowledge infrastructure," supporting both core research and interdisciplinary trends.

Secondly, the data also reflects a focus on English-speaking "supercenters" (the United States, the United Kingdom, Australia, and Canada) within the national context, while noting a trend towards multipolarization as countries like Germany, China, South Africa, Indonesia, and India increasingly contribute. Internationally, the collaborative network clearly shows fragmentation into three regional clusters but maintains strong points of intersection (the United States, the United Kingdom, Hong Kong/China, and Germany), facilitating the efficient flow of knowledge between the West and the East. At the organizational level, units such as the Department of Educational Research (Lancaster University), the Division of Policy (University of Hong Kong), and INCHER-Kassel play crucial roles in knowledge production and networking, contributing to both the quantity and influence within the field.

Third, the map shows that the keyword "higher education" is the platform where policy, governance, methodology, and learners converge. "Higher education research" is strongly linked to "systematic review," "bibliometric analysis," "qualitative research," and "content analysis," reflecting the maturation of endogenous self-reflection methods. The phrase learner-quality assurance (students, engagement, psychology, assessment, quality control) shifts the focus from output measurement to experience-engagement, driving pedagogical improvement through data loops. Technology-innovation (e-learning, information/knowledge management, project management, engineering education, critical thinking, artificial intelligence) demonstrates the permeation of technology into research, governance, and teaching; AI/ML restructures the knowledge creation process and learning organization. Topics such as "neoliberalism," "knowledge production," "intersectionality," and geographical contexts (Australia, China, South Africa) highlight the need for a critical approach, adapting policies to each context, and avoiding a tendency toward non-adaptation.

Fourth, the Trend Topics graph shows a clear evolutionary trajectory: the initial phase focused on digital infrastructure and governance such as data mining, online systems, information technology, and knowledge/project management; followed by "higher education," "education computing," "information management," and contextual factors such as Australia; recently, the focus has shifted to "students," "academic research," "articles," and "higher education researches," notably with the development of "artificial intelligence," "contrastive learning," and "federated learning." This reflects the link between academic standardization and technological expansion, with learners at the center. The stability of "qualitative research," along with the integration of clinical/metric methods, enhances multi-method capabilities, enabling the field to both conduct in-depth research and expand its applications.

The empirical contributions of the research include: (i) mapping the knowledge ecosystem at the macro level using a large and well-covered dataset; (ii) locating centers of academic power at the national–organizational–author level along with bridging nodes, useful for collaboration strategies and capacity building; (iii) identifying the three-tiered subject structure (system–research–learner) and technological dynamics, providing a reference framework for program design, quality assurance, and funding prioritization. From these findings, three prominent policy implications are proposed. First, strengthen the "methodology pillar" by requiring mandatory systems overview/bibliometrics in methodology modules, linked to ethical standards and data transparency, to maintain self-reflection mechanisms. Second, design a learner data loop (engagement–affect–achievement) integrated into QA at multiple levels, shifting from output tracking to evidence-based optimization of the learning experience. Thirdly, it involves creating a targeted digital transformation strategy: clearly separating the toolset for research (metrics, exploration), management (keyboard/management/quality assurance), and teaching and learning (active learning, critical thinking, AI-assisted assessment), while prioritizing research connecting AI with DEI to reduce bias and increase equity.

However, the paper acknowledges the limitations of relying solely on Scopus as a source, potentially overlooking some publications outside the index's scope; the time frame in the citation link analysis (2018–2022) reflects current structure but may not fully encompass long-term impacts; and contextual inference from keywords requires further verification through full-text analysis. Nevertheless, these limitations do not diminish the overall value of the results, but rather point to areas for improving future research design.

Future research needs include: expanding data sources to include multiple systems (Scopus + WoS + Crossref/Dimensions); experimenting with dynamic topic modeling using machine learning techniques (topic modeling, dynamic embeddings) to track conceptual shifts over time; building a dashboard for QA based on

engagement-learning-wellbeing metrics; and developing an AI impact assessment framework based on principles of fairness, transparency, and accountability.

Thus, higher education currently operates as a systemic foundation, with a mature methodology pillar, learners at the center of data, and technology as the driving force of transformation. Realizing the three policy implications mentioned above will help the academic community and administrators shift from a knowledge map to an actionable architecture, improving research quality, organizational capacity, and learning experiences in the digital age.

## REFERENCES

1. Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational research methods*, 18(3), 429-472.
2. Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of business research*, 133, 285-296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
3. Diem, A., & Wolter, S. C. (2013). The use of bibliometrics to measure research performance in education sciences. *Research in higher education*, 54(1), 86-114.
4. Arici, F., Yildirim, P., Caliklar, Ş., & Yilmaz, R. M. (2019). Research trends in the use of augmented reality in science education: Content and bibliometric mapping analysis. *Computers & education*, 142, 103647. <https://doi.org/10.1016/j.compedu.2019.103647>
5. Xue, Y., Cornelis, J., & Zhu, C. (2022). EU-China university governance structures—case studies. *Asia Europe Journal*, 20(2), 137-171.
6. Barrot, J. S. (2023). Trends in automated writing evaluation systems research for teaching, learning, and assessment: A bibliometric analysis. *Education and Information Technologies*, 1–25. <https://doi.org/10.1007/s10639-023-12083-y>
7. Hallinger, P., & Kovačević, J. (2019). A bibliometric review of research on educational administration: Science mapping the literature, 1960 to 2018. *Review of Educational Research*, 89(3), 335-369.
8. Maral, M. (2024). A bibliometric analysis of global research on education in the Scopus database, 2013–2022. *Global Knowledge, Memory and Communication*.
9. Huang, C., Yang, C., Wang, S., Wu, W., Su, J., & Liang, C. (2020). Evolution of topics in education research: A systematic review using bibliometric analysis. *Educational Review*, 72(3), 281-297. <https://doi.org/10.1080/00131911.2019.1566212>
10. Ivanović, L., & Ho, Y. S. (2019). Highly cited articles in the education and educational research category in the social science citation Index: A bibliometric analysis. *Educational Review*, 71(3), 277-286. <https://doi.org/10.1080/00131911.2017.1415297>
11. Gavel, Y., & Iselid, L. (2008). Web of Science and Scopus: a journal title overlap study. *Online information review*, 32(1), 8-21. <https://doi.org/10.1108/14684520810865958>
12. Pham, D. H. (2021). The professional development of academic staff in higher education institution. *Journal of Teacher Education for Sustainability*, 23(1), 115-131. DOI: 10.2478/jtes-2021-0009
13. Hallinger, P., & Chatpinyakoo, C. (2019). A bibliometric review of research on higher education for sustainable development, 1998–2018. *Sustainability*, 11(8), 2401. <https://doi.org/10.3390/su11082401>
14. Hallinger, P., & Nguyen, V. T. (2020). Mapping the landscape and structure of research on education for sustainable development: A bibliometric review. *Sustainability*, 12(5), 1947. <https://doi.org/10.3390/su12051947>
15. Van Eck, N. J., & Waltman, L. (2014). Visualizing bibliometric networks. In *Measuring scholarly impact: Methods and practice* (pp. 285-320). Cham: Springer International Publishing.
16. Glänzel, W., & Thijs, B. (2012). Using ‘core documents’ for detecting and labelling new emerging topics. *Scientometrics*, 91(2), 399-416. <https://doi.org/10.1007/s11192-011-0591-7>