

Chronicles of Learning: Trend Analysis and Clustering in the History of Education

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ABSTRACT: This study conducts a comprehensive bibliometric analysis of educational literature from 1976 to 2025, revealing significant research output and impact trends. The findings indicate a period of low article production from the late 1970s to the early 2000s, with notable citation peaks in 1981 and 1986. However, since the 2010s, there has been a marked increase in published articles, accompanied by a decline in average citations per article, suggesting a saturation of literature. The keyword co-occurrence analysis highlights a shift from historical perspectives to emerging themes such as rural education and gender issues, particularly from 2012 onward. The study identifies a well-defined hierarchy in which the «history of education» cluster remains central, underscoring its foundational role in the field. In contrast, the period from 2016 to 2025 exhibits diversification in research inquiries, with new clusters emerging around case studies and qualitative approaches. Despite this diversification, the analysis reveals a lack of significant citation spikes in newer topics, indicating potential stagnation. Overall, this research underscores the dynamic evolution of educational literature, emphasizing the need for ongoing inquiry into contemporary themes and their relevance in addressing current educational challenges. Future studies should enhance the visibility and impact of emerging topics within this increasingly saturated academic landscape.

EET/TEE KEYWORDS: History of Education; Bibliometric analysis; Thematic evaluation; Trends analysis; XX-XXI Centuries.

Introduction

The history of education traces the evolution of formal and informal learning systems from ancient civilizations to contemporary society, highlighting the development of pedagogical theories, curricula, and educational institutions¹. Initially rooted in transmitting cultural knowledge and skills, education has progressively incorporated scientific methodologies, fostering critical thinking and innovation². This historical progression has introduced new dimensions to the scientific community by promoting interdisciplinary collaboration, enhancing research methodologies, and facilitating the dissemination of knowledge³. As education adapts to technological advancements and societal needs, it plays a crucial role in shaping future scientific inquiry and fostering a more informed and engaged populace.

The history of education significantly influences modern society, particularly with the emergence of modern technologies, by reshaping pedagogical approaches and learning environments⁴. As educational practices evolve, they increasingly integrate digital tools and resources, facilitating personalized learning experiences and expanding access to information⁵. This historical context underscores the transition from traditional, rote memorization methods to more interactive, student-centered learning paradigms emphasizing critical thinking, collaboration, and creativity⁶. Moreover, incorporating tech-

¹ R. Collins, *Comparative and Historical Patterns of Education*, «Handbook of the Sociology of Education», November 27, 2000, pp. 213-239, <https://doi.org/10.1007/0-387-36424-2_10> (last access: 10.09.2025).

² V.M. Vesterinen, M.A. Manassero-Mas, Á. Vázquez-Alonso, *History, Philosophy, and Sociology of Science and Science-Technology-Society Traditions in Science Education: Continuities and Discontinuities*, «International Handbook of Research in History, Philosophy and Science Teaching», January 1, 2014, pp. 1895-1925, <https://doi.org/10.1007/978-94-007-7654-8_58> (last access: 10.09.2025).

³ J. MacDonald, A. Black, *Disciplinary Knowledge Practices in Distance Education*, «Arts and Humanities in Higher Education», vol. 9, n. 1, February 2010, pp. 69-86, <<https://doi.org/10.1177/1474022209349828>> (last access: 10.09.2025); J. Newman, *Promoting Interdisciplinary Research Collaboration: A Systematic Review, a Critical Literature Review, and a Pathway Forward*, «Social Epistemology», vol. 38, n. 2, March 3, 2024, pp. 135-151, <<https://doi.org/10.1080/02691728.2023.2172694>> (last access: 10.10.2025).

⁴ Kinshuk *et alii*, *Evolution Is Not Enough: Revolutionizing Current Learning Environments to Smart Learning Environments*, «International Journal of Artificial Intelligence in Education», vol. 26, n. 2, June 1, 2016, pp. 561-581, <<https://doi.org/10.1007/S40593-016-0108-X/METRICS>> (last access: 10.10.2025).

⁵ J.A. García-Martínez *et alii*, *Digital Tools and Personal Learning Environments: An Analysis in Higher Education*, «Sustainability 2020», vol. 12, n. 19, October 4, 2020, p. 8180, <<https://doi.org/10.3390/SU12198180>> (last access: 10.09.2025).

⁶ Z. Zhang, *Revolutionizing Education: The Transformative Power of Educational Technology in Online Learning*, in *Proceedings of the 2024 3rd International Conference on Humanities, Wisdom Education and Service Management (HWESM 2024)*, 2024, pp. 523-529, <https://doi.org/10.2991/978-2-38476-253-8_62> (last access: 10.09.2025).

nology in education fosters lifelong learning and adaptability, essential skills in a rapidly changing job market⁷. Consequently, the historical evolution of education informs current teaching practices and enhances individuals' capacity to navigate and contribute to an increasingly complex and interconnected world.

Identifying trends in the publication of articles within the history of education is crucial for understanding the evolving landscape of educational theories, practices, and policies. By analyzing publication patterns, researchers can discern shifts in focus areas, emerging methodologies, and the impact of socio-political contexts on educational discourse⁸. This trend analysis informs current educational practices and guides future research agendas, ensuring they remain relevant and responsive to contemporary challenges⁹. Then, neglecting to pay attention to these trends can stagnate knowledge, where outdated practices persist, and innovative solutions to pressing educational issues are overlooked. This oversight hinders educational equity and effectiveness advancement, ultimately impacting the quality of education provided to learners in diverse contexts.

The history of education has evolved through various dimensions across different periods, reflecting societal changes and advancements in pedagogical theories. Before the 21st century, education was primarily characterized by traditional, teacher-centered approaches, with a strong emphasis on rote learning and standardized curricula, often influenced by industrialization and the need for a skilled workforce. From 2000 to the onset of the COVID-19 pandemic, the dimensions of education shifted towards more learner-centered methodologies, incorporating technology and digital resources, facilitating personal-

⁷ J. Kim, C. Young Park, *Education, Skill Training, and Lifelong Learning in the Era of Technological Revolution: A Review*, «Asian-Pacific Economic Literature», vol. 34, n. 2, November 1, 2020, pp. 3-19, <<https://doi.org/10.1111/APEL.12299>> (last access: 10.09.2025); J. Hutson, J. Ceballos, *Rethinking Education in the Age of AI: The Importance of Developing Durable Skills in the Industry 4.0*, «Journal of Information Economics», vol. 1, n. 2, July 1, 2023, pp. 26-35, <<https://doi.org/10.58567/jie01020002>> (last access: 10.09.2025).

⁸ A. Yazdi, A. Karimi, S. Mystakidis, *Gamification in Online Education: A Visual Bibliometric Network Analysis*, «Information», vol. 15, n. 2, February 1, 2024, p. 81, <<https://doi.org/10.3390/INFO15020081>> (last access: 10.09.2025); I. Maryani, A. Karimi, K. Fathi, *Museums as a Valuable Platform for Teaching History: A Scientometric Review*, «European Journal of Education», vol. 60, n. 3, September 2025, <<https://doi.org/10.1111/EJED.70146>> (last access: 10.09.2025).

⁹ D. Herhausen *et alii*, *Machine Learning in Marketing: Recent Progress and Future Research Directions*, «Journal of Business Research», vol. 170, January 1, 2024, p. 114254, <<https://doi.org/10.1016/J.JBUSRES.2023.114254>> (last access: 10.09.2025); D. Ifenthaler *et alii*, *Putting Learning Back into Learning Analytics: Actions for Policy Makers, Researchers, and Practitioners*, «Educational Technology Research and Development», vol. 69, n. 4, August 1, 2021, pp. 2131-2150, <<https://doi.org/10.1007/S11423-020-09909-8/TABLES/2>> (last access: 10.09.2025).

ized learning experiences and greater access to information. This period also saw an increased focus on inclusivity and diversity in educational settings. Since the pandemic, the analysis of educational dimensions has expanded to include the impact of remote learning, the digital divide, mental health considerations, and the necessity for adaptive teaching strategies to accommodate diverse learning environments. Moving forward, it is essential to consider the integration of social-emotional learning, global citizenship education, and the role of artificial intelligence in shaping future educational practices.

The History of Education has experienced significant changes over the decades, marked by increased scholarly output and new thematic focuses. From 1967 to 2005, research in the History of Education was limited, focusing primarily on traditional educational narratives. Roda-Segarra, Payà Rico, and Hernández Huerta (2022) conducted a bibliometric analysis of 11 relevant journals, indicating that this period established a foundation for future research but lacked collaborative networks. Early studies mainly addressed historical accounts of educational systems, often reflecting national contexts without significant international dialogue¹⁰. A pivotal change occurred in 2006, with a marked increase in research production that fostered internationalization and transnational research networks. Gómez-Carrasco *et alii* (2022) identified a shift toward Historical Thinking and Historical Consciousness as central themes in history education research, leading to the emergence of five topic clusters emphasizing critical engagement with historical sources and the social functions of history in shaping identity and civic responsibility¹¹.

We have seen further evolution in recent years, particularly in integrating digital humanities. Roda-Segarra *et alii* (2024) introduced Hecumen, a digital tool to address bibliographic gaps and enhance the accessibility of historical education research. This point reflects a broader trend toward utilizing technology to improve scholarly visibility¹². Additionally, establishing the Observatory for the History of Education in 2019 sought to reflect on contemporary theories and issues, especially in light of the challenges posed by the COVID-19 pandemic¹³. Hernández Huerta *et alii* (2019) examined research

¹⁰ J. Roda-Segarra, A. Payà Rico, J.L. Hernández Huerta, *The History of Education through Specialised Journals: Themes, Scientific Production and Bibliometrics (1967-2022)*, «Social and Education History», vol. 12, n. 1, February 23, 2023, pp. 85-117, <<https://doi.org/10.17583/HSE.11028>> (last access: 10.09.2025).

¹¹ C.J. Gómez-Carrasco *et alii*, *A Review of Literature on History Education: An Analysis of the Conceptual, Intellectual and Social Structure of a Knowledge Domain (2000-2019)*, «European Journal of Education», vol. 57, n. 3, September 1, 2022, pp. 497-511, <<https://doi.org/10.1111/EJED.12508>> (last access: 10.09.2025).

¹² J. Roda-Segarra *et alii*, *History of Education Meets Digital Humanities: A Field-Specific Finding Aid to Review Past and Present Research*, «History of Education», vol. 53, n. 5, September 2, 2024, pp. 893-913, <<https://doi.org/10.1080/0046760X.2024.2337896>> (last access: 10.09.2025).

¹³ L. Somogyvári, M. Bittar, T. Hamel, *Observatory for the History of Education: Looking*

dissemination within the Iberian Peninsula, highlighting the roles of academic societies, journals, and conferences in shaping the communication landscape of the History of Education¹⁴. Their study underscored the importance of participatory spaces for debate and collective knowledge construction, which is essential for advancing the field in regional contexts.

The literature on the History of Education illustrates a dynamic landscape characterized by increasing scholarly output, thematic diversification, and digital tool integration. The shift from a national to a more international and collaborative approach has enriched the field, allowing for a broader understanding of educational histories. Future research should continue to address collaboration challenges and the need for cohesive understanding, particularly as the discipline adapts to a rapidly changing educational landscape. The focus on Historical Thinking and Historical Consciousness suggests promising directions for future studies, equipping educators and students to navigate complex societal issues.

The research background in the History of Education literature review reveals significant shortcomings in addressing critical questions regarding the field's evolution and current state. While it acknowledges the increase in scholarly output and thematic diversification, it fails to provide accurate answers to essential inquiries such as the current state of academic literature (RQ1) and the contributions of keyword clustering to understanding historical educational practices (RQ2). Furthermore, the review does not adequately explore the trends identified through scientometric map analysis (RQ3) or the insights gained from citation analysis regarding prevailing trends and influences in the discipline (RQ4). This lack of comprehensive analysis leaves a gap in understanding how these developments have shaped the field and highlights the need for a more focused investigation into these specific research questions to enhance the overall discourse in the History of Education.

Consequently, this article aims to comprehensively review the scientometric analysis of articles published in «History of Education». This analysis is structured around the following research questions:

RQ1. What is the current state of scholarly literature about the history of education?

at the Past, Analysing the Present and Reflecting on the Future—a Transnational Perspective, «Paedagogica Historica», vol. 59, n. 5, 2023: pp. 837-846, <<https://doi.org/10.1080/00309230.2021.1962927>> (last access: 10.09.2025).

¹⁴ J.L. Hernández Huerta, S. González Gómez, I. Pérez Miranda, *History of Education in the Iberian Peninsula (2014-2019). Societies, Journals and Conferences in Spain and Portugal. L'histoire de l'éducation Dans La Péninsule Ibérique (2014-2019): Associations Savantes, Revues et Colloques En France et En Espagne*, «Histoire de l'éducation», n. 154, December 31, 2022, pp. 177-206, <<https://doi.org/10.4000/HISTOIRE-EDUCATION.5730>> (last access: 10.09.2025).

- RQ2. How does keyword clustering contribute to our understanding of the historical development of educational practices and theories?
- RQ3. What trends are identified and illustrated through scientometric map analysis within the history of education?
- RQ4. What insights does citation analysis of scholarly articles in the history of education yield regarding prevailing trends and influences in the discipline?

Methodology

Bibliometric Analysis

Bibliometric analysis is a quantitative research method that utilizes statistical tools to evaluate and analyze published literature within a specific field or discipline¹⁵. By examining various metrics such as publication frequency, citation counts, authorship patterns, and journal impact factors, bibliometric analysis helps to identify trends, emerging topics, and the intellectual structure of a research area¹⁶. This method benefits researchers and policymakers as it provides insights into the evolution of knowledge, the influence of specific works or authors, and the collaborative networks that shape scientific discourse¹⁷. Consequently, bibliometric analysis is a valuable tool for recognizing shifts in research focus, assessing the impact of scholarly contributions, and guiding future research directions.

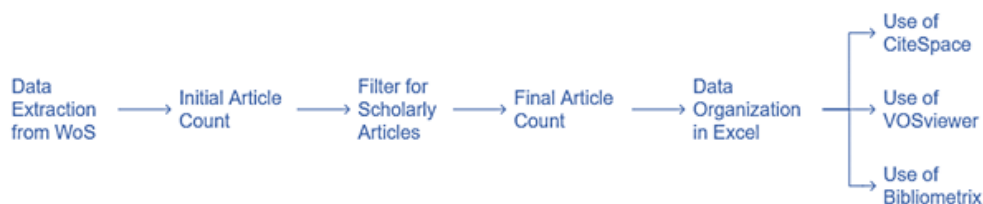
¹⁵ C.J. Gómez-Carrasco *et alii*, *A Review of Literature on History Education: An Analysis of the Conceptual, Intellectual and Social Structure of a Knowledge Domain (2000–2019)*, «European Journal of Education», vol. 57, n. 3, September 1, 2022, pp. 497-511, <<https://doi.org/10.1111/EJED.12508>> (last access: 10.09.2025); J. Monteagudo-Fernández, C.J. Gómez-Carrasco, Á. Chaparro-Sainz, *Heritage Education and Research in Museums. Conceptual, Intellectual and Social Structure within a Knowledge Domain (2000-2019)*, «Sustainability», vol. 13, n. 12, June 11, 2021, p. 6667, <<https://doi.org/10.3390/SU13126667>> (last access: 10.09.2025).

¹⁶ W. Hassan, A. Eliene Duarte, *Bibliometric Analysis: A Few Suggestions*, «Current Problems in Cardiology», vol. 49, n. 8, August 1, 2024, pp. 102640, <<https://doi.org/10.1016/J.CPCARDIOL.2024.102640>> (last access: 10.09.2025); N. Donthu *et alii*, *How to Conduct a Bibliometric Analysis: An Overview and Guidelines*, «Journal of Business Research», vol. 133, September 1, 2021, pp. 285-296, <<https://doi.org/10.1016/J.JBUSRES.2021.04.070>> (last access: 10.09.2025).

¹⁷ M.L. Kumar, R.J. George, P.S. Anisha, *Bibliometric Analysis for Medical Research*, «Indian Journal of Psychological Medicine», vol. 45, n. 3, May 1, 2023, pp. 277-282, <https://doi.org/10.1177/02537176221103617/ASSET/FBFD93F-3BAE-4C35-A560-93EC2F806325/ASSETS/IMAGES/LARGE/10.1177_02537176221103617-FIG2.JPG> (last access: 20.09.2025).

Search Strategy and Data Collection

The study employed data from the Web of Science (WoS) database, extracted on April 6, 2025, to investigate specific research inquiries. WoS was chosen over Scopus due to its broader array of pertinent articles¹⁸. The collected data facilitated the creation of a comprehensive and interdisciplinary citation profile, utilizing Excel for data organization and employing tools such as CiteSpace, VOSviewer, and Bibliometrix to generate network diagrams in line with methodologies used in prior research. Furthermore, traditional descriptive methods previously applied in this field have proven inadequate for addressing emerging challenges. The inclusion criteria were established: initially, a search using the keyword «History of Education» yielded 2,145 articles without any restrictions. To refine the article's focus to scholarly articles exclusively, the restriction “articles only” was applied, increasing to 1.590 articles. After a thorough review and eliminating irrelevant entries, the final count of articles was reduced to 1.500. The data extraction process from the WoS database employed a targeted search strategy that incorporated specific keywords, as illustrated in Figure 1. The discipline of scientometrics relies on various essential software applications for data analysis and visualization, including Microsoft Excel (2013), CiteSpace (6.3.1), VOSviewer (VOS) (1.6.20), and the Bibliometrix package (3.1.4), which operates within the R programming environment (3.6.3). These software tools are crucial in bibliometrics, offering distinct functionalities catering to diverse analytical needs.

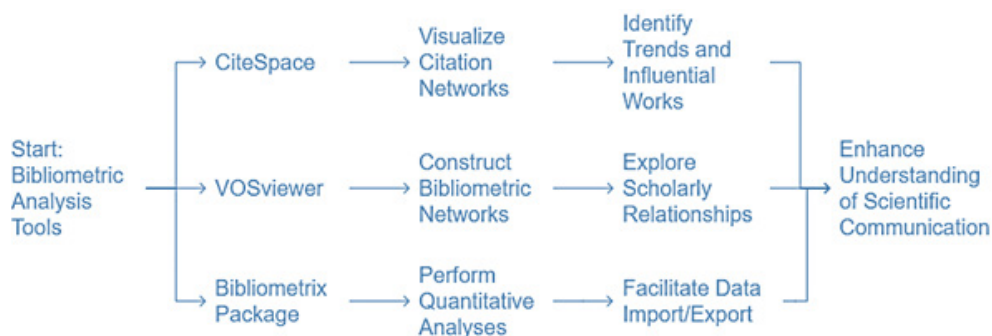


The methodological data collection and analysis strategy

CiteSpace (6.3.1), VOSviewer (1.6.20), and the Bibliometrix package (3.1.4) are prominent tools utilized in bibliometric analysis and visualization, each offering unique functionalities for researchers. CiteSpace is designed to visualize

¹⁸ L. Yan, W. Zhiping, *Mapping the Literature on Academic Publishing: A Bibliometric Analysis on WOS*, «SAGE Open», vol. 13, n. 1, January 1, 2023, <https://doi.org/10.1177/21582440231158562/SUPPL_FILE/SJ-DOCX-1-SGO-10.1177_21582440231158562.DOCX> (last access: 20.09.2025).

scientific literature's structure and dynamics, enabling users to identify trends, emerging topics, and influential works through its citation network analysis capabilities¹⁹. VOSviewer, on the other hand, specializes in constructing and visualizing bibliometric networks, such as co-authorship, co-citation, and keyword co-occurrence networks, providing an intuitive interface for exploring complex relationships within scholarly data²⁰. The Bibliometrix package, implemented in R, offers a comprehensive suite of tools for quantitative research in bibliometrics, allowing users to perform various analyses, including citation analysis, collaboration networks, and thematic mapping, while also facilitating the import and export of bibliographic data²¹. These tools enhance the understanding of scientific communication and knowledge dissemination across disciplines.



Pic. 2. Data visualization software.

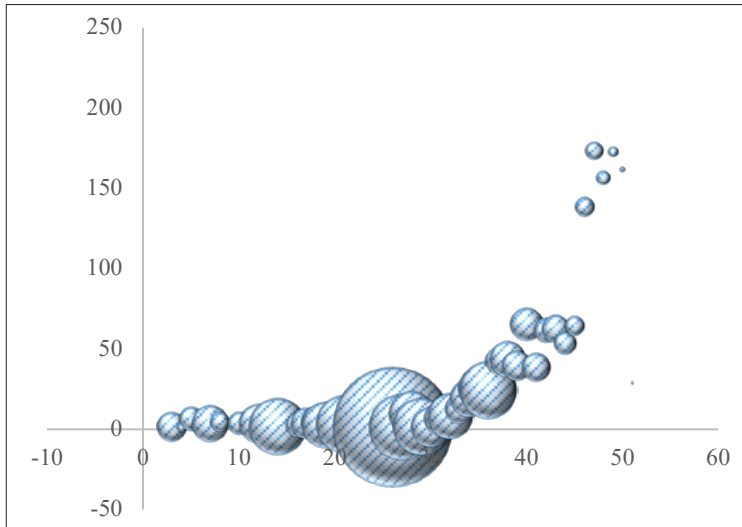
¹⁹ C. Chen, *Science Mapping: A Systematic Review of the Literature*, «Journal of Data and Information Science», vol. 2, n. 2, May 1, 2017, <<https://doi.org/10.1515/JDIS-2017-0006>> (last access: 20.09.2025); C. Chen, L. Leydesdorff, *Patterns of Connections and Movements in Dual-Map Overlays: A New Method of Publication Portfolio Analysis*, «Journal of the American Society for Information Science and Technology», vol. 65, n. 2, 2014, pp. 334-351, <<https://doi.org/10.1002/ASI.22968>> (last access: 20.09.2025).

²⁰ N. Jan van Eck, L. Waltman, *Visualizing Bibliometric Networks*, «Measuring Scholarly Impact», 2014, pp. 285-320, <https://doi.org/10.1007/978-3-319-10377-8_13> (last access: 20.09.2025).

²¹ M. Aria, C. Cuccurullo, *Bibliometrix: An R-Tool for Comprehensive Science Mapping Analysis*, «Journal of Informetrics», vol. 11, n. 4, 2017, pp. 959-975, <<https://doi.org/10.1016/j.joi.2017.08.007>> (last access: 20.09.2025).

Result

Performance Information



Pic. 3. Annual Production and Citation.

Tab. 1. Primary information about the collected documents.

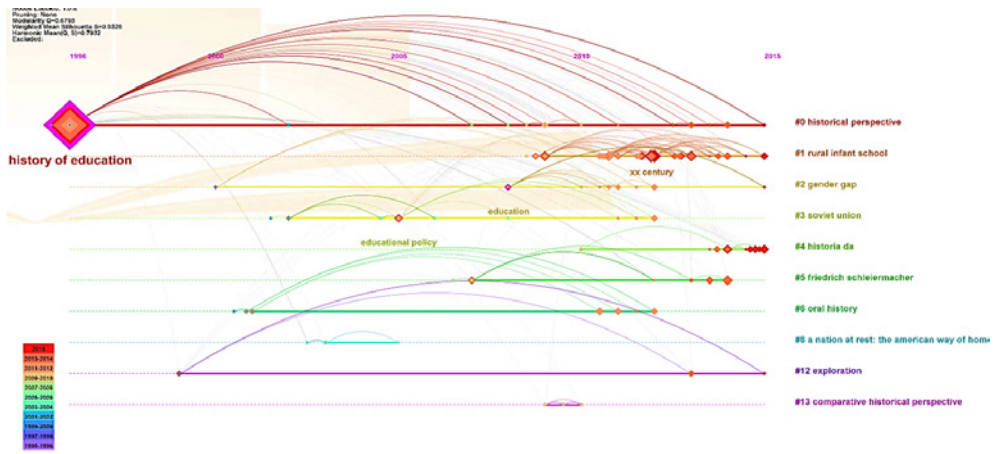
Description	Results
Timespan	1976:2025
Sources (Journals, Books, etc)	480
Documents	1500
Annual Growth Rate %	4.74
Document Average Age	7.82
Average citations per doc	3.079
References	63188
Keywords Plus (ID)	541
Author's Keywords (DE)	3624
Authors	1881
Authors of single-authored docs	720
Single-authored docs	913
Co-Authors per Doc	1.6
International co-authorships %	8.533

The data presented in the article on the history of education reveals a complex and evolving system of educational articles published over several de-

acades, characterized by fluctuations in the number of articles and their mean total citations per article (MeanTCperArt). Initially, the late 1970s and early 1980s show a relatively low output of articles, with notable peaks in citation rates, particularly in 1981 and 1986, suggesting that particular articles during these years had a significant impact or relevance. The 1990s exhibit a more consistent production of articles, with a notable spike in citations in 1995, indicating a possible shift in educational discourse or the emergence of influential research. The early 2000s continue this trend, with 2000 marking an extraordinary citation peak, likely reflecting a pivotal moment in educational research. However, as we progress into the 2010s and beyond, there is a marked increase in the number of articles published, particularly in 2020 and 2021, yet this is accompanied by a decline in mean citations per article, suggesting that while more research is being produced, it may not be receiving the same level of impact or recognition as earlier works. The data indicates a potential saturation of educational literature, where the sheer volume of articles dilutes individual contributions' significance. Furthermore, the downward trend in mean citations per article from 2020 onwards raises questions about the quality and relevance of recent publications.

The analysis of the essay on the history of education, as presented in Table 1, reveals a comprehensive overview of the academic landscape within this field from 1976 to 2025. With 480 sources contributing to 1,500 documents, the annual growth rate of 4.74% indicates a steady increase in scholarly output, suggesting a growing interest and investment in educational research. The average age of documents at 7.82 years implies a relatively recent body of work reflecting contemporary educational issues and innovations. The average citations per document, standing at 3.079, suggests that while the research is being produced significantly, the impact of individual papers was modest, indicating potential challenges in achieving widespread recognition or influence. The total of 63,188 references highlights the extensive interconnectivity and reliance on prior research within the field, while the presence of 541 Keywords Plus and 3,624 Author's Keywords indicates a diverse range of topics and themes being explored. The authorship data reveals a collaborative environment, with 1,881 authors contributing to the literature, of which 720 have produced single-authored documents, suggesting a balance between individual and collaborative research efforts. The average of 1.6 co-authors per document and the 8.533% rate of international co-authorships further emphasize the collaborative nature of educational research, potentially enhancing the quality and breadth of the findings.

Clustering Trend

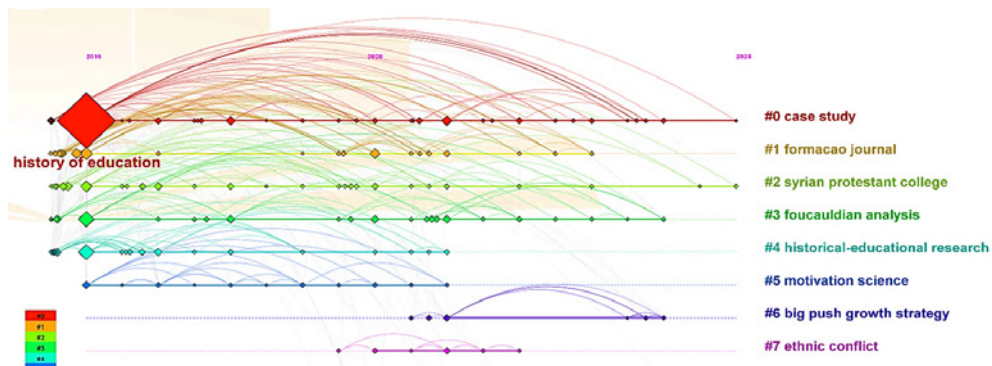


Keyword co-occurrence analysis of the history of education (1976-2015)

The analysis of the significant clusters reveals a diverse range of topics, with the largest cluster focusing on «historical perspective», indicating a substantial interest in historical analysis, particularly around 2009. Following this, the second cluster, «rural infant school», suggests a focus on educational themes, emerging in 2012, while the third cluster, «gender gap», also from 2012, highlights ongoing discussions about gender issues. Other notable clusters include «soviet union», which reflects historical geopolitical studies from 2006, and «Friedrich Schleiermacher», indicating philosophical or theological inquiries from 2011. The presence of clusters like «oral history» and «exploration» further emphasizes a blend of historical narrative and inquiry into human experiences. The clusters illustrate a rich tapestry of academic interests, highlighting historical and educational themes across various years.

The analysis of citation counts, degree, centrality, and sigma across various clusters reveals a clear hierarchy of significance within the educational research landscape. The «history of education» in Cluster #0 stands out prominently, leading in citation counts (172), degree (139), centrality (0.89), and sigma (1.00), indicating its foundational role in the field. In Cluster #1, topics such as «XIX-XX centuries» and «XX century» show moderate citation counts and degree, but they lack the centrality and sigma scores of the top-ranked item. Educational policy in Cluster #3 also demonstrates notable importance, ranking fourth in citation counts and degree while maintaining a consistent sigma score of 1.00. Other clusters, such as Cluster #2 with «education» and Cluster #6 with «special education», exhibit strong sigma scores, suggesting their relevance in educational discourse despite lower citation counts. The data

illustrates that while the «history of education» is the most influential, other topics contribute significantly to the academic dialogue, particularly in specialized areas like educational policy and special education.



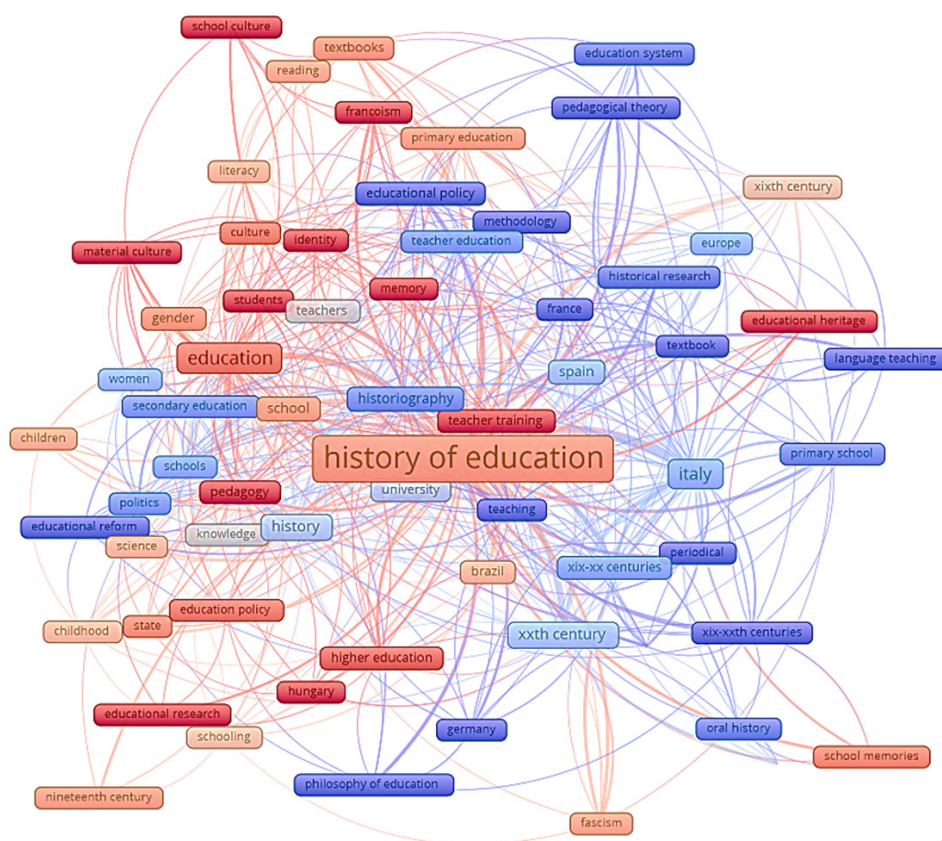
Keyword co-occurrence analysis of the history of education (2016-2025)

The network analysis reveals a structure comprising 11 clusters, with the most significant seven clusters exhibiting distinct themes and characteristics. Cluster #0, labeled as a «case study», is the most extensive, with 57 members focusing on historical education topics, while Cluster #1, «formacao journal», encompasses 38 members and emphasizes scientific production in education. The third cluster, «Syrian protestant college», highlights 19th-century educational themes with 37 members. The fourth cluster, «Foucauldian analysis», explores educational research and cultural aspects with 34 members. Cluster #4, «historical-educational research», delves into public memory and educational heritage with 31 members. Smaller clusters, such as «motivation science» and «big push growth strategy», contain 13 and 10 members, respectively, focusing on motivation in education and strategic growth in educational contexts. Each cluster is characterized by a silhouette value of 0, indicating a lack of clear separation between members, suggesting that while they are grouped by thematic relevance, the boundaries between clusters may be fluid.

The analysis of citation counts, bursts, degree, centrality, and sigma across various clusters reveals a clear hierarchy of the significance of education-related topics. The «history of education» in Cluster #0 stands out prominently with the highest citation count of 632, indicating its substantial influence and recognition in academic discourse. In contrast, other topics such as «XX century» and «education» have significantly lower citation counts of 48 and 42, respectively. Notably, all items exhibit a burst value of 0.00, suggesting a lack of recent spikes in interest or activity. In terms of degree, «history of educa-

tion» again leads with a degree of 136, followed by «school» and «history» in Cluster #1, which have degrees of 36 and 35, respectively. Centrality metrics further emphasize the importance of «history of education», which has a centrality score of 1.05, while other topics like «school» and «education» follow with lower scores. Lastly, all top-ranked items share a sigma value 1.00, indicating consistent relevance across the clusters. Overall, the data underscores the dominant role of historical perspectives in educational research, highlighting the relative obscurity of other topics within the academic landscape.

Keywords Trend

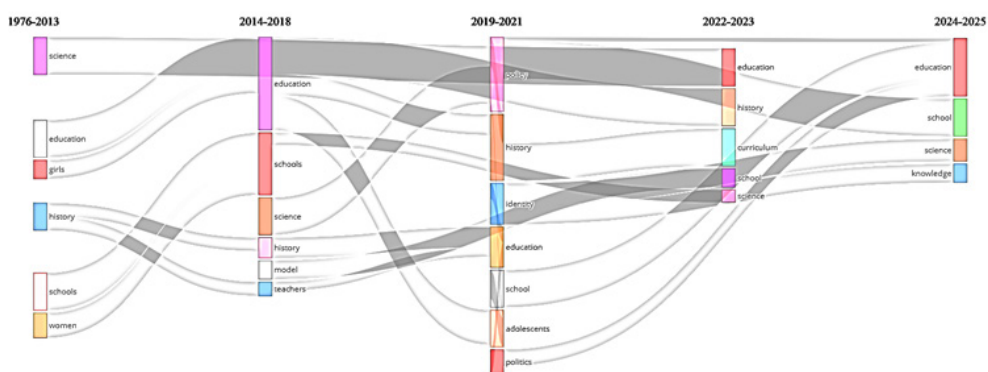


Overlay visualization map

In the context of the history of education, several keywords emerge as particularly strategic, indicating potential motors and trends for future research.

Notably, «history of education» (1561 occurrences) and «education» (937 occurrences) serve as foundational concepts that anchor the field. Additionally, «educational policy» (1049 occurrences) and «curriculum» (724 occurrences) are critical for understanding the frameworks that shape educational systems. Emerging themes such as «gender» (1351 occurrences), «identity» (1757 occurrences), and «cultural identity» (711 occurrences) suggest a growing interest in the intersection of education with social constructs and personal narratives. Furthermore, keywords like «higher education» (1462 occurrences) and «teacher education» (3532 occurrences) indicate a focus on the evolving roles of educators and institutions in shaping educational landscapes. As these themes continue to develop, they drive future inquiries into the complexities of educational history and its implications for contemporary practices.

The coverage analysis (Pic. 6) reveals that keywords can be divided into two categories. The first category, denoted by a light oil blue color, includes foundational and supportive concepts that have gained importance within the field. This cluster features terms such as oral history (2016 Apy), educational reform (2015 Avr.pub.year), cultural identity (2015 Apy), primary school (2016 Apy), and textbook (2014 Apy). These keywords are crucial for comprehending the broader context of technological progress in education and health. In contrast, the second category, marked in red, consists of emerging and innovative keywords that, as suggested by the topic map analysis, have the potential to either gain or lose relevance over time. This group encompasses terms such as memory (2021 Apy), identity (2021 Apy), school culture (2021 Apy), higher education (2019 Apy), educational heritage (2020 Apy), material culture (2020 Apy), pedagogy (2021 Apy), and Francoism (2019 Apy).



Thematic evaluation

The analysis of the essay on the history of education, as illustrated by the transitions in keywords from 1976 to 2025, reveals significant thematic shifts and continuities in educational discourse over time. The data indicates that

from 1976 to 2013, the focus was predominantly on foundational concepts such as «education», «girls», «history», «schools», and «science», reflecting a broad interest in the historical and social dimensions of education. However, the period from 2014 to 2018 shows a nuanced shift towards more specific themes, including «school» and «teachers», suggesting an increased emphasis on the practical aspects of education and the roles of educators. The subsequent transition from 2019 to 2021 introduces new dimensions such as «children», «politics», and «identity», indicating a growing recognition of the socio-political context of education and the importance of diverse identities within educational settings. As we move into 2022-2023, the keywords reflect a consolidation of these themes, with a continued focus on «education», «school», and «curriculum», while also incorporating concepts like «knowledge» and «pedagogy», which highlight the evolving nature of educational practices and theories. The final transition to 2024-2025 suggests a potential return to foundational themes, with a sustained emphasis on «education» and «science», while also integrating contemporary issues such as «state» and «knowledge».

References Trend

Tab. 2. The ten most influential articles in the history of education (1976-2019).

Paper	Source	TC	TC per Year	Normalized TC
22	<i>Journal of computer-assisted learning</i>	214	13.38	11.68
23	<i>Review of educational research</i>	164	6.31	2.00
24	<i>American Educational Research Journal</i>	104	11.56	25.10
25	<i>American Educational Research Journal</i>	59	1.90	3.23

(segue)

²² A. Collins, R. Halverson, *The Second Educational Revolution: Rethinking Education in the Age of Technology*, «Journal of Computer Assisted Learning», vol. 26, n. 1, February 1, 2010, pp. 18-27, <<https://doi.org/10.1111/J.1365-2729.2009.00339.X>> (last access: 20.09.2025).

²³ V. Siddle Walker, *Valued Segregated Schools for African American Children in the South, 1935-1969: A Review of Common Themes and Characteristics*, «Review of Educational Research», vol. 70, n. 3, 2000, pp. 253-285, <<https://doi.org/10.3102/00346543070003253>> (last access: 20.09.2025).

²⁴ D.K. Cohen, J.D. Mehta, *Why Reform Sometimes Succeeds: Understanding the Conditions That Produce Reforms That Last*, «American Educational Research Journal», vol. 54, n. 4, August 1, 2017, pp. 644-690, <<https://doi.org/10.3102/0002831217700078>> (last access: 20.09.2025).

²⁵ J. Garrison, *Deweyan Pragmatism and the Epistemology of Contemporary Social Constructivism*, «American Educational Research Journal», vol. 32, n. 4, December 1995, pp. 716-740, <<https://doi.org/10.3102/00028312032004716>> (last access: 20.09.2025).

Paper	Source	TC	TC per Year	Normalized TC
26	<i>International Review of Research in Open and Distance Learning open access</i>	57	4.75	9.82
27	<i>Language & History</i>	56	4.67	9.65
28	<i>Curriculum Inquiry</i>	54	3.38	2.95
29	<i>Journal of Philosophy of Education</i>	53	2.65	4.68
30	<i>PloS one</i>	47	3.92	8.10
31	<i>Review of educational research</i>	40	1.60	1.63

The analysis of citation metrics for the listed papers reveals varying levels of impact and recognition within the educational research community. Collins and Halverson (2010) lead with a total citation count (TC) of 214, indicating significant influence, particularly with a high normalized TC of 11.68, suggesting sustained relevance over time³². Cohen and Mehta (2017) also demonstrate a strong impact with a normalized TC of 25.10, reflecting their work's importance in understanding educational reform³³.

The collection of articles presents a multifaceted exploration of educational paradigms, historical contexts, and reform dynamics, reflecting the evolving landscape of education. Collins and Halverson (2010) argue for a transformative educational approach in the digital age, emphasizing integrating technolo-

²⁶ S. Bulfin, L. Pangrazio, N. Selwyn, *Making 'MOOCs': The Construction of a New Digital Higher Education within News Media Discourse*, «International Review of Research in Open and Distributed Learning», vol. 15, n. 5, 2014, pp. 290-305, <<https://doi.org/10.19173/IRRODL.V15I5.1856>> (last access: 20.09.2025).

²⁷ A.P.R. Howatt, R. Smith, *The History of Teaching English as a Foreign Language, from a British and European Perspective*, «Language & History», vol. 57, n. 1, May 1, 2014, pp. 75-95, <<https://doi.org/10.1179/1759753614Z.000000000028>> (last access: 10.09.2025).

²⁸ A. Cook-Sather, *Students as Learners and Teachers: Taking Responsibility, Transforming Education, and Redefining Accountability*, «Curriculum Inquiry», vol. 40, n. 4, September 2010, pp. 555-575, <<https://doi.org/10.1111/J.1467-873X.2010.00501.X>> (last access: 20.10.2025).

²⁹ D. Bridges, *The Disciplines and Discipline of Educational Research*, «Journal of Philosophy of Education», vol. 40, n. 2, July 10, 2006, pp. 259-272, <<https://doi.org/10.1111/J.1467-9752.2006.00503.X>> (last access: 20.09.2025).

³⁰ A. Goodman, A. Heshmati, I. Koupil, *Family History of Education Predicts Eating Disorders across Multiple Generations among 2 Million Swedish Males and Females*, «PLOS ONE», vol. 9, n. 8, August 27, 2014, p. e106475, <<https://doi.org/10.1371/JOURNAL.PONE.0106475>> (last access: 20.10.2025).

³¹ J.L. Paul, K. Marfo, *Preparation of Educational Researchers in Philosophical Foundations of Inquiry*, «Review of Educational Research», vol. 71, n. 4, 2001, pp. 525-547, <<https://doi.org/10.3102/00346543071004525>> (last access: 20.09.2025).

³² Collins, Halverson, *The Second Educational Revolution: Rethinking Education in the Age of Technology*, cit.

³³ Cohen, Mehta, *Why Reform Sometimes Succeeds: Understanding the Conditions That Produce Reforms That Last*, cit.

gy into learning environments³⁴. Walker (2000) provides a historical analysis of segregated schools for African American children, highlighting the complex interplay of value and identity in marginalized educational settings³⁵. Cohen and Mehta (2017) investigate the conditions that lead to successful and sustainable educational reforms, suggesting that understanding these factors is essential for effective change³⁶. Garrison (1995) connects Deweyan pragmatism with contemporary social constructivism, offering a philosophical lens to view educational practices³⁷. Bulfin *et alii* (2014) examine the rise of MOOCs and their portrayal in media, indicating a shift in higher education dynamics³⁸. Howatt and Smith (2014) trace the historical development of English language teaching, providing insights into pedagogical evolution³⁹. Cook-Sather (2010) advocates for student agency in learning, promoting a model where students are both learners and teachers⁴⁰. Bridges (2006) discusses the disciplinary nature of educational research, emphasizing the importance of philosophical inquiry⁴¹. Goodman et al. (2014) reveal the intergenerational impact of educational history on health outcomes, linking educational experiences to broader societal issues⁴². Lastly, Paul and Marfo (2001) address the need for a solid philosophical foundation in preparing educational researchers, underscoring the importance of inquiry in educational practice⁴³. Together, these articles contribute to a comprehensive understanding of the complexities and interconnections within the field of education.

³⁴ Collins, Halverson, *The Second Educational Revolution: Rethinking Education in the Age of Technology*, cit.

³⁵ Walker, *Valued Segregated Schools for African American Children in the South, 1935-1969: A Review of Common Themes and Characteristics*, cit.

³⁶ Cohen, Mehta, *Why Reform Sometimes Succeeds: Understanding the Conditions That Produce Reforms That Last*, cit.

³⁷ Garrison, *Deweyan Pragmatism and the Epistemology of Contemporary Social Constructivism*, cit.

³⁸ Bulfin, Pangrazio, Selwyn, *Making 'MOOCs': The Construction of a New Digital Higher Education within News Media Discourse*, cit.

³⁹ Howatt, Smith, *The History of Teaching English as a Foreign Language, from a British and European Perspective*, cit.

⁴⁰ Cook-Sather, *Students as Learners and Teachers: Taking Responsibility, Transforming Education, and Redefining Accountability*, cit.

⁴¹ Bridges, *The Disciplines and Discipline of Educational Research*, cit.

⁴² Goodman, Heshmati, Koupil, *Family History of Education Predicts Eating Disorders across Multiple Generations among 2 Million Swedish Males and Females*, cit.

⁴³ Paul, Marfo, *Preparation of Educational Researchers in Philosophical Foundations of Inquiry*, cit.

Tab. 3. The five most influential articles in the history of education (2020-2025).

Paper	Source	TC	TC per Year	Normalized TC
44	Critical Studies in Education	53	10.60	33.17
45	Phi Delta Kappan	39	7.80	24.41
46	Oxford Review of Education	26	4.33	13.64
47	Paedagogica Historica	24	4.00	12.59
48	Journal of Vocational Education & Training	21	3.50	11.02

The citation metrics for the listed papers indicate varying levels of impact within the educational research community. Ozga (2021) leads with a total citation count (TC) of 53 and a high normalized TC of 33.17, suggesting significant influence and relevance in critical policy discussions. Coburn *et alii* (2021) follow with 39 citations and a normalized TC of 24.41, reflecting their contribution to research-practice partnerships. Kirby (2020) and Ydesen & Grek (2020) show moderate citation counts, indicating a growing interest in historical perspectives on dyslexia and OECD influence, respectively. Martínez-Morales and Marhuenda-Fluixá (2020) have the lowest metrics, suggesting their work on vocational education is still gaining traction.

The selected articles collectively engage with critical themes in educational policy, historical perspectives, and the dynamics of research-practice partnerships. Ozga (2021) critiques the development of policy sociology, emphasizing the need to interrogate the assumptions and power structures underlying educational policies. Coburn, Penuel, and Farrell (2021) advocate for research-practice partnerships to foster educational improvement, highlighting the importance of collaboration between researchers and practitioners to bridge the gap between theory and practice. Kirby (2020) provides a historical

⁴⁴ J. Ozga, *Problematising Policy: The Development of (Critical) Policy Sociology*, «Critical Studies in Education» vol. 62, n. 3, May 27, 2021, pp. 290-305, <<https://doi.org/10.1080/17508487.2019.1697718>> (last access: 10.09.2025).

⁴⁵ C.E. Coburn, W.R. Penuel, C.C. Farrell, *Fostering Educational Improvement with Research-Practice Partnerships*, «Phi Delta Kappan», vol. 102, n. 7, April 1, 2021, pp. 14-19, <<https://doi.org/10.1177/00317217211007332>> (last access: 20.09.2025).

⁴⁶ P. Kirby, *Dyslexia Debated, Then and Now: A Historical Perspective on the Dyslexia Debate*, «Oxford Review of Education», vol. 46, n. 4, July 3, 2020, pp. 472-486, <<https://doi.org/10.1080/03054985.2020.1747418>> (last access: 20.09.2025).

⁴⁷ C. Ydesen, S. Grek, *Securing Organisational Survival: A Historical Inquiry into the OECD's Work in Education during the 1960s*, «Paedagogica Historica», vol. 56, n. 3, May 3, 2020, pp. 412-427, <<https://doi.org/10.1080/00309230.2019.1604774>> (last access: 20.09.2025).

⁴⁸ I. Martínez-Morales, F. Marhuenda-Fluixá, *Vocational Education and Training in Spain: Steady Improvement and Increasing Value*, «Journal of Vocational Education & Training», vol. 72, n. 2, April 2, 2020, pp. 209-227, <<https://doi.org/10.1080/13636820.2020.1729840>> (last access: 10.09.2025).

analysis of the dyslexia debate, illustrating how perceptions and understandings of dyslexia have evolved, which informs current educational practices. Ydesen and Grek (2020) delve into the OECD's historical role in shaping educational policies during the 1960s, revealing how international organizations influence national education systems. Lastly, Martínez-Morales and Marhuenda-Fluixá (2020) discuss the advancements in vocational education and training in Spain, noting its growing significance and value in the educational landscape. Together, these articles contribute to a nuanced understanding of the complexities of educational policy, the interplay between historical context and contemporary practices, and the importance of collaborative approaches to educational improvement.

Discussion

The study of educational literature from 1976 to 2025 reveals significant trends in research output and impact. There was low article production from the late 1970s to the early 2000s, with citation peaks in 1981 and 1986. However, since the 2010s, there has been a significant increase in published articles but a decline in average citations per article, suggesting saturation within literature. As the other studies approve this finding⁴⁹.

The analysis of keyword co-occurrence in the history of education from 1976 to 2025 reveals significant shifts in research trends over the decades. In the earlier period (1976-2015), the focus was predominantly on historical perspectives, with a notable peak in interest around 2009, alongside emerging themes such as rural education and gender issues from 2012⁵⁰.

The bibliometric data reveal a well-defined hierarchy in which the «history of education» cluster occupies a central and foundational position. This cluster underscores its continued and growing recognition among scholars, as historical perspectives have long provided the analytical framework necessary for understanding educational traditions. Seminal works on teacher education

⁴⁹ Roda-Segarra, Rico, Huerta, *The History of Education through Specialised Journals: Themes, Scientific Production and Bibliometrics* (1967-2022), cit.; J.L. Hernández Huerta, S. González Gómez, I. Pérez Miranda, *History of Education in the Iberian Peninsula* (2014-2019). *Societies, Journals and Conferences in Spain and Portugal*, «Histoire de l'éducation», n. 154, December 31, 2020, pp. 177-206, <<https://doi.org/10.4000/HISTOIRE-EDUCATION.5730>> (last access: 22.09.2025).

⁵⁰ M. Cekiso *et alii*, *Factors Affecting Grade 6 Learners' Reading Performance in a Rural School in Maluti, South Africa*, «Reading and Writing (South Africa)», vol. 13, n. 1, 2022, <<https://doi.org/10.4102/RW.V13I1.327>> (last access: 22.09.2025); G. Chisamya *et alii*, *Gender and Education for All: Progress and Problems in Achieving Gender Equity*, «International Journal of Educational Development», vol. 32, n. 6, November 1, 2012, pp. 743-755, <<https://doi.org/10.1016/J.IJEDUDEV.2011.10.004>> (last access: 20.09.2025).

highlight themes related to the historiography of education, illustrating how history has shaped debates about curriculum and policy⁵¹. Studies focusing on the pedagogical challenges associated with teaching history, such as those addressing truth and reconciliation, further exemplify the importance of historical inquiry within education⁵².

In contrast to this historically dominant cluster, the period spanning 2016-2025 exhibits a marked diversification of educational inquiries. The emergence of distinct clusters reflects a broadening of research force, where topics such as case studies and specific publication outlets have gained prominence. For instance, the appearance of a «case study» cluster aligns with qualitative research approaches that underline unique instances of educational change, as described in detailed investigations of educational practice transformations⁵³. The thematic analyses of the «Educação & Formação Journal» have revealed evolving educational discussions, reaffirming the journal's role as a significant platform for academic discourse within the field⁵⁴.

Moreover, the diversification noted in this later period parallels trends observed in emerging domains such as telecollaborative learning, where new methodological approaches and cross-disciplinary integrations have been highlighted⁵⁵. However, the overall analysis also reveals an absence of significant citation spikes across several newer topics, suggesting that despite the broader array of themes, some areas might be experiencing a degree of stagnation or slower developmental momentum relative to the robust legacy of historical studies. Thus, while the «history of education» continues to dominate the academic landscape, the evolving research landscape indicates both the promise and challenges of integrating novel themes into the broader field of educational inquiry.

The analysis of keyword trends in the history of education highlights a dynamic evolution concerning thematic focus over the decades. From 1976 to 2013, the discourse predominantly revolved around foundational concepts

⁵¹ L. Lefty, *Teacher Education and Teachers' Colleges*, «Handbook of Historical Studies in Education: Debates, Tensions, and Directions», 2019, pp. 1-15.

⁵² J. Miles, *Teaching History for Truth and Reconciliation: The Challenges and Opportunities of Narrativity, Temporality, and Identity*, «McGill Journal of Education», vol. 53, n. 2, March 29, 2019, <<https://doi.org/10.7202/1058399AR>> (last access: 20.09.2025).

⁵³ S.K. Kado, I. Lindemann, G. Brand, *Supporting Pacific Clinicians' Medical Education Practice Change through Faculty Development: A Qualitative Case Study*, «Focus on Health Professional Education: A Multi-Professional Journal», September 30, 2022, pp. 1-17, <<https://doi.org/10.11157/FOHPE.V23I3.598>> (last access: 10.09.2025).

⁵⁴ L. Machado *et alii*, *Educação & Formação Journal: Balance of Scientific Production (2016-2018)*, «Revista Tempos e Espaços Em Educação», vol. 13, n. 32, 2020, p. 12, <<https://doi.org/10.20952/revtee.v13i32.12926>> (last access: 10.09.2025).

⁵⁵ R. O'Dowd, *Emerging Trends and New Directions in Telecollaborative Learning*, «CALICO Journal», vol. 33, n. 3, November 4, 2016, pp. 291-310, <<https://doi.org/10.1558/CJ.V33I3.30747;CTYPE:STRING:JOURNAL>> (last access: 20.09.2025).

such as «education», «girls», «history», «schools», and «science», indicating significant interest in the historical and social dimensions of education. These themes reflect an engagement with education's fundamental structures and societal roles and align with the socio-political contexts influencing education systems⁵⁶. The scholarly focus during this period underscores the need for a nuanced understanding of educational frameworks in various socio-historical conditions, as evidenced by works examining educational practices across different cultures and political climates⁵⁷.

A marked shift occurred between 2014 and 2018 when the emphasis transitioned towards more specific themes, notably «school» and «teachers». This period reflects a growing interest in the practical aspects of education, including the roles and identities of educators, as documented in studies exploring the pressures faced by new teacher educators and their professional integration into educational systems⁵⁸. The research recognizes educators as pivotal to the learning process and the implementation of effective educational practices, which align with ongoing discussions about teacher identity and educator roles in contemporary education⁵⁹.

The period from 2019 to 2021 marked further evolution, with emerging themes such as «children», «politics», and «identity», signifying an increasing acknowledgment of the socio-political context and the importance of diverse identities within educational settings. Education is a powerful agent for so-

⁵⁶ N. de Podestá, S. Berg, *Ew University: Liberal Education and Arts in Brazil*, in *5th International Conference on Higher Education Advances*, 2019, <<https://doi.org/10.4995/head19.2019.9514>> (last access: 20.09.2025); N.V. Sitnikova, A.D. Nikolaeva – European Proceedings of, *The Specifics Of The Portrait Of A Nomadic Teacher (Educator)*, in *Europeanproceedings.com* NV Sitnikova, AD NikolaevaEuropean Proceedings of Social and Behavioural, *Sciences.europeanproceedings.com*, n. 126, June 3, 2022, pp. 886-896, <<https://doi.org/10.15405/EPBSBS.2022.06.98>> (last access: 20.09.2025).

⁵⁷ Sitnikova, *The Specifics Of The Portrait Of A Nomadic Teacher (Educator)*, cit.; K.H. Mok, P.T. Ng, K.H. Mok, *Singapore's Global Education Hub AmbitionsUniversity Governance Change and Transnational Higher Education*, «International Journal of Educational Management», vol. 22, n. 6, August 15, 2008, pp. 527-546, <<https://doi.org/10.1108/09513540810895444>> (last access: 20.09.2025).

⁵⁸ B. Ponet, *Interrogating the Role of Teacher Educators in the Reduction of Inequalities in Education*, in *AERA 2023 Annual MeetingAt: Chicago*, 2023, <<https://doi.org/10.3102/2061382>> (last access: 20.09.2025); J. Murray, T. Male, *Becoming a Teacher Educator: Evidence from the Field*, «Teaching and Teacher Education», vol. 21, n. 2, February 1, 2005, pp. 125-142, <<https://doi.org/10.1016/J.TATE.2004.12.006>> (last access: 20.09.2025); P Poti et alii, *The Role of Educators and Education Personnel in Increasing the Quality of Education in STKIP Weeetebula, Indonesia*, in *Cyberleninka.RuP Poti, J Rohkmat, L Muhaim-iTraektoriâ Nauki= Path of Science*, 2023.cyberleninka.ru, vol. 9, n. 1, January 31, 2023, pp. 2072-2077, <<https://doi.org/10.22178/POS.89-18>> (last access: 20.09.2025).

⁵⁹ K. Livingston, *Teacher Educators: Hidden Professionals?*, «European Journal of Education», vol. 49, n. 2, June 1, 2014, pp. 218-232, <<https://doi.org/10.1111/EJED.12074>> (last access: 20.09.2025); Ponet, *Interrogating the Role of Teacher Educators in the Reduction of Inequalities in Education*, cit.

cio-political socialization, shaping political attitudes and fostering civic engagement among learners⁶⁰. The interplay between education and political contexts is critical, as literature highlights education's role in promoting participation and engagement within democratic frameworks⁶¹.

As we approach 2022-2023, the focus appears to consolidate around core concepts such as «education», «school», and «curriculum» while also incorporating contemporary ideas like «knowledge» and «pedagogy». This point reflects an ongoing discourse concerning the relevance of curricular content and pedagogical methods in fostering effective educational environments⁶². Moreover, integrating technology and acknowledging its impact on education highlight the necessity for adapting educational practices to keep pace with changing societal demands and technological advancements⁶³.

Looking forward to 2024-2025, anticipated trends suggest a potential return to foundational themes, maintaining a significant emphasis on «education» and «science» alongside contemporary issues like «state» and «knowledge». This trajectory indicates a complex interplay between established educational frameworks and emerging socio-cultural dynamics, suggesting a rich landscape for future research (Eacott, 2015; Hodge, 2017)⁶⁴. The need for continuous examination of these themes speaks to the evolving nature of edu-

⁶⁰ I. Seventilofa, *The Relationship between Academic Achievement and Political Views in Indonesia*, «Ganec Swara», vol. 18, n. 2, 2024, <<https://doi.org/10.35327/gara.v18i2.902>> (last access: 20.09.2025); D. Sunshine Hillygus, *The Missing Link: Exploring the Relationship between Higher Education and Political Engagement*, «Political Behavior» vol. 27, n. 1, March 2005, pp. 25-47, <<https://doi.org/10.1007/S11109-005-3075-8/METRICS>> (last access: 20.09.2025).

⁶¹ Hillygus, *The Missing Link: Exploring the Relationship between Higher Education and Political Engagement*; T.S. Dee, *Are There Civic Returns to Education?*, «Journal of Public Economics», vol. 88, n. 9-10, August 1, 2004, pp. 1697-1720, <<https://doi.org/10.1016/J.JPU-BECO.2003.11.002>> (last access: 20.09.2025).

⁶² Z. Walker, *Special Education Teacher Preparation in Singapore's Dual Education System*, «Teacher Education and Special Education», vol. 39, n. 3, August 1, 2016, pp. 178-190, <<https://doi.org/10.1177/0888406415622251>> (last access: 20.09.2025); Murray, Male, *Becoming a Teacher Educator: Evidence from the Field*, cit.; Poti et alii, *The Role of Educators and Education Personnel in Increasing the Quality of Education in STKIP Weeetebula, Indonesia*, cit.

⁶³ B. Fainholc, *Teaching and Learning in the Knowledge Society*, «Encounters on Education», n. 6, 2005, pp. 87-105, <<https://www.memoria.fahce.unlp.edu.ar/library?a=d&c=arti&d=Jpr16923>> (last access: 20.09.2025).

⁶⁴ S. Eacott, *Educational Leadership Relationally: A Theory and Methodology for Educational Leadership, Management and Administration*, in *Educational Leadership Relationally: A Theory and Methodology for Educational Leadership, Management and Administration*, January 1, 2015, pp. 1-151, <<https://doi.org/10.1007/978-94-6209-911-1>> (last access: 20.09.2025); S. Hodge, *Standardised Curriculum and Hermeneutics: The Case of Australian Vocational Educators*, «Journal of Curriculum Studies», vol. 50, n. 1, January 2, 2018, pp. 38-55, <<https://doi.org/10.1080/00220272.2016.1278042>> (last access: 10.09.2025).

cation as it responds to historical contexts and modern exigencies. These are similar to other research⁶⁵.

The analysis of citation metrics from the 1976-2019 and 2020-2025 periods reveals notable shifts in the focus and impact of educational research. In the earlier period, the most influential articles, such as Collins and Halverson (2010) and Cohen and Mehta (2017), emphasized the integration of technology in education and the dynamics of educational reform, respectively, with high total citation counts and normalized citation rates indicating their sustained relevance. The themes explored were broad, encompassing historical contexts, pedagogical evolution, and the philosophical underpinnings of educational practices. In contrast, the more recent articles from 2020-2025, led by Ozga (2021) and Coburn et al. (2021), reflect a shift toward critical policy analysis and the importance of research-practice partnerships, suggesting a growing emphasis on the practical implications of educational research. The normalized citation rates in this latter period are notably high, particularly for Ozga, indicating a substantial impact on contemporary discussions around educational policy. This evolution signifies a transition from a primarily theoretical exploration of educational paradigms to a more applied focus on policy and practice, highlighting the increasing relevance of collaborative approaches in addressing current educational challenges.

New areas in the history of world education have emerged in response to global challenges and advancements in technology, reflecting a more interconnected and interdisciplinary approach⁶⁶. These include the exploration of digital education and the impact of technology on learning environments, which has gained prominence with the rise of online learning platforms and digital resources⁶⁷. Additionally, a growing focus on global citizenship education emphasizes fostering student awareness and understanding of diverse cultures and international issues⁶⁸. Integrating social justice and equity in educational narratives has also become a critical area of study, addressing historical in-

⁶⁵ Roda-Segarra, Rico, Huerta, *The History of Education through Specialised Journals: Themes, Scientific Production and Bibliometrics* (1967-2022), cit.; Gómez-Carrasco et alii, *A Review of Literature on History Education: An Analysis of the Conceptual, Intellectual and Social Structure of a Knowledge Domain* (2000-2019), cit.

⁶⁶ S. Hanisch, D. Eirdosh, *Teaching for the Interdisciplinary Understanding of Evolutionary Concepts*, «Synthese Library», vol. 478, n. 2023, pp. 147-180, <https://doi.org/10.1007/978-3-031-33358-3_8> (last access: 22.09.2025).

⁶⁷ E. Lacka, T.C. Wong, *Examining the Impact of Digital Technologies on Students' Higher Education Outcomes: The Case of the Virtual Learning Environment and Social Media*, «Studies in Higher Education», vol. 46, n. 8, 2021, pp. 1621-1634, <<https://doi.org/10.1080/03075079.2019.1698533>> (last access: 22.09.2025).

⁶⁸ C. Mosisa Hunduma, Y. Seyoum, *Multicultural Education and Global Citizenship: Literature Review*, «Multidisciplinary Reviews», vol. 7, n. 10, June 28, 2024, p. 2024223, <<https://doi.org/10.31893/MULTIREV.2024223>> (last access: 22.09.2025).

equalities and advocating for inclusive practices⁶⁹. Furthermore, examining educational responses to crises, such as the COVID-19 pandemic, has opened new avenues for research into resilience and adaptability in educational systems worldwide. These emerging areas reflect a shift towards understanding education as a dynamic and evolving process influenced by cultural, technological, and societal changes.

Conclusion

In conclusion, the bibliometric analysis of the history of education from 1976 to 2025 reveals significant trends and shifts in scholarly output and citation patterns. The steady annual growth rate of 4.74% and the production of 1,500 documents across 480 sources indicate a robust and expanding field of educational research. However, the average number of citations per document, at 3.079, suggests that while the volume of research is increasing, the impact of individual articles may be diminishing, raising concerns about the quality and recognition of recent contributions. The analysis highlights a dynamic landscape characterized by thematic clusters that reflect evolving academic interests, with a notable emphasis on historical perspectives, educational policy, and socio-political contexts. The emergence of keywords related to identity, gender, and educational reform signals a shift towards more nuanced discussions within the field.

Furthermore, the collaborative nature of authorship, evidenced by a significant percentage of international co-authorships, underscores the importance of diverse perspectives in enriching educational discourse. Overall, this research provides valuable insights into the complexities of educational literature, emphasizing the need for ongoing inquiry into the relevance and impact of contemporary educational research as it navigates an increasingly saturated academic environment. Future studies should focus on enhancing the visibility and influence of emerging topics to ensure that the field continues to address pressing educational challenges effectively.

This research is subject to several limitations that impact the comprehensiveness and generalizability of its findings. Firstly, the scope of the literature is confined to articles published in 2025, which may not fully capture the evolving nature of the subject matter beyond that year. Additionally, the reliance on the Web of Science database restricts the breadth of sources considered, potentially omitting relevant studies available in other databases. Furthermore,

⁶⁹ N.R. Wild, *Teaching for Social Justice: A Teacher Researcher's Journey and Evolution*, «The Reading Teacher», vol. 77, n. 3, November 1, 2023, pp. 360-370, <<https://doi.org/10.1002/TRTR.2252>> (last access: 20.09.2025).

focusing on articles as the sole publication type excludes valuable insights in different formats, such as conference proceedings, reports, or books. To enhance the robustness of this research, it would be beneficial to incorporate data from alternative databases such as Google Scholar, Scopus, Emerald, and GStore, which could provide a more diverse array of scholarly contributions and perspectives.

