

Mapping Global Research Trends on Early Career Teachers

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Abstract

This study maps global research trends on early career teachers using a bibliometric approach. The study addresses the growing scholarly and policy interest in early career teachers as a critical group in relation to teacher induction, mentoring, professional identity, wellbeing, attrition, and retention. Bibliographic data were retrieved from the Scopus database using the search query *TITLE-ABS-KEY (early AND career AND teachers)*. The initial search identified 3,942 publications. After applying inclusion and exclusion criteria (English-language publications, journal articles, and documents published between 2020 and 2025) 200 articles were retained for analysis. The study employed performance analysis and science mapping to examine annual publication trends, productive journals, contributing countries, and keyword co-occurrence patterns. The findings indicate that research on early career teachers has developed around interconnected themes, including induction, mentoring, professional development, teacher identity, wellbeing, resilience, attrition, and retention. The keyword structure suggests that the field is moving beyond a narrow focus on teacher survival toward a broader concern with professional sustainability and institutional support. This study contributes by providing a structured overview of the intellectual landscape of early career teacher research and by identifying future research directions related to mentoring quality, teacher wellbeing, leadership support, and sustainable teacher retention.

Keywords: early career teachers; bibliometric analysis; teacher induction; mentoring; teacher retention; teacher wellbeing

Introduction

Early career teachers occupy a pivotal yet vulnerable position in contemporary education systems. The first years of teaching are widely understood as a critical transition from initial teacher preparation into full professional responsibility, during which teachers must simultaneously develop instructional competence, classroom management capacity, professional identity, collegial relationships, and resilience in complex school environments. This phase is not merely an individual adjustment period; it is a structural point at which teacher education, school leadership, induction policy, mentoring systems, and workforce sustainability intersect. Research has shown that early career teachers often encounter significant challenges related to workload, classroom management, emotional strain, professional isolation, and mismatch between preparation and workplace realities (Kutsyuruba et al., 2019; Morrison, 2013).

The importance of early career teachers has become increasingly visible amid global concerns about teacher shortages, teacher attrition, and the quality of teaching. Attrition in the early years of teaching is particularly consequential because it represents a loss of human capital, institutional investment, and pedagogical continuity. Global reports have emphasized that teacher shortages are not only a recruitment problem but also a retention and working-conditions problem, requiring stronger policy attention to teacher

support, professional learning, and career sustainability (OECD, 2024; UNESCO & International Task Force on Teachers for Education 2030, 2024). Studies on early career teachers indicate that decisions to remain in or leave the profession are shaped by the interaction between personal commitment and contextual conditions, including induction quality, mentoring relationships, school culture, leadership support, workload, and opportunities for professional growth (Kutsyuruba et al., 2018; Kutsyuruba et al., 2019). Therefore, understanding early career teachers is essential not only for teacher education scholarship but also for policy debates on educational quality, teacher retention, and sustainable school improvement.

A substantial body of research has emphasized induction and mentoring as key mechanisms for supporting early career teachers. Effective induction is generally associated with structured mentoring, targeted professional development, reduced isolation, administrative support, and opportunities for collaborative reflection. Recent reviews have highlighted that mentoring can support novice teachers by strengthening emotional and psychological resilience, improving instructional practice, and facilitating adaptation to school culture (Jin et al., 2025; Maras et al., 2024). At the same time, contemporary scholarship increasingly argues that mentoring should move beyond compliance-oriented or standards-driven support toward relational, context-sensitive, and future-focused professional learning that enables early career teachers to respond to uncertainty, diversity, and rapid educational change (Larsen et al., 2025).

Beyond induction and mentoring, the early career phase is also central to the formation of teacher professional identity. Morrison (2013) argues that early career teachers' identities are shaped through trajectories that emerge from the interaction between personal interpretation, school context, and influential professional relationships. More recent studies similarly show that early career teachers' professional identities are shaped by tensions between personal ideals, school expectations, wellbeing, and contextual support (Nickel & Crosby, 2021; Zhao, 2022). These identity trajectories can support professional traction or contribute to distress and early exit from teaching. This perspective is important because early career teaching is not only a technical process of acquiring classroom skills; it is also a process of becoming a teacher within particular institutional, emotional, and social conditions. Consequently, research on early career teachers has expanded to include professional identity, wellbeing, resilience, agency, career decision-making, and teacher emotions as major analytical concerns.

The expanding scholarly attention to early career teachers has produced a diverse and fragmented knowledge base. Existing studies have examined induction systems, mentoring models, teacher identity, professional development, wellbeing, retention, teacher education, and contextual influences across different countries and educational settings. However, because this literature has grown across multiple subfields, journals, methods, and national contexts, it is increasingly difficult to identify the field's intellectual structure, dominant themes, influential publications, collaboration patterns, and emerging research fronts through narrative review alone. This situation creates a need for a systematic mapping of the research landscape to clarify how knowledge on early career teachers has developed over time.

Bibliometric mapping offers a rigorous approach for addressing this need because it enables researchers to examine publication growth, citation impact, authorship patterns, country collaboration, keyword co-occurrence, and thematic evolution within a field. In teacher education research, bibliometric approaches have been used to map areas such as early childhood teacher education, teacher roles, teacher competencies, and pedagogical competence, revealing how research productivity, conceptual priorities, and international collaboration evolve over time (Herut, 2024; Li et al., 2025; Tunç et al., 2023). These studies demonstrate the

value of bibliometric analysis for identifying research trends and gaps, yet early career teacher research itself remains insufficiently mapped as a distinct scholarly domain.

Accordingly, this study aims to map global research trends on early career teachers by examining the development of publications, influential sources and documents, leading authors and countries, collaboration networks, and major thematic clusters. By doing so, the article contributes to the field in three ways. First, it consolidates a dispersed body of knowledge on early career teachers into a structured intellectual map. Second, it identifies dominant and emerging themes that can inform future research agendas on teacher induction, mentoring, professional identity, wellbeing, and retention. Third, it provides evidence-based insights for scholars, teacher educators, school leaders, and policymakers seeking to strengthen support systems for teachers in the early years of their careers.

Methodology

This study adopted a bibliometric review design to map the development, structure, and thematic orientation of global research on early career teachers. Bibliometric analysis is appropriate for examining a large corpus of scientific publications because it enables researchers to identify publication patterns, influential contributors, citation structures, collaboration networks, and conceptual trends in a transparent and reproducible manner (Donthu et al., 2021). In line with established science-mapping procedures, this study combined performance analysis and science mapping. Performance analysis was used to describe the productivity and impact of research constituents, such as authors, journals, countries, and documents, while science mapping was used to examine relationships among research constituents through keyword co-occurrence, co-authorship, and citation-based networks (Aria & Cuccurullo, 2017; Donthu et al., 2021).

Data Source and Search Strategy

The bibliographic data were retrieved from the Scopus database. Scopus was selected because it provides extensive coverage of peer-reviewed international literature and exports structured metadata that can be processed for bibliometric and science-mapping analysis. Bibliometric studies commonly rely on structured citation databases such as Scopus because consistent metadata are essential for reproducible performance analysis and network mapping (Aria & Cuccurullo, 2017; Donthu et al., 2021). The search was conducted using the query *TITLE-ABS-KEY (early AND career AND teachers)*, which was designed to identify publications that mention early career teachers in the title, abstract, or keywords. The initial search produced 3,942 publications before screening. Using a single database also helped reduce inconsistencies that may occur when records from multiple databases are merged and harmonized.

Inclusion and Exclusion Criteria

Inclusion criteria	Exclusion criteria
Documents written in English.	Documents published in languages other than English.
Publications issued between 2020 and 2025.	Publications issued outside the 2020–2025 period.
Journal articles indexed in Scopus.	Conference papers, book chapters, reviews, editorials, notes, letters, and other non-article document types.
Studies relevant to early career teachers based on title, abstract, or keywords.	Documents not aligned with the research focus on early career teachers.

After the application of these criteria, 200 journal articles were retained as the final dataset for analysis. This screening procedure was intended to ensure that the dataset was recent, internationally accessible, and focused on peer-reviewed journal literature relevant to early career teachers.

Data Screening and Preparation

The screening and preparation of data were conducted in two stages. First, the initial Scopus results were limited using database filters for language, publication year, and document type. Second, the remaining records were checked to ensure their relevance to the research focus. The bibliographic metadata of the final 200 articles were then exported from Scopus for analysis, including authors, titles, abstracts, author keywords, source titles, publication years, affiliations, countries, citation counts, and references. Prior to analysis, the dataset was cleaned to minimize inconsistencies in author names, institutional names, countries, and keywords. Keyword normalization was particularly important because variations in spelling, singular–plural forms, and closely related terms can affect the accuracy of co-occurrence analysis and thematic interpretation.

Bibliometric Analysis

The final dataset was analyzed using bibliometric indicators and network visualization procedures. Descriptive bibliometric analysis was used to examine annual publication trends, leading journals, productive authors, contributing countries, and highly cited documents. Science mapping was then conducted to identify conceptual and social structures in the field. Keyword co-occurrence analysis was used to reveal dominant and emerging research themes, while co-authorship and country collaboration analyses were used to examine patterns of scholarly collaboration. Where appropriate, bibliometric mapping was supported by VOSviewer, a software tool designed to construct and visualize bibliometric networks, including co-authorship, citation, bibliographic coupling, co-citation, and keyword co-occurrence maps (van Eck & Waltman, 2010). The interpretation of the resulting maps focused not only on the size and density of clusters, but also on their substantive meaning for understanding the intellectual development of early career teacher research.

Result And Discussion

The bibliometric analysis of 200 Scopus-indexed journal articles published between 2020 and 2025 shows that research on early career teachers has developed around two interrelated concerns: the professional development of novice teachers and the sustainability of the teaching workforce. This pattern is consistent with recent scholarship showing that early career teachers face persistent challenges related to workload, wellbeing, induction quality, mentoring, professional identity, and retention (Davis & Park, 2025; Maras et al., 2024). Therefore, the results are discussed not only as publication patterns but also as indicators of how the field has responded to contemporary educational challenges, including post-pandemic teacher wellbeing and international concerns about teacher shortages.

Annual Publication Trends

Figure 1 indicates the annual development of publications on early career teachers during the 2020–2025 period. The presence of publications across the full observation period suggests that early career teacher research has remained a sustained concern in educational scholarship. This trend can be interpreted in relation to the increasing attention given to teacher retention, induction, and wellbeing after the COVID-19 pandemic. Davis and Park (2025) found that early career teachers experienced persistent post-pandemic stressors, including increased workload, professional isolation, disrupted induction processes, and emotional strain. Recent evidence also suggests that early career teachers' preparedness and perceived support remain important factors in explaining their distress and professional uncertainty (Brouwer et al., 2023). These issues

help explain why the field continues to attract scholarly attention, particularly as education systems seek to retain and support teachers in the first years of professional practice.

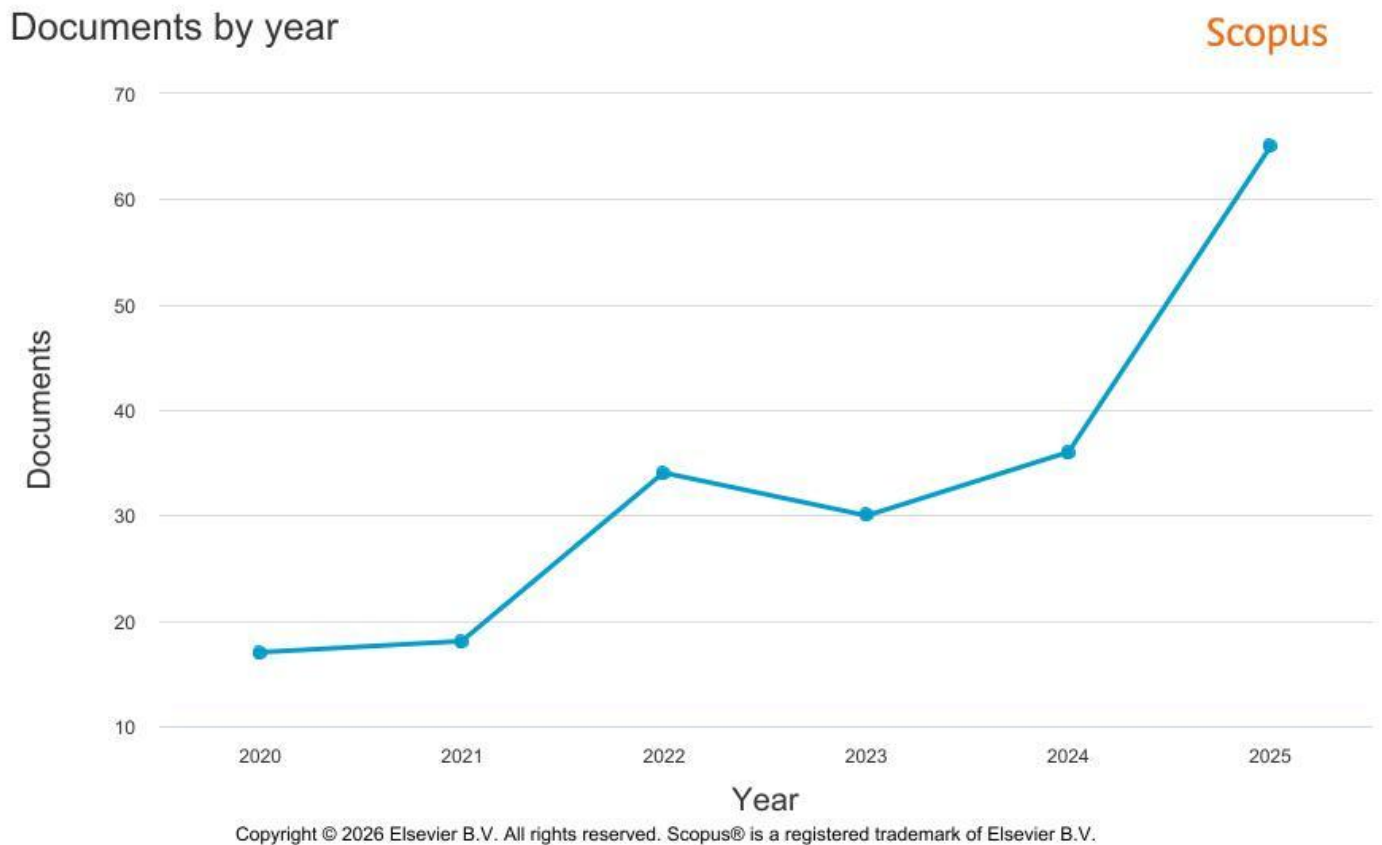


Figure 1. Annual publication trends on early career teachers, 2020–2025.

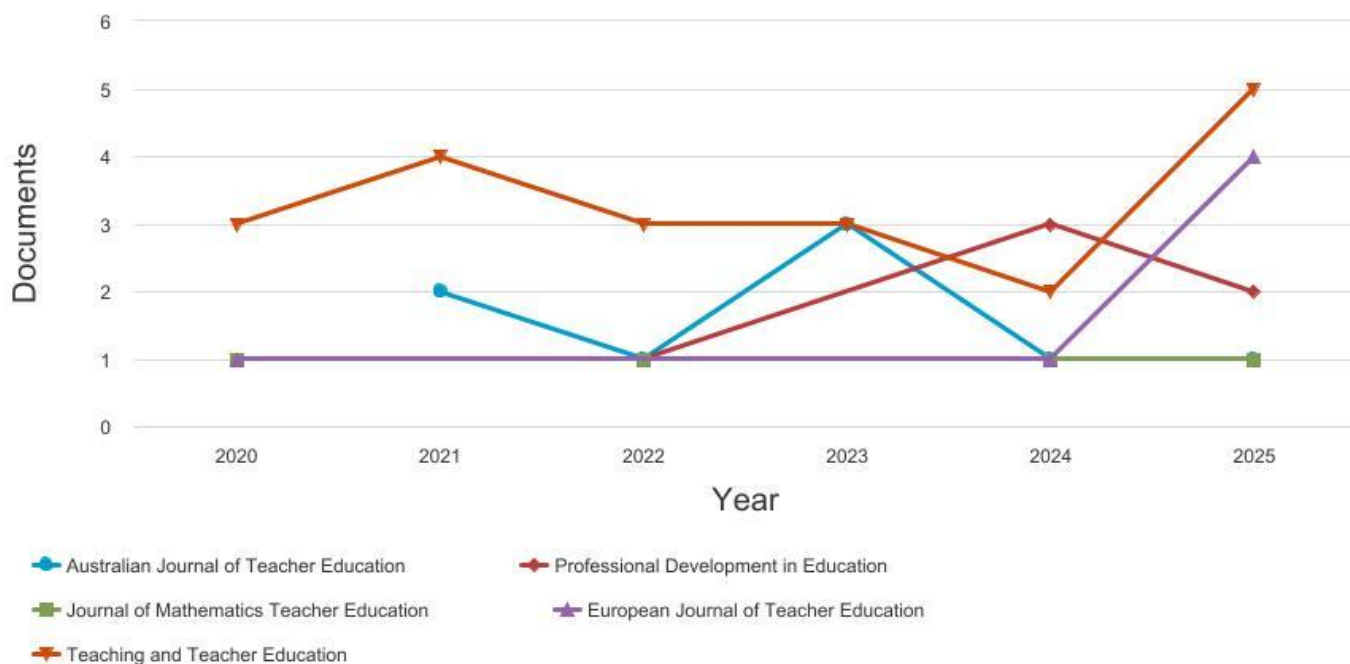
Most Productive Journals and Source Distribution

Table 1 presents the distribution of publications across journals. Although the detailed source distribution depends on the final Scopus export, the available structure of the data suggests that early career teacher research is positioned within a broad education research landscape rather than a single narrow subfield. This is important because the topic intersects teacher education, professional development, school leadership, educational psychology, and policy studies. Studies on mentoring and induction, for example, are often located in teacher education and professional development journals because they focus on how novice teachers are supported in the transition from preparation to professional practice (Kwok & Ogden Macfarlane, 2025; Maras et al., 2024). Research on teacher agency also shows that professional development and school reform are strongly shaped by teachers' capacity to act within contextual constraints and opportunities (Imants & Van der Wal, 2020; Molla & Nolan, 2020). The journal distribution therefore reflects the interdisciplinary nature of early career teacher scholarship.

Documents per year by source

Compare the document counts for up to 10 sources. Compare sources and view CiteScore, SJR, and SNIP data

Scopus



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Table 1. Top journals publishing research on early career teachers.

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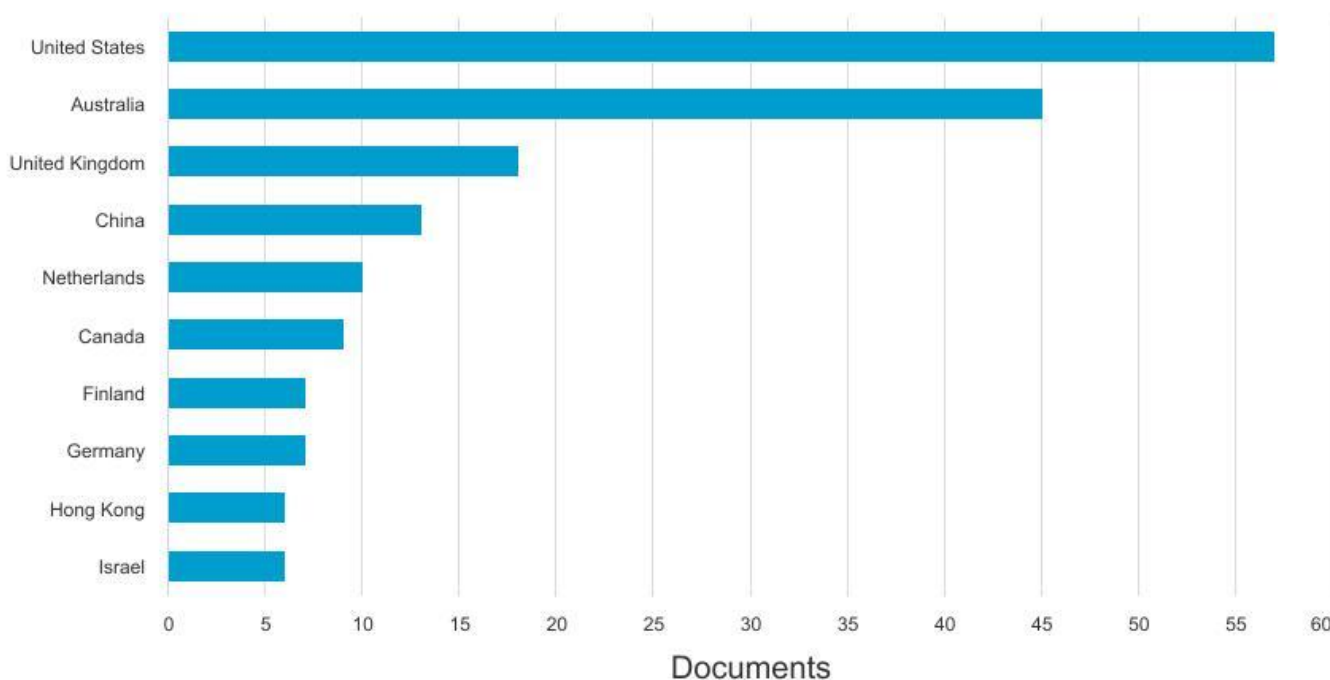
Productive Countries

Figure 2 shows the distribution of productive countries in the dataset. The country distribution is useful for understanding where early career teacher research is most actively produced and how the topic is shaped by national and regional policy contexts. Research productivity in this field is likely connected to countries where teacher shortages, induction policy, mentoring systems, and teacher retention have become prominent educational concerns. Recent international evidence shows that mentoring can influence novice teachers' expected career length through organizational commitment, indicating that the issue of early career teacher retention is not only a local concern but a cross-national policy challenge (Park & Choi, 2025). Consequently, country-level productivity should be interpreted alongside differences in teacher education systems, induction requirements, and school support structures.

Documents by country or territory

Scopus

Compare the document counts for up to 15 countries/territories.



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Figure 2. Most productive authors, institutions, and countries.

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Keyword Co-occurrence and Thematic Clusters

Figure 3 visualizes the keyword co-occurrence network and provides insight into the conceptual structure of early career teacher research. The most visible themes in this field are expected to cluster around induction, mentoring, professional development, teacher identity, wellbeing, resilience, attrition, and retention. These themes are conceptually connected because early career teachers' professional sustainability depends on both individual capacity and institutional support. External mentoring, for instance, has been identified as a key mechanism for supporting identity development, professional autonomy, networking, and retention among early career teachers (Maras et al., 2024). Similarly, evidence-based induction programs emphasize individualized coaching, targeted professional development, structured peer collaboration, administrative support, and workload adjustment as components that help early career teachers manage classroom responsibilities and remain in the profession (Kwok & Ogden Macfarlane, 2025). Studies on resilience and sustained professional development further indicate that early career teachers' capacity to remain in teaching is shaped by dynamic interactions among personal beliefs, wellbeing, agency, collegial relationships, and school context (Duan et al., 2023; Huang, 2021).

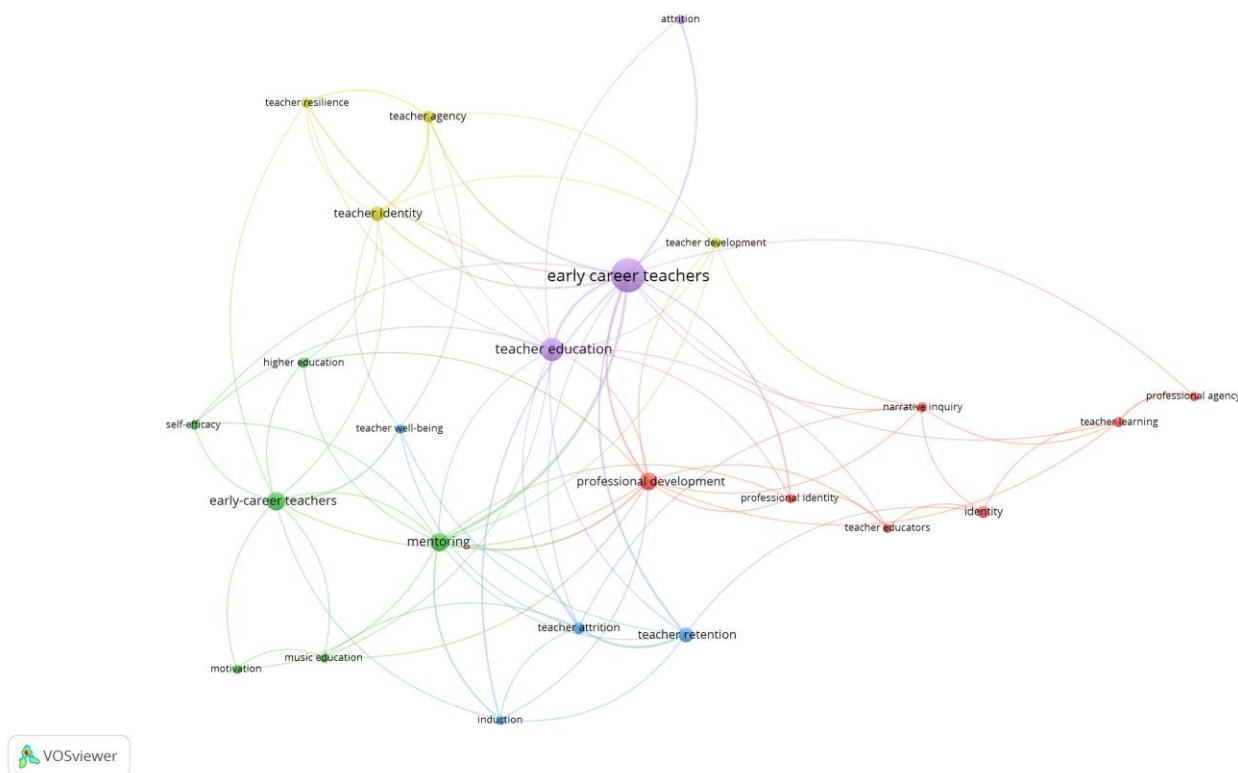


Figure 3. Keyword co-occurrence network visualization.

Taken together, the bibliometric findings suggest that early career teacher research is moving from a narrow concern with teacher survival toward a broader concern with professional sustainability. The field increasingly connects teacher retention with wellbeing, identity development, mentoring quality, school leadership, and professional learning. Recent research reinforces this interpretation. Davis and Park (2025) show that stress, burnout, and disrupted support mechanisms remain major concerns for early career teachers during and after the pandemic. Dockerty (2025) further argues that early career teachers' identities are dynamic and shaped by personal, organizational, social, cultural, political, and historical conditions. These findings indicate that future research should move beyond counting attrition and examine the conditions that enable early career teachers to develop confidence, agency, wellbeing, and long-term commitment to teaching.

Conclusion

This study mapped global research trends on early career teachers using 200 Scopus-indexed journal articles published between 2020 and 2025. The findings indicate that the field has developed around several interconnected themes, including induction, mentoring, professional development, teacher identity, wellbeing, resilience, attrition, and retention. These themes show that early career teacher research is not limited to the first years of classroom adjustment but also concerns the broader question of how education systems can support teachers' professional sustainability.

The results suggest that future studies should pay greater attention to the interaction between individual teacher development and institutional conditions, particularly mentoring quality, leadership support, workload, collegial collaboration, and wellbeing-oriented professional learning. For policymakers and school leaders, the findings highlight the need to design induction and mentoring systems that are structured, sustained, and responsive to early career teachers' professional and emotional needs. This implication is

consistent with international policy evidence showing that teacher retention depends on improving working conditions, professional learning, and the attractiveness of the teaching profession (OECD, 2024; UNESCO & International Task Force on Teachers for Education 2030, 2024). For researchers, the study provides a foundation for further comparative, longitudinal, and mixed-methods investigations into the development and retention of teachers during the early career phase.

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