

# Teacher Recruitment: a Bibliometric Analysis and Visualization of Emerging Trends, Challenges and Applications

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## Info Artikel

## Abstract

### Keywords:

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Recruitment Challenges,  
VOS Viewer.

This study looks at changes in hiring teachers using bibliometrics to look at the Scopus database and 287 documents shown in VOS Viewer from 2013 to 2023. The results showed a significant increase in publications related to teacher recruitment, with the United States as the largest contributor and the UCL Institute of Education in the UK as the most productive institution. Seven main clusters were found in the trend visualization that show how hiring teachers is related to education policy, teacher education, teacher shortages, training, career choices, and professional development. Particularly in retention strategies, professional development, and data-driven education policy, there is a correlation between teacher recruitment and education management. The study suggests creating a model for hiring teachers based on competency-based selection strategies, performance-based incentives, long-term career paths, and flexible training programs based on these results. This model was developed to facilitate the successful implementation of similar strategies in various global education systems, such as the alternative certification scheme in the United States, the grow-your-own teacher approach in the UK, and the fast-track teacher recruitment program in Finland. In Indonesia's education context, implementing this model faces several challenges, including disparities in teacher distribution, limited financial incentives, and a lack of sustainable professional development programs. Therefore, this study suggests using an affirmative action-based recruitment model for 3T (underdeveloped, frontier, and outermost) areas, strengthening the teacher professional development (PPG) scheme, and incorporating technology into choosing and training new teachers. We expect that the study's results will help us make policies for hiring more flexible teachers, based on facts, and in line with how teachers' needs change over time in Indonesia.

### Kata kunci:

Perekrutan guru, analisis  
bibliometrik, tantangan  
perekrutan, penampil VOS.

### Abstrak.

Penelitian ini bertujuan untuk menganalisis tren rekrutmen guru melalui pendekatan bibliometrik dengan menggunakan basis data Scopus dari tahun 2013 hingga 2023 terhadap 287 dokumen yang divisualisasikan melalui VOS Viewer. Hasil penelitian menunjukkan peningkatan signifikan dalam publikasi terkait rekrutmen guru, dengan Amerika Serikat sebagai kontributor terbesar dan UCL Institute of Education di Inggris sebagai institusi yang paling produktif. Visualisasi tren mengidentifikasi tujuh kluster utama yang mengilustrasikan keterkaitan antara rekrutmen guru dengan aspek kebijakan pendidikan, pendidikan guru, kekurangan guru, pelatihan, pilihan karier, serta pengembangan profesional. rekrutmen guru dan manajemen pendidikan memiliki korelasi, khususnya dalam strategi retensi, pengembangan profesional, serta kebijakan pendidikan yang berbasis data. Berdasarkan temuan ini, penelitian merekomendasikan pengembangan model rekrutmen guru berbasis strategi seleksi kompetensi, insentif berbasis kinerja, jalur karier yang berkelanjutan, serta program pelatihan adaptif. Model ini dikembangkan dengan merujuk pada keberhasilan penerapan strategi serupa di

berbagai sistem pendidikan global, seperti skema alternative certification di Amerika Serikat, pendekatan grow-your-own teacher di Inggris, dan program fast-track teacher recruitment di Finlandia. Dalam konteks pendidikan di Indonesia, implementasi model ini dihadapkan pada sejumlah tantangan, termasuk disparitas distribusi guru, keterbatasan insentif finansial, serta kurangnya program pengembangan profesional yang berkelanjutan. Oleh karena itu, penelitian ini merekomendasikan aplikasi model rekrutmen yang berbasis kebijakan afirmatif untuk daerah 3T (tertinggal, terdepan, dan terluar), penguatan skema pendidikan profesi guru (PPG), serta pemanfaatan teknologi dalam sistem seleksi dan pembinaan guru baru. Implikasi dari hasil penelitian ini diharapkan dapat menjadi dasar perumusan kebijakan rekrutmen guru yang lebih adaptif, berbasis bukti, serta selaras dengan dinamika kebutuhan tenaga pendidik di Indonesia.

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## INTRODUCTION

An educator is one of the most important assets in education. The qualifications and quality of teachers play a crucial role in teaching and inspiring students to achieve academic success. (Sancassani, 2023; Sutrisno et al., 2023; Vries et al., 2022). Other studies have elucidated that the quality of teaching in schools is a product of various factors, including available resources, curriculum, and instructional leadership. However, it is also driven by the individuals who teach in each classroom and the placement of teachers in schools, which results from teacher recruitment and retention practices. (Loeb & Myung, 2020).

Considering the importance of teachers' role in students' achievement, a school institution requires an adequate number of teachers with excellent quality. In reality, many schools lack an adequate number of teachers. UNESCO reports a significant shortage of teachers worldwide. Prior research also confirms the existence of issues regarding the quantity of teachers in the United States and many other countries. (Chaaban et al., 2023; García et al., 2022; Iii et al., 2022; Whitfield et al., 2021). Numerous nations confront a deficiency of trained educators and an insufficiency of teachers in schools that cater to underprivileged people or rural regions. (Wahyu et al., 2021) Therefore, recruitment needs to be conducted for teachers to improve school quality by analyzing needs and establishing teacher staffing requirements. (Yanto & Supriyanto, 2023). In conducting the procurement/recruitment of teachers, the principal first consults with the Education Office to avoid misunderstandings (miscommunication) and to enhance the skills/professionalism of the teachers. Education and training are beneficial for teachers as they acquire new information related to education, teaching, and methods in the field of learning simultaneously. Example of its implementation, according to (Mudrik et al., 2024) The principal, along with the HRD Team and several expert teachers in their fields, recruits and selects teachers. The hope is that the incoming teachers will at least have a basic understanding or even be experts in their field.

One of the efforts made to address the teacher shortage problem is by improving the recruitment process and policies related to teacher career advancement (Chaaban et al., 2023; Qin, 2021; Whitfield et al., 2021). The research focuses on effective recruitment methods or systems to attract individuals' interest in becoming teachers, and how to retain experienced teachers. Understanding individuals' perceptions of teaching as a profession, and their motivations for teaching, might help identify which initiatives/policies hold the most promise in enhancing teacher recruitment (Lepori et al., 2015; Prewett et al., 2018; See et al., 2020a). Regarding the teachers' perception, the recruitment method often employed to address the shortage of teachers is long-term career assurance. Implementing a scholarship and certification allowance program for those

willing to pursue a career as teachers in areas experiencing a shortage of educators (Burke & Ceo-DiFrancesco, 2022; Eze et al., 2022; Whitfield et al., 2021). The recruitment process for schools experiencing a shortage of educators is certainly not without the obstacles that occur during the recruitment process, including Organizational Policies, Job Requirements, Recruitment Implementation Methods, Labor Market Conditions, Solidarity, and External Environmental Conditions. There are several principles that must be firmly upheld in the planning or implementation of the teacher recruitment process to ensure the selection of qualified, eligible, and potential candidates for specific positions, including: The teacher recruitment process must be designed carefully, objectively, comprehensively covering all aspects of the requirements that prospective teachers must possess (Hendrizar et al., 2024). The relationship between teacher recruitment and bibliometric methods is very important for the bibliometric analysis of literature, research, and education data. This helps identify research topics and competencies and assists educational institutions in evaluating the quality of teachers by assessing their contributions to educational publications. Therefore, the recruitment process is very important in addressing the shortage of teachers, and there is still limited research focusing on teacher recruitment trends with utilizing the bibliometric method.

Bibliometric research method is a technique for mapping publications that investigates the relationships between academic disciplines, fields, scholars, and individual papers. (Ariyani et al., 2022; Masduki et al., 2022; Zupic & Čater, 2014) Methods like this have gained high interest among academics because they integrate classification and visualization to map the structure of science. (Aktoprak & Hursen, 2022; Cant et al., 2022; Fauzi, 2022). Bibliometric indicators consist of: research fields, document sources, publication output, document source, language source, country and institutional distribution, top authors, number of quotations, and authors' keywords, which have been frequently used to analyze trends. (Muhammad et al., 2022; Semina et al., 2022; Suprpto et al., 2021).

According to (Agia & Sudrajat, 2023) The research results explain that LKP International Education, located in the Serang Banten area, conducts recruitment through the first dissemination of brochures via social media, the acceptance of prospective educators, the selection of educators, and the announcement of educators who pass to become educators at LKP International Education. The researcher's novelty is Teacher Recruitment, which is reviewed from the perspective of bibliometric analysis and the visualization of trends, challenges, and emerging applications and their impacts. By using bibliometric analysis, the research process can focus more on relevant competencies based on the relevant literature, thereby increasing the chances of obtaining high-quality research results. (Winarsih et al., 2024) He mentioned that his research can serve as a reference for the government in setting policies for teacher recruitment through a marketplace to be implemented in 2024. Therefore, this research examines and focuses on the trends in Teacher Recruitment research during the period 2013-2023 with three research questions: (i) Analyzing a large number of studies on teacher recruitment using bibliometric methods; (ii) Understanding the characteristics of the data network among these studies; and (iii) Discussing future research directions and specific topics that can be pursued on the topic of teacher recruitment.

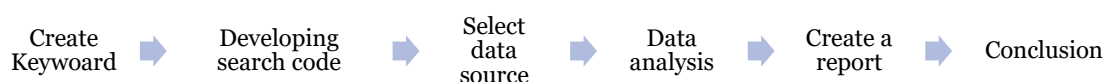
## RESEARCH METHOD

Systematic literature review (SLR) is defined as a method of systematic review and meta-analysis that presents results by combining and analyzing data from various researches conducted

on similar research topics on an academic database that has been published in a scientific journal (Ahn & Kang, 2018; MacLure et al., 2016). The research focuses on bibliometric analysis of the research carried out on recruiting teachers in different countries. The scientific article's source was searched on the Scopus database of Elsevier, an academic database of reputable international journals. Elsevier's Scopus is the largest abstract and citation database of peer-reviewed literature (Joshi et al., 2016), another advantage of Scopus is that it distinguishes between author and index keywords (unlike other databases such as Google Scholar, etc). As stated on the Scopus website ([https://service.elsevier.com/app/answers/detail/a\\_id/36019/supporthub/scopus/](https://service.elsevier.com/app/answers/detail/a_id/36019/supporthub/scopus/)), author keywords are terms given by authors to reflect the content of their documents. The research procedure was structured into four main stages: i) creating keywords; ii) developing search code; iii) selecting data source; iv) data analysis; v) creating a report; vi) conclusion, as illustrated in Figure 1.

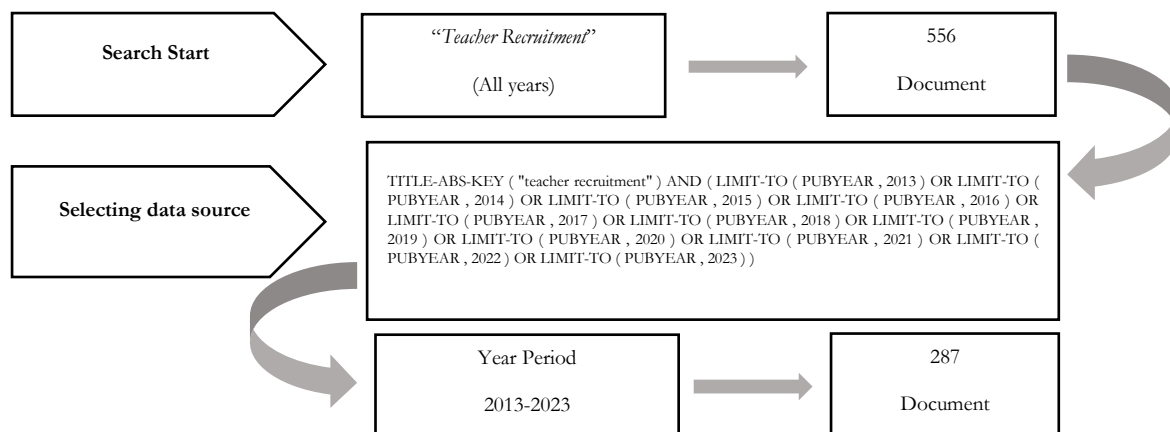
This study was conducted over six months, from January to June 2023. All scientific articles discussing the issue of "Teacher Recruitment" indexed in the Scopus database from 2014 to 2023 are included in the population of this study. Most of the research sample focused on articles that met the inclusion criteria: titles, abstracts, or keywords containing the keyword "Teacher Recruitment," and were published in journals with an international reputation. The data collection technique used a systematic search method with developed keywords, and the search instrument was a search code specifically designed to enhance the relevance of the results. The VOSviewer software is then used to conduct bibliometric data analysis. This program generates author collaboration maps, co-citation maps, and keyword co-occurrence maps. Data analysis was conducted to determine research trends, issues, and activities related to "Teacher Recruitment" in various countries.

The scientific article's source was searched on the Scopus database of Elsevier, an academic database of reputable international journals. This study follows the steps of bibliometric research, as illustrated in Figure 1. While the keyword used is "teacher recruitment", it is used as a filter for searching for titles, abstracts, and keywords from 2014-2023 (van Eck & Waltman, 2018).



**Figure 1.** Bibliometric Research Steps (Mohammadi & Galera, 2023)

This research begins with code generation and development of a search code for searching publication data in the Scopus database. Next, we carefully screened the collected data to ensure accuracy and eliminate redundancy or duplication. To conduct a robust bibliometric analysis. This bibliometric investigation yielded valuable insights into the research landscape on "Teacher Recruitment" in education. The findings were visualized using VOSviewer, a specialized software for building bibliometric networks. (van Eck & Waltman, 2018). This allowed us to generate visual representations, including co-authorship maps, co-citations, and co-occurrence of keywords. (Donthu et al., 2021) This study analyzed and interpreted the collected data and visualizations to identify teacher recruitment trends, challenges, and activities. As shown in Figure 2, we applied Keyword search steps in the Scopus database during the search process.



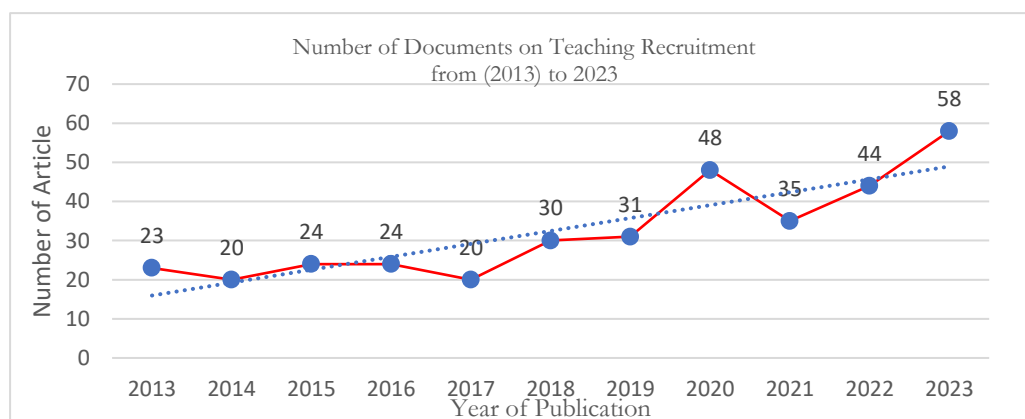
**Figure 2.** Keyword Search Steps in the Scopus Database

## RESULTS AND DISCUSSION

### Result

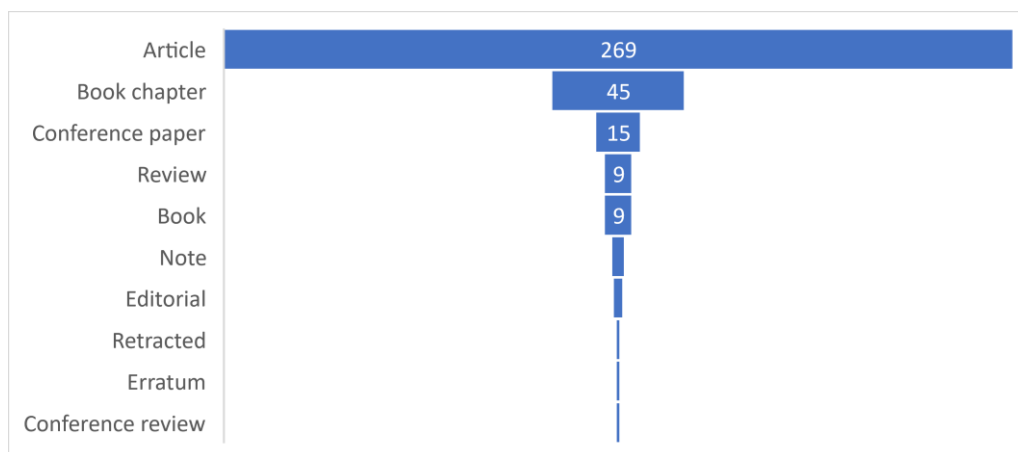
#### Analysis of publications in the topic of teacher recruitment

During the search for documents in the scopus database, 556 articles were obtained. In the last 10 years, there were 357 documents related to the research of teacher recruitment, including three types of document sources (Journal, Conference, and Proceedings). Publications focusing on teacher recruitment research from 2013 to 2023 are shown in Figure 3. The number of articles about teacher recruitment is increasing from year to year, peaking in 2020 when a pandemic struck the world, which affected the number of Human Resources on all lines without exception in the world of education.



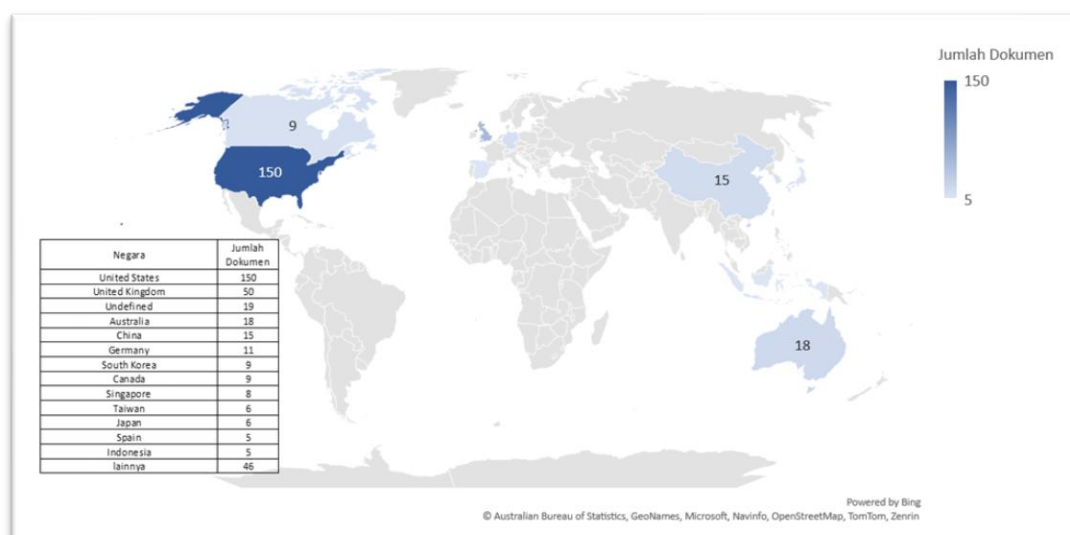
**Figure 3.** Number of Documents on Teaching Recruitment from 2013 to 2023

During the search for documents in the scopus database, 556 articles were obtained. In the last 10 years, there were 357 documents related to the research of teacher recruitment, including three types of document sources (Journal, Conference, and Proceedings). Publications focusing on teacher recruitment research from 2013 to 2023 are shown in Figure 4. The number of articles about teacher recruitment is increasing from year to year, peaking in 2020 when a pandemic hit the world, which had an impact on the number of Human Resources in all lines without exception in the world of education, and in 2023, where the new normal began to be implemented..



**Figure 4.** Number of Teacher Recruitment Articles by Article Source Category

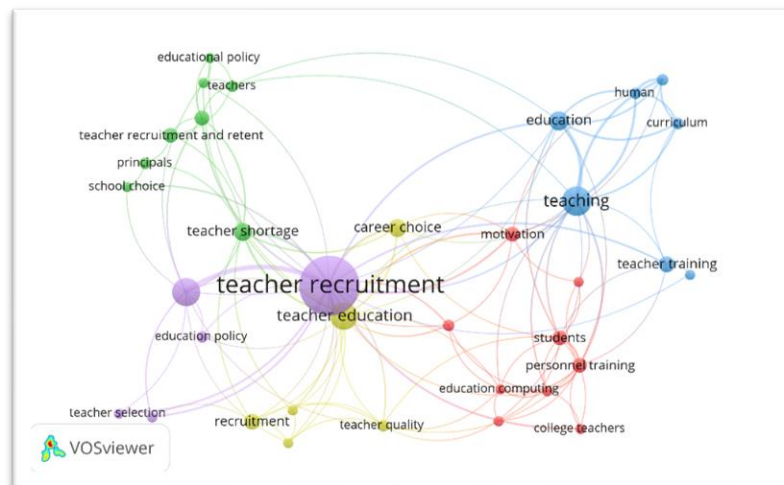
The United States dominates the distribution of publications by country, with 150 documents from 2013 to 2023. The United Kingdom has 50 articles, Australia has 18 articles, and other countries, including Indonesia, contribute to the number of articles below 18 documents (see Figure 5).



**Figure 5.** Number of Teacher Recruitment Articles by Country

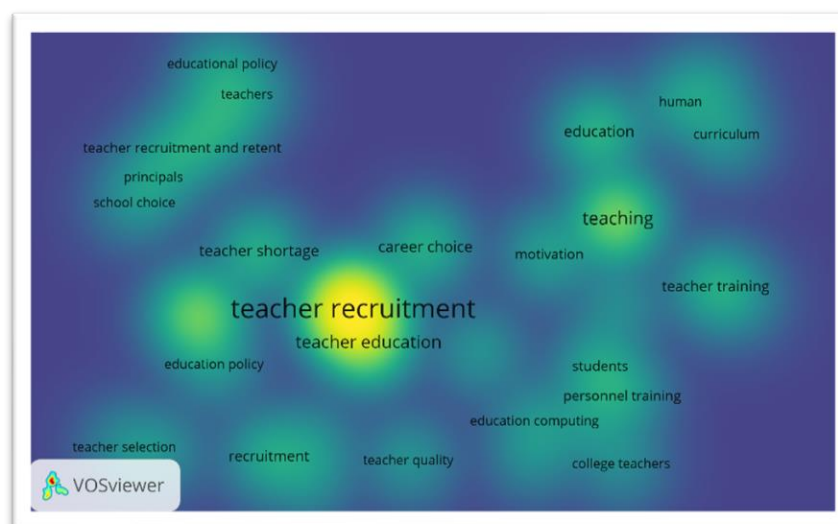
### Visualization of research trends on teacher recruitment on VoSViewer software

Documents downloaded from the Scopus database are in RIS format, which are then visualized with VOSviewer to describe the variables studied related to the topic “teacher recruitment”. VOSviewer is an application that can visualize the relationship of keywords displayed in a circle with a dash on each keyword, as seen in Figure 6. As seen in Figure 6, five keyword clusters are distinguished by color. The purple clusters are teacher recruitment, teacher retention, and education policy. The yellow clusters include teacher education, teacher quality, teacher development. The red cluster group comprises college teachers, education computing, motivation, and preservice teachers.



**Figure 6.** Overview of Research on Teacher Recruitment During 2013-2023

The blue clusters consist of teaching, education, curriculum, and humans. The red clusters include teacher shortage, school choice, and urban education. Among the 556 documents correlated with teacher recruitment in the Scopus database, the researcher observed trends in the topic of teacher recruitment with the help of the VosViewer application. This effort helped to find research that is often done and that is still little studied, so that this effort helps to find new research on this topic. The research results by researchers worldwide resulted in five clusters with a high density of research on teacher recruitment, teacher retention, career choice, and teacher education. In contrast, the research topics that are still rarely studied are research on educational policy and urban education. (Nashrullah & Rindaningsih, 2023). Figure 7 shows that the most frequently researched keyword is teacher recruitment, which is indicated by the brightest keyword.

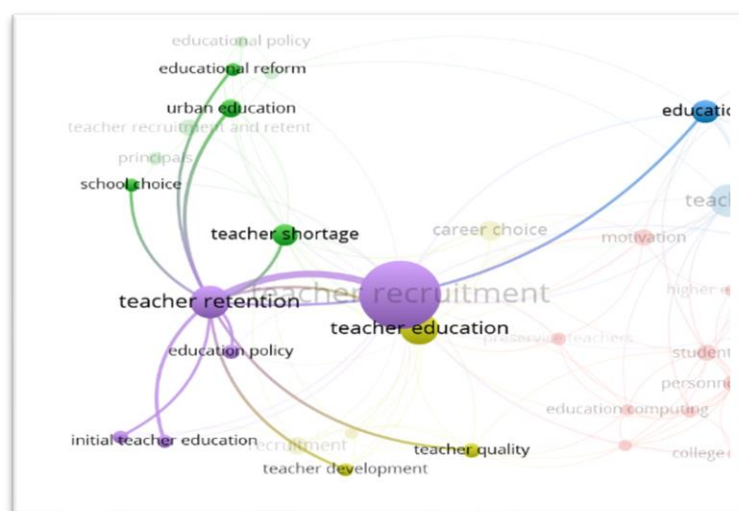


**Figure 7.** Overview of Research on Teacher Recruitment During 2013-2023

Figure 8 shows the relationship between teacher recruitment and teacher retention. An effective teacher recruitment process creates the foundation for getting quality individuals into the education system and is crucial in building positive relationships between teachers and education institutions. However, a strong teacher retention strategy that offers professional support, continuous career development, and a motivating work environment is required to sustain teaching



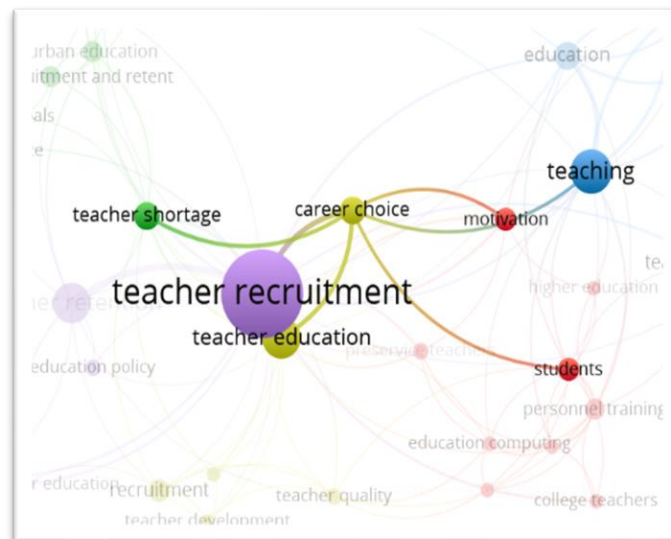
quality. Therefore, the close relationship between teacher recruitment and retention is an important foundation for an education system's success in delivering quality teaching and creating a productive learning environment.



**Figure 8.** Research on The Link Between Teacher Recruitment and Teacher Retention

Figure 9 shows that the teacher recruitment process has great potential as a source of motivation for someone aspiring to a career in education. Through a careful selection and inclusive recruitment, prospective teachers can feel recognized for their potential and dedication, generating motivation to contribute their knowledge and skills in molding future generations. Therefore, positive and inspiring teacher recruitment not only creates job opportunities, but is also a key driver that ignites one's passion and motivation to pursue a meaningful career as an educator. While many people have the interest and motivation to become a teacher in America, several issues can affect teacher recruitment and retention in the country: **Low Salaries:** Teachers are often underpaid compared to the responsibilities and work they perform (Rhinesmith et al., 2023; Rice et al., 2023). This factor can be a barrier in attracting qualified individuals into the profession and retaining existing teachers. **High Workload:** American teachers often face high workloads, including tasks outside the classroom, teaching preparation, and administrative responsibilities. This can create significant pressure and affect one's interest in remaining in the profession. **Lack of Support and Resources:** Some schools, especially in less developed or low socioeconomic impact districts, may experience a lack of support and resources. This can make it difficult for teachers to provide quality education and harm their interest in remaining in the profession. **Social Challenges and Mental Wellbeing:** Teachers often face social challenges, such as educational inequality and mental well-being issues arising from high work pressure. These may affect individuals' interest in choosing or remaining in a teaching career.





**Figure 9.** Research on the Relationship Between Teacher Recruitment and Career Choice

As part of the discussion of this study, the researcher would like to make three recommendations for future research: i) It is recommended to compare data from Web of Science and Scopus databases in researching teacher recruitment; and ii) The importance of conducting direct research. For example, research on the impact of teacher recruitment in rural and urban areas.

## Discussion

The findings of this study provide valuable insights into research trends and challenges surrounding teacher recruitment over the past decade. The increasing number of publications, especially during 2020 and 2023, highlights the growing interest in this topic during significant global events such as the pandemic and the transition to the "new normal." These events have had profound implications for the education sector, including an increased demand for quality educators and changes in recruitment strategies. The dominance of publications from countries such as the United States, England, and Australia highlights their proactive efforts in addressing the issue of teacher recruitment. However, the contributions from developing countries, including Indonesia, remain limited, indicating a potential research gap in these regions. In line with the research (Klassen et al., 2021).

This article has several limitations, only including the recruitment strategies and messages from two organizations—DfE and Teach First—and although these are key players in teacher training in England, many other ITT programs make recruitment efforts with fewer resources. The article also focuses solely on England as a case study, and important work to improve teacher recruitment strategies is ongoing. Identifying teachers' key attributes is the first step in building the foundation for an integrated teacher recruitment, selection, and development framework. Current teacher recruitment strategies are well-intentioned and likely play a role in attracting new teachers. However, little is known about their effectiveness, and scant attention is given to important theories and research from sources outside of education. Furthermore, there is (O'Doherty & Harford, 2018) There is evidence of a decline in the number of applicants for teacher education programs and a shortage of teachers in core subject areas, thus creating a 'crisis' in teacher recruitment and retention, as found in Ireland. This gives a new perspective that is very helpful in the international debate about the strategies implemented to increase the supply of teachers.

Bibliometric analysis using VOS viewer reveals five distinct keyword clusters, reflecting various dimensions of teacher recruitment research. Key areas such as teacher retention, education policy, teacher quality, and urban education are crucial for understanding and addressing recruitment challenges. The close relationship between teacher recruitment and teacher retention, as illustrated in Figure 8, emphasizes the need for integrated strategies that attract quality individuals and encourage their long-term commitment through a supportive work environment, professional development opportunities, and adequate remuneration. However, the fact that teacher effectiveness can vary raises an important issue regarding the value of certain policies in promoting recruitment or retention. We cannot assume that increasing recruitment or retention rates is a valuable outcome. If this increase is achieved at the expense of quality, students may experience more losses than benefits from the policy. A high recruitment or retention rate may not be a desirable outcome, although there may be negative financial and distributional consequences for turnover and training new students. This is only desirable if student learning improves or remains constant. (Guarino et al., 2006). In England, the Early Career Framework (ECF), introduced in 2020, is part of a broader Teacher Recruitment and Retention Strategy to support new teachers during their induction years through high-quality mentoring and professional development, as well as more manageable teaching schedules, short. (See et al., 2020b).

Additionally, this research highlights critical teacher recruitment and retention barriers, especially in the United States, such as low salaries, high workloads, and lack of resources, which deter potential candidates and contribute to attrition. These findings indicate that addressing these challenges requires systemic reforms and policy interventions designed to enhance the attractiveness and sustainability of the teaching profession. Research findings conducted by increasing the diversity of the teaching workforce, a review of minority teacher candidates' recruitment, retention, and experiences in initial teacher education, highlight the structural and institutional barriers that affect the experiences of minority teacher candidates and their transformative power and agency to face these challenges. Recruitment and retention strategies were identified. In 2003, the General Teaching Council for Wales published a teacher recruitment and retention strategy that increased the recruitment of diverse teachers into the teaching profession. This issue still needs to be 'back to basics' and one of the issues that must be explored is the proactive recruitment of a new generation of diverse students into teacher training programs. The recruitment and retention of teachers of colour in Wales, an ongoing conundrum, on the other hand, although they are more capable of providing professional training and education, countries like the United States, the United Kingdom, and Australia face challenges related to balancing the quality and quantity of teachers. (Davis et al., 2023).

Findings from a study (Yee Leong & Said, 2023) investigate the challenges faced by school administrators during the digitalization of teacher recruitment practices in international schools in Malaysia. Teachers are recruited based on selective, standardized patterns meeting technical development requirements. The attitude pattern not only tests the intellectual ability of prospective teachers but also their psychology and personality to meet the challenges of entering the Digital Era 4.0 (Khairani & Tambak, 2023). In addition, social changes and technological advancements also hurt teachers. Along with the increasing use of technology in education, it will become increasingly important for teachers to be proficient in technology and brave enough to conduct online learning. Therefore, recruitment strategies that help teachers adapt to the digital era and technology must be top priorities. This also indicates that the training must be more comprehensive and focus not only on traditional classroom learning but also on digital learning.

Teachers' efforts to adapt to these technological changes will significantly negatively impact the quality of education, especially in the long term, when online learning and the use of digital platforms become more common.

This research significantly contributes to the hypothesis and prior investigations in Table 1. This research reinforces the Human Resource Management (HRM) and Career Motivation theories by elucidating the connection between recruiting tactics, teacher retention, and professional development, which influences the overall quality of education. The research findings substantiate the hypothesis of Educational Globalisation by demonstrating the preeminence of published contributions from rich nations and the disparity in contributions from developing countries, notably Indonesia. This study demonstrates the efficacy of VOS Viewer in bibliometric analysis, effectively visualising and quantifying research patterns, thereby offering a more thorough understanding of the dynamics in global teacher recruiting research.

**Table 1.** Contribution of Research Findings to Theory and Previous Studies

Aspect	Research Findings	Contribution to Theory	Contribution to Previous Studies
<b>Trends in Teacher Recruitment Research</b>	Increased publications on teacher recruitment, particularly in the United States and the UK.	Strengthens human resource management (HRM) theory in education related to the need for effective and sustainable recruitment strategies.	Expands on Loeb & Myung (2020) by highlighting global trends and contributions from different countries in educational policy and teacher recruitment.
<b>Main Research Clusters</b>	Identified seven main clusters: retention, teacher education, teacher shortage, training, career choice, teaching, and motivation.	Deepens Career Motivation Theory in education by showing the relationship between individual motivation and career choice as a teacher.	This supports Gorard and See (2022) by confirming that career motivation and perception influence the decision to become a teacher while also adding dimensions of retention and professional development.
<b>Dominance of Contributing Countries</b>	The United States as the largest contributor, followed by the UK and Australia. Limited contributions from Indonesia.	It highlights the Globalization of Education Theory, emphasizing the dominance of developed countries in educational	Confirms findings from Chaaban et al. (2023) regarding research contribution disparities between developed and developing countries

		innovation and urging developing countries to enhance their research contributions.	in educational research.
<b>Bibliometric Method and VOS Viewer</b>	Utilized VOS Viewer to visualize research trends and clusters.	Validates Bibliometric Analysis Theory for mapping research trends quantitatively and visually.	Complements previous studies like Zupic & Čater (2014) on using VOS Viewer to analyze research trends and networks.
<b>Educational Policy Implications</b>	Emphasized the need for recruitment strategies aligned with educational policies to enhance teacher retention and quality.	Deepens Educational Policy Theory by highlighting the importance of integrating recruitment strategies with teacher retention policies.	Supports findings by Klassen et al. (2021), emphasizing the need for integrating educational policy with recruitment strategies to improve education quality.

Sources: Loeb & Myung (2020), Gorard & See (2022), Chaaban et al. (2023), Zupic & Čater (2014), Klassen et al. (2021). These sources were analyzed to synthesize the research findings presented in this table

Finally, this study identifies underexplored areas such as the impact of teacher recruitment policies in rural versus urban contexts and comparative studies using alternative databases like Web of Science. Future research in this field could contribute to a more comprehensive understanding of global teacher recruitment dynamics and provide insights for fair and effective recruitment practice strategies.

## CONCLUSION

Teacher recruitment is a process that reflects social dynamics in society, as it involves interactions between individuals who have important roles in education. In the sociology of education, teacher recruitment is a phenomenon that shows how social structures and community values influence the selection and placement of individuals in the education profession. The behavior of individuals participating in the teacher recruitment process also reflects the social norms prevailing in the education community and society. The sociology of education pays attention to how social factors such as economics, culture, and politics play a role in the formation of the teaching force through the recruitment process. The dynamics of teacher recruitment policies create patterns of social interaction among prospective teachers, educational institutions, and the government as a regulatory agent. The teacher selection and placement process in the sociology of education shows how power and social structure influence the distribution of expertise and human resources in education.

Research trends on teacher recruitment through 2013-2023 show that this period witnessed a significant growth in research interest related to teacher recruitment. The bibliometric analysis highlights the evolution of concepts, methods, and research focus developed throughout

the decade. Key trends include an increased understanding of effective recruitment strategies, teacher retention challenges and their influence on professional development in educational contexts. In particular, research shows that teacher vacancies and increased task complexity are leading to increased interest in innovations in the recruitment process. In addition, there is a tendency to understand better the factors that influence individuals' decisions to choose a career as a teacher, including salary, support, and working conditions.

During this time, focus has shifted from simply filling vacant positions to quality-oriented recruitment strategies that include assessments of personality, teaching ability and commitment to education. Increased awareness of the impact of diversity and inclusivity in education has also been a major theme in teacher recruitment research. However, research has also highlighted challenges, such as low salaries and high workloads, that may affect individuals' interest in choosing or remaining in a teaching career. Technology and social media have also emerged as an increasingly influential factor in attracting prospective teachers. This research reinforces HRM and Career Motivation theories by revealing the link between recruitment strategies, teacher retention, and professional development, which impacts education quality. It supports the Educational Globalization hypothesis by highlighting dominance in publications from developed nations and the contribution gap from developing countries, particularly Indonesia. Additionally, the study demonstrates the effectiveness of VOS Viewer in visualizing and quantifying global research trends, providing comprehensive insights into teacher recruitment dynamics. Finally, these data provide an important basis for developing current policies and practices that support the sustainability and improvement of quality education.

## REFERENCES

- Agia, N. R., & Sudrajat, I. (2023). Sistem Rekrutmen Tenaga Pendidik (Guru). *Sanskara Pendidikan dan Pengajaran*, 1(02), 40–44. <https://doi.org/10.58812/spp.v1i02.111>
- Ahn, E., & Kang, H. (2018). Introduction to systematic review and meta-analysis. *Korean Journal of Anesthesiology*, 71(2), 103–112. <https://doi.org/10.4097/kjae.2018.71.2.103>
- Aktoprak, A., & Hursen, C. (2022). A Bibliometric and Content Analysis of Critical Thinking in Primary Education. *Thinking Skills and Creativity*, 44, 101029. <https://doi.org/10.1016/j.tsc.2022.101029>
- Ariyani, Y. D., Wilujeng, I., & Dwiningrum, S. I. A. (2022). Bibliometric analysis of SCAMPER strategy over the past 20 years. *International Journal of Evaluation and Research in Education*, 11(4), 1930–1938. <https://doi.org/10.11591/ijere.v11i4.22316>
- Burke, B. M., & Ceo-DiFrancesco, D. (2022). Recruitment and retention of world language teacher education majors: Perspectives of teacher candidates and alumni to remedy a global shortage. *Foreign Language Annals*, 55(2), 333–360. <https://doi.org/10.1111/flan.12613>
- Cant, R., Ryan, C., & Kardong-Edgren, S. (2022). Virtual simulation studies in nursing education: A bibliometric analysis of the top 100 cited studies, 2021. *Nurse Education Today*, 114, 105385. <https://doi.org/10.1016/j.nedt.2022.105385>
- Chaaban, Y., Alkhateeb, H., Abu-tineh, A., & Romanowski, M. (2023). Exploring teachers' perspectives on career development: Q methodology research. *Teaching and Teacher Education*, 122, 103987. <https://doi.org/10.1016/j.tate.2022.103987>
- Davis, S., Houghton, C., Chapman, S., Okeke, R., Yafele, A., Yu, K., & Smith, M. (2023). The recruitment and retention of teachers of colour in Wales. An ongoing conundrum? *The Curriculum Journal*, 34(1), 118–137. <https://doi.org/10.1002/curj.175>

- 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>
- Eze, N., Nwadi, C., Onodugo, I., Ozioko, E., Osondu, S., Nwosu, O., Chilaka, A., & Obichukwu, U. (2022). *Occupational decision motives of potential TVET teachers: New standards of pre-service TVET teachers' recruitment and career development*. August, 1–10. <https://doi.org/10.3389/feduc.2022.883340>
- Fauzi, M. A. (2022). Heliyon E-learning in higher education institutions during COVID-19 pandemic: Current and future trends through bibliometric analysis. *Heliyon*, 8(March), e09433. <https://doi.org/10.1016/j.heliyon.2022.e09433>
- García, E., Han, E., & Weiss, E. (2022). Determinants of Teacher Attrition: Evidence from District-Teacher Matched Data1. *Education Policy Analysis Archives*, 30. <https://doi.org/10.14507/epaa.30.6642>
- Guarino, C. M., Santibañez, L., & Daley, G. A. (2006). Teacher Recruitment and Retention: A Review of the Recent Empirical Literature. *Review of Educational Research*, 76(2), 173–208. <https://doi.org/10.3102/00346543076002173>
- Hendrizar, Beggy, M., & Afriza. (2024). Analisis Konsep Sistem Rekrutmen dan Seleksi Tenaga Pendidik dan Tenaga Kependidikan. *Jurnal Bening*, 11(1), 58–72.
- Iii, J. A. W., Hill-jackson, V., Caldwell, C., & Craig, C. J. (2022). *Teacher Recruitment and Retention: Local Strategies , Global Inspiration*. <https://doi.org/10.1177/00224871221118155>
- Joshi, A., Mahila, G., Kalibadi, M., & Raipur, R. (2016). Comparison between Scopus & ISI Web of Science. *Journal Global Values*, 7(1), 1–11.
- Khairani, K., & Tambak, S. P. (2023). Application of School Teacher Literacy Culture in Efforts to Improve Education Quality in the Digitalization 4.0 Era. *Jurnal Dirosah Islamiyah*, 5(1), 306–318. <https://doi.org/10.47467/jdi.v5i1.2952>
- Klassen, R. M., Bardach, L., Rushby, J. V., & Durksen, T. L. (2021). Examining Teacher Recruitment Strategies in England. *Journal of Education for Teaching*, 47(2), 163–185.
- Lepori, B., Seeber, M., & Bonaccorsi, A. (2015). Competition for talent. Country and organizational-level effects in the internationalization of European higher education institutions. *Research Policy*, 44(3), 789–802. <https://doi.org/10.1016/j.respol.2014.11.004>
- Loeb, S., & Myung, J. (2020). Economic approaches to teacher recruitment and retention. In *The Economics of Education: A Comprehensive Overview* (pp. 403–414). <https://doi.org/10.1016/B978-0-12-815391-8.00029-X>
- MacLure, K., Paudyal, V., & Stewart, D. (2016). Reviewing the literature, how systematic is systematic? *International Journal of Clinical Pharmacy*, 38(3), 685–694. <https://doi.org/10.1007/s11096-016-0288-3>
- Masduki, N. A., Mahfar, M., & Senin, A. A. (2022). A bibliometric analysis of the graduate employability research trends. *International Journal of Evaluation and Research in Education*, 11(1), 172–181. <https://doi.org/10.11591/ijere.v11i1.22145>
- Meyer, J. P. (2016). *Teachers' Perceptions of Their Jobs: A Multilevel Teachers' Perceptions of Their Jobs: A Multilevel Analysis of the Teacher Follow-Up Survey for 1994 – 95. May 2005*. <https://doi.org/10.1111/j.1467-9620.2005.00501.x>
- Mohammadi, P., & Galera, A. (2023). Occupational exposure to nanomaterials: A bibliometric study of publications over the last decade. *International Journal of Hygiene and Environmental Health*, 249(February), 114132. <https://doi.org/10.1016/j.ijheh.2023.114132>

- Mudrik, A.-N. S., Murtafiah, N. H., Rofii, A., & Yanti, D. (2024). Strategi Kepala Sekolah Dalam Meningkatkan Kompetensi Profesional Guru di Idn Boarding School Jonggol. *UNISAN JURNAL: JURNAL MANAJEMEN DAN PENDIDIKAN*, 3(4), 708–724.
- Muhammad, U. A., Fuad, M., Ariyani, F., & Suyanto, E. (2022). Bibliometric analysis of local wisdom-based learning: Direction for future history education research. *International Journal of Evaluation and Research in Education*, 11(4), 2209–2222. <https://doi.org/10.11591/ijere.v11i4.23547>
- Nashrullah, M., & Rindaningsih, I. (2023). Kerangka Kerja Manajemen Rekrutmen Guru: Sebuah Tinjauan Sistematis. *Pendidikan Islam*, 12(03), 2487–2500. <https://doi.org/10.30868/ei.v12i03.4656>
- O'Doherty, T., & Harford, J. (2018). Teacher recruitment: Reflections from Ireland on the current crisis in teacher supply. *European Journal of Teacher Education*, 41(5), 654–669. <https://doi.org/10.1080/02619768.2018.1532994>
- Prewett, S. L., Bergin, D. A., & Huang, F. L. (2018). Student and teacher perceptions on student-teacher relationship quality: A middle school perspective. *School Psychology International*. <https://doi.org/10.1177/0143034318807743>
- Qin, L. (2021). Country effects on teacher turnover intention: A multilevel, cross-national analysis. *Educational Research for Policy and Practice*, 20(1), 79–105. <https://doi.org/10.1007/s10671-020-09269-3>
- Rhinesmith, E., Anglum, J. C., Park, A., & Burrola, A. (2023). Recruiting and Retaining Teachers in Rural Schools: A Systematic Review of the Literature. *Peabody Journal of Education*, 98(4), 347–363. <https://doi.org/10.1080/0161956X.2023.2238491>
- Rice, S., Watt, H. M. G., Richardson, P. W., & Crebbin, S. (2023). Career motivations and interest in teaching of tertiary students taking mathematics and science subjects. *Research Papers in Education*, 00(00), 1–24. <https://doi.org/10.1080/02671522.2023.2244972>
- Sancassani, P. (2023). The effect of teacher subject-specific qualifications on student science achievement. *Labour Economics*, 80, 102309. <https://doi.org/10.1016/j.labeco.2022.102309>
- See, B. H., Morris, R., Gorard, S., Kokotsaki, D., & Abdi, S. (2020a). Teacher Recruitment and Retention: A Critical Review of International Evidence of Most Promising Interventions. *Education Sciences*, 10(10), Article 10. <https://doi.org/10.3390/educsci10100262>
- See, B. H., Morris, R., Gorard, S., Kokotsaki, D., & Abdi, S. (2020b). Teacher Recruitment and Retention: A Critical Review of International Evidence of Most Promising Interventions. *Education Sciences*, 10(10), 262. <https://doi.org/10.3390/educsci10100262>
- Semina, A., Kazachinskaya, A., Semina, A., & Kazachinskaya, A. (2022). An analysis of international business journals An analysis international business journals by of bibliometric indicators by bibliometric. *Procedia Computer Science*, 214, 918–926. <https://doi.org/10.1016/j.procs.2022.11.260>
- Suprpto, N., Prahani, B. K., & Deta, U. A. (2021). *Research Trend on Ethnoscience through Bibliometric Analysis (2011-2020) and The Contribution of Indonesia*.
- Sutrisno, S., Hayati, H., Saputra, N., Arifin, S., & Kartiko, A. (2023). The Influence of The Head of Madrasah and Infrastructure Facilities on The Quality of Education Through Teacher Competence. *Tafkir: Interdisciplinary Journal of Islamic Education*, 4(2), Article 2. <https://doi.org/10.31538/tijie.v4i2.423>
- van Eck, N. J., & Waltman, L. (2018). VOSviewer Manual—Version 1.6.8. *Univeriteit Leiden*, April, 1–51.



- Vries, J. A. De, Dimosthenous, A., Schildkamp, K., & Visscher, A. J. (2022). Studies in Educational Evaluation The impact on student achievement of an assessment for learning teacher professional development program. *Studies in Educational Evaluation*, 74(September 2021), 101184. <https://doi.org/10.1016/j.stueduc.2022.101184>
- Wahyu, N., Sayuti, S. A., & Jailani, J. (2021). Heliyon Indigenous artifacts from remote areas , used to design a lesson plan for preservice math teachers regarding sustainable education. *Heliyon*, 7(August 2020), e06417. <https://doi.org/10.1016/j.heliyon.2021.e06417>
- Whitfield, J., Banerjee, M., Waxman, H. C., Scott, T. P., & Capraro, M. M. (2021). Recruitment and retention of STEM teachers through the Noyce Scholarship: A longitudinal mixed methods study. *Teaching and Teacher Education*, 103. <https://doi.org/10.1016/j.tate.2021.103361>
- Winarsih, N., Silviana, & Hakim, F. (2024). Analisis Perspektif Guru Kabupaten Probolinggo Terhadap Munculnya Kebijakan Rekrutmen Guru Melalui Marketplace. *Discourse: Journal of Social Studies and Education*, 2(1), 29–35.
- Yanto, & Supriyanto. (2023). Pengembangan Profesionalisme Guru dalam Menghadapi Pendidikan Era Global (Studi di Pondok Pesantren Darul Amal Karanganyar). *Jurnal Pendidikan Dan Konseling*, 5(2), 849–856.
- Yee Leong, S., & Said, H. (2023). Pitfalls of Digitalization: Teacher Recruitment in Malaysia International Schools. *Sains Humanika*, 16(1), 69–75. <https://doi.org/10.11113/sh.v16n1.2103>
- Zupic, I., & Čater, T. (2014). Bibliometric Methods in Management and Organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>