

DIROSAT

Journal of Education, Social Sciences & Humanities

Journal website: <https://dirosat.com/>

ISSN : 2985-5497 (Online)

DOI: <https://doi.org/10.58355/dirosat.v4i3.239>

Vol. 4 No. 3 (2026)

pp. 299-308

Research Article

Global Research Trends on Campus-Based Islamic Boarding Schools: A Bibliometric Analysis

Parihat¹, Shindu Irwansyah², Helmi Aziz³, Fahmi Fatwa Rosyadi Satria Hamdani⁴

1. Universitas Islam Bandun, Indonesia

2. Universitas Islam Bandung, Indonesia

3. Universitas islam Bandung, Indonesia

4. Universitas Islam Bandung, Indonesia

Corresponding Author, Email: parihat@unisba.ac.id (Parihat)



Copyright © 2026 by Authors, Published by **DIROSAT: Journal of Education, Social Sciences & Humanities**. This is an open access article under the CC BY License <https://creativecommons.org/licenses/by/4.0/>

Received : June 06, 2026

Accepted : Augst 20, 2026

Revised : July 01, 2026

Available online : Sept, 10 2026

How to Cite: Parihat, Shindu Irwansyah, Helmi Aziz, & Fahmi Fatwa Rosyadi Satria Hamdani. (2026). Global Research Trends on Campus-Based Islamic Boarding Schools: A Bibliometric Analysis. *DIROSAT: Journal of Education, Social Sciences & Humanities*, 4(3), 392–408. <https://doi.org/10.58355/dirosat.v4i3.239>

Abstract. Islamic Boarding School Programs at Universities, or “pesantren mahasiswa”, integrate traditional Islamic education with modern higher education. This study maps global research trends on “pesantren mahasiswa” from 2021 to 2024 by examining publication growth, author collaboration, institutions, countries, and dominant keywords. Using a qualitative bibliometric approach, data from the Dimensions database were analyzed descriptively with VOSviewer through co-authorship and keyword co-occurrence networks. The results identified 41 relevant publications, peaking in 2023. Akhmad Sirojudin, Ari Kartiko, and Muhamad Arif were among the most productive authors, while UIN Maulana Malik Ibrahim, Universitas Darussalam Gontor, and Universitas Airlangga were leading institutions. Indonesia and Malaysia dominated publication output. Common keywords included student, study, research, education, pesantren, and Islam. The study concludes that this topic remains underexplored internationally. Its novelty lies in providing a global bibliometric map that positions pesantren as a modern academic ecosystem supporting policy, curriculum development, and international collaboration.

Keywords: Islamic Boarding School, Islamic Boarding School for University Students, Higher Education, Bibliometric Analysis, VOSviewer

Abstrak. Program pesantren mahasiswa di perguruan tinggi mengintegrasikan pendidikan Islam tradisional dengan pendidikan tinggi modern. Penelitian ini bertujuan memetakan tren penelitian global mengenai pesantren mahasiswa pada periode 2021–2024 dengan mengkaji perkembangan publikasi, kolaborasi penulis, institusi, negara, dan kata kunci yang dominan. Penelitian menggunakan pendekatan bibliometrik kualitatif. Data yang diperoleh dari basis data Dimensions dianalisis secara deskriptif menggunakan VOSviewer melalui jaringan kolaborasi penulis (co-authorship) dan kemunculan bersama kata kunci (keyword co-occurrence). Hasil penelitian mengidentifikasi 41 publikasi yang relevan, dengan jumlah publikasi tertinggi terjadi pada tahun 2023. Akhmad Sirojudin, Ari Kartiko, dan Muhamad Arif termasuk penulis paling produktif, sedangkan UIN Maulana Malik Ibrahim, Universitas Darussalam Gontor, dan Universitas Airlangga menjadi institusi yang paling menonjol. Indonesia dan Malaysia mendominasi jumlah publikasi. Kata kunci yang paling sering muncul meliputi student, study, research, education, pesantren, dan Islam. Penelitian ini menyimpulkan bahwa kajian pesantren mahasiswa masih belum banyak dikembangkan dalam lingkup internasional. Kebaruan penelitian terletak pada penyediaan peta bibliometrik global yang menempatkan pesantren sebagai ekosistem akademik modern yang dapat mendukung pengembangan kebijakan, kurikulum, dan kolaborasi internasional.

Kata kunci: Pesantren, Pesantren Mahasiswa, Pendidikan Tinggi, Analisis Bibliometrik, VOSviewer.

INTRODUCTION

Islamic Boarding School Programs at Universities, commonly known in Indonesia as *pesantren mahasiswa*, constitute an Islamic faith-based educational institution whose existence has long been established in Indonesia and several ASEAN countries, such as Southern Thailand and Malaysia. Historically, pesantren have played a significant role in shaping society and national education systems. As of 2024, there are approximately 41,220 pesantren institutions in Indonesia (PAIPPK, 2019). This number has increased dramatically, with around 11,000 new pesantren established since 2019, indicating a substantial rise in public interest in the pesantren education model (Kantor Berita Indonesia, 2024).

This growth has been further supported by Law No. 18 of 2019 on Pesantren, which facilitates the establishment of pesantren and formally recognizes an integrative education model that combines religious and general sciences through intra-curricular, extracurricular, and co-curricular activities. Structurally, pesantren education consists of *kyai* (religious leaders), *santri* (students), and the study of classical Islamic texts, particularly “*kitab kuning*” (yellow books) (UU Nomor 18 Tahun 2019, 2019). This traditional model continues to evolve dynamically in response to contemporary societal and educational demands.

Islamic educational institutions in various parts of the world have developed new models by integrating traditional religious education with modern knowledge systems, seeking to harmonize pesantren traditions with contemporary sciences (Hadi et al., 2025). Such dynamics are particularly evident in Turkey, where political policies have significantly reshaped Islamic education. While traditional Islamic education was prohibited during the early secular period of the Turkish Republic, recent developments indicate efforts to reintegrate Islamic traditions within a state-supported, integrated education system (Mujib, 2024; Sanah, 2024)

From a historical perspective in Indonesia, the concept of pesantren mahasiswa first emerged in the late twentieth century. Pesantren Mahasiswa Al-Hikam in Malang, founded on 21 March 1992 by KH. A. Hasyim Muzadi, is recognized

as one of the pioneering institutions. Established specifically for university students, Al-Hikam aimed to integrate higher education—emphasizing science and technology—with pesantren-based character and moral education, thereby eliminating the dichotomy between religious and general knowledge through an integrative model (Mbois, 2024).

In Indonesia, the implementation of pesantren mahasiswa varies across higher education institutions. Some universities require students to reside in dormitories during their first year of study, while others extend this requirement throughout the entire period of study. Universitas Islam Bandung (UNISBA), for example, incorporates the Pesantren Mahasiswa Program as a compulsory academic activity for all first-year students, formally recorded in the Study Plan Card (Kartu Rencana Studi), to ensure early exposure to religious and moral education (PAIPPK, 2019).

From an international perspective, similar integrative models can be observed at Ibn Khaldun University, which offers multilingual and interdisciplinary programs combining classical Islamic texts with modern social sciences, and at Al-Azhar University in Egypt, one of the oldest centers of Islamic higher education, which provides residential facilities to support its academic system (Al-Azhar Al-Sharif at Britain, n.d.; *Campus and Facilities*, n.d.; Sanah, 2024)

These studies demonstrate that Islamic Boarding School Programs at Universities are not unique to Indonesia but have developed globally in diverse institutional and regulatory contexts. Prior to conducting further investigation, this study undertook a literature exploration to assess the scope and significance of existing research. Accordingly, VOSviewer was employed to conduct a bibliometric analysis of metadata retrieved from the Dimensions database using the keyword “Islamic Boarding School Program at the University.”

METHOD

This study utilizes data derived from published research outputs, including articles and journal publications, within a three-year research period from 2021 to 2024. The data were collected from publications whose titles or abstracts are thematically related to *Islamic Boarding School Program at the University*, with metadata retrieved from the Dimensions database. Based on the data collection conducted in 2024, a total of 4,296 publications were identified. The primary data source for this bibliometric analysis comprises publication metadata retrieved from the Dimensions database, while secondary literature includes key methodological studies on bibliometric mapping (van Eck & Waltman, 2010); (Hamdani, Mujahid, et al., 2025b; Marlina et al., 2021)

The research methodology employed in this study is a qualitative approach combined with descriptive statistical analysis within a literature-based research design. Publications related to student Islamic boarding school programs were initially processed and analyzed using Microsoft Excel 2021 to identify basic descriptive patterns. Subsequently, publication trends, research networks, and thematic developments were further examined using VOSviewer software.

Furthermore, Figure 1 illustrates the research framework developed by the authors to compare scientific publications related to Islamic Boarding School

Programs at Universities. VOSviewer serves as a tool for constructing and visualizing bibliometric maps and is freely accessible for the bibliometric research community. The software enables the generation of maps based on co-authorship and keyword co-occurrence data (Hamdani, Mujahid, et al., 2025a). Through these visualizations, readers can conduct detailed bibliometric examinations of research patterns within the field.

Previous studies on VOS mapping techniques refer to the works of Van Eck and Waltman, as well as Van Eck et al., who introduced the VOS mapping technique implemented in VOSviewer. This technique allows the software to display bibliometric maps effectively by positioning items based on their relatedness (van Eck & Waltman, 2010).

Accordingly, VOSviewer can present maps generated using the VOS mapping technique as well as visualizations derived from multidimensional scaling approaches. The software is web-accessible and compatible with various operating systems and hardware configurations, making it a flexible and widely used tool for bibliometric analysis (Rusydiana Aam Slamet, 2019).

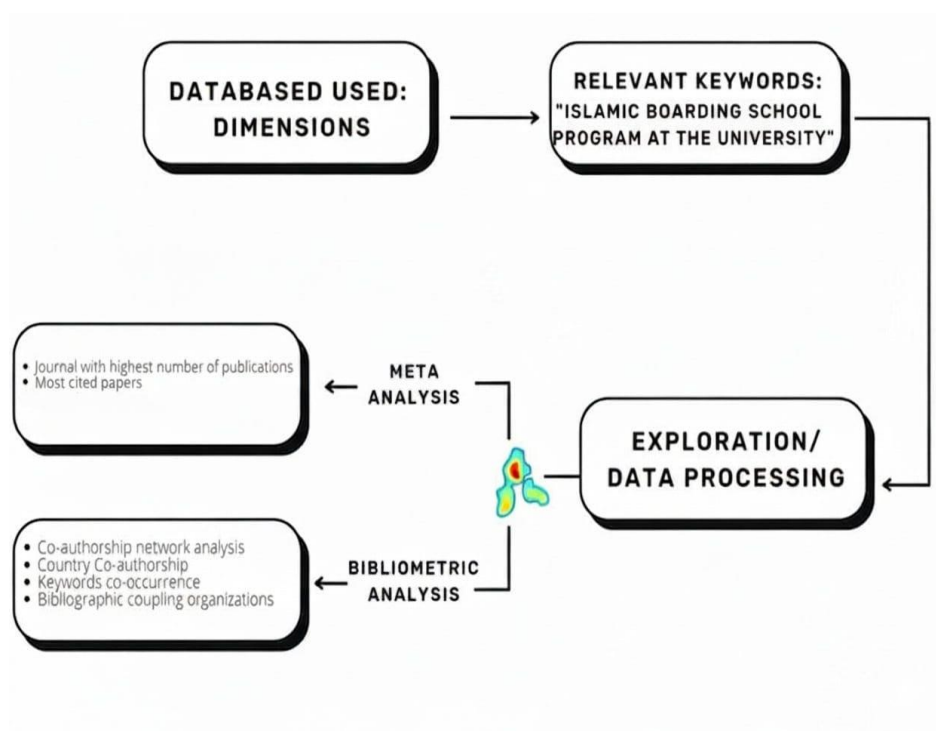


Figure 1. Methodological Framework for Bibliometric Analysis Using VOSviewer

RESULT AND DISCUSSION
Meta – Analysis

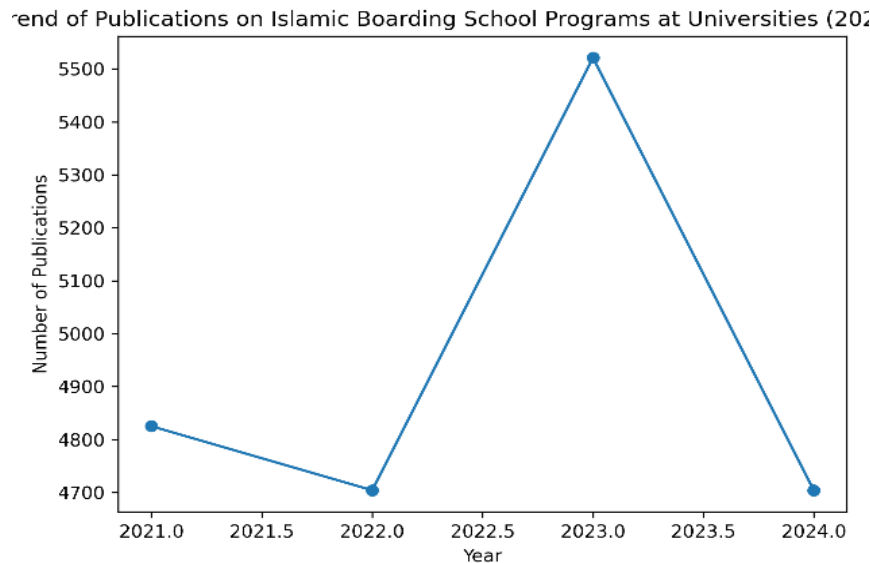


Figure 2. Annual Publication Trends

Figure 2 illustrates the number of early publications related to *Islamic Boarding School Programs at Universities* indexed in the **Dimensions** database. During the three-year observation period from 2021 to 2024, a total of 19,754 publications were recorded, with annual outputs ranging from 4,825 to 5,521 publications. The highest number of publications on the topic *Islamic Boarding School Program at the University* was observed in 2023, with a total of 5,521 articles. In contrast, the lowest numbers of publications were recorded in 2021 and 2024.

However, when the publications were further filtered to include only those that were directly relevant to the topic of *Islamic Boarding School Program at the University*, only 41 publications were identified throughout the entire three-year period. This finding indicates that, despite the large volume of publications broadly related to Islamic education and higher education, research that specifically addresses Islamic Boarding School Programs at Universities remains limited.

Furthermore, this section presents articles published in various journals indexed in the Dimensions database, summarized in tabular form. Among the 41 relevant studies, publications addressing Islamic Boarding School Programs at Universities were found across several academic journals, as detailed in the following table.

Tabel 1. Most Cited Publications

Citation	Authors	Paper Name	Year
4	Iffat Maimunah, Miftahul Huda, Arina Haque, Zubaidah(Maimunah et al., 2021)	Islamic Boarding School at University: A Strong Pathway for Integrating Religion and Science	2021

Citation	Authors	Paper Name	Year
2	Suparta (Suparta, 2024)	Religious Moderation-Based Curriculum For Urban Muslims: A Study In Islamic University Of Indonesia Islamic Boarding School	2024
1	Zuri Pramuji, Fauzi (Pamuji & Fauzi, 2023)	Service Innovation Model in Boarding School Programs for New Students at Islamic Higher Education	2023
1	Mochamad Nasichin Al - Muiz, Abd. Rachman Assegaf, Machali (Al Muiz et al., 2023)	Ma'had al-Jāmi'ah: Synthesis of Islamic Boarding School and University	2023
1	Mauhibur Rokhmanm, Samsul Wahidin, Dwi Suharmoko (Rokhmanm et al., 2021)	Prevention of Radicalism at Islamic Boarding College	2021
-	Firda Inayah(Inayah, 2024)	Integrated Boarding Systems University: An Effective Formula for Creating a Good Man	2024

Table 1 presents the publications with the highest citation counts obtained from journals indexed in the Dimensions metadata. The most highly cited publication is the study conducted by Iffat Maimunah, Miftahul Huda, Arina Haque, and Zubaidah, entitled “Islamic Boarding School at University: A Strong Pathway for Integrating Religion and Science”(Maimunah et al., 2021).

This study examines the concept of integrative development between UIN Maulana Malik Ibrahim Malang and Ma'had al-Jāmi'ah as a model for combining religious and scientific knowledge within higher education. In its implementation, the Islamic boarding school program at UIN Maulana Malik Ibrahim is supported by various facilities designed to enhance language development, students' interests and talents, as well as character formation.

Data collection in this study was conducted through library research, documentation analysis, field observations, and in-depth interviews with selected informants who were considered to possess relevant expertise and competence in the field. This comprehensive methodological approach contributes to the robustness of the findings and partly explains the study's relatively high citation impact within the field of Islamic boarding school programs at universities.

Bibliometric Analysis

A. Bibliometric Co- Authorship

a. Author

The authorship bibliometric mapping was identified using VOSviewer, as illustrated in the following figure. This visualization presents the structure of author collaboration networks within the research field of Islamic Boarding School Programs at Universities. The mapping highlights the relationships among authors based on co-authorship patterns, indicating the level of collaboration and the formation of research clusters in this field.

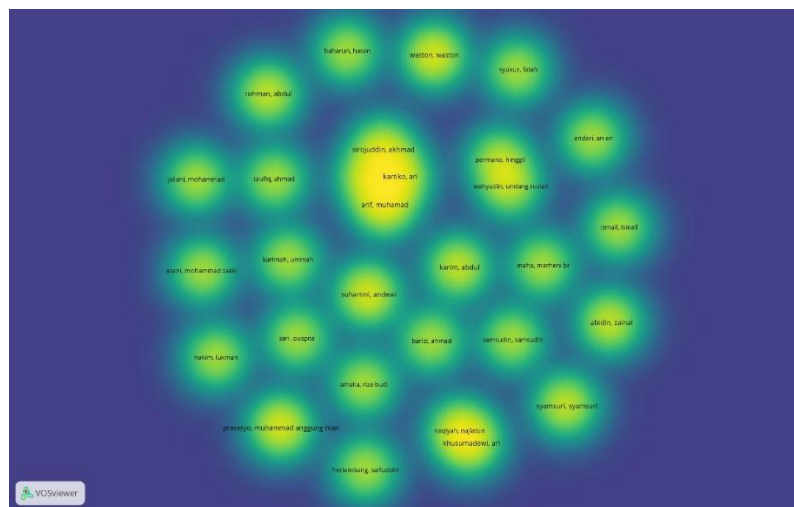


Figure 3. Co-Authorship Authors Density Visualization

Co-authorship analysis is a form of bibliometric analysis that examines relationships among authors based on the number of documents they have published. In this study, the Authors unit represents one type of co-authorship analysis, in which VOSviewer processes the entire dataset to identify patterns of authorship and collaboration among researchers who have published on *Islamic Boarding School Programs at Universities*.

In the density visualization, each author is represented by a yellow luminous circle. The visualization does not display connecting lines, indicating the absence of strong co-authorship relationships among authors. Color intensity reflects authorship density: brighter colors indicate higher publication frequency and stronger relative visibility, while dimmer colors represent fewer publications and weaker collaborative ties.

The density map reveals that research on *Islamic Boarding School Programs at Universities* is characterized by low collaboration intensity and fragmented authorship patterns. Most authors appear as isolated nodes or form small, weakly connected groups, suggesting that publications in this field are largely produced by individual researchers or limited research teams rather than by extensive collaborative networks.

A central area of higher density is visible around authors such as Akhmad Sirojuddin, Ari Kartiko, and Muhamad Arif, whose brighter coloration indicates greater publication output and higher visibility compared to other authors in the network. These scholars can be regarded as core contributors who play a more prominent role in shaping the academic discourse within this research area.

In contrast, many authors are dispersed across the visualization with lower density levels, reflecting limited co-authorship relationships and underdeveloped cross-institutional and interdisciplinary collaboration. The absence of dense clusters further suggests that this field has not yet consolidated into well-established research communities.

Overall, the co-authorship density visualization indicates that research on Islamic Boarding School Programs at Universities remains at an emerging stage of academic development. The predominance of isolated authors and small research groups highlights substantial opportunities for future collaboration, particularly at the international level. Strengthening co-authorship networks may enhance theoretical advancement, methodological robustness, and the global visibility of scholarship in this field.

b. Organizations

Software Vosviewer dapat menunjukkan peta bibliometrik bagian organisasi dengan topik *Islamic Boarding School at The University*. Berikut pemetaan bagian organisasi bibliometrik, dapat dilihat pada gambar yang berada di bawah ini:

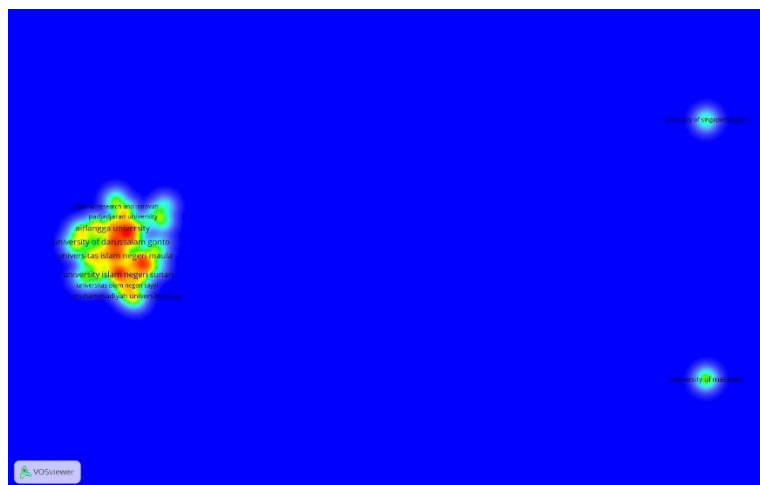


Figure 4. Co-Authorship Organizations Density Visualization

Figure 4 presents the organizational-level bibliometric mapping of research on *Islamic Boarding School Programs at Universities* generated using VOSviewer. This visualization illustrates patterns of institutional contribution and collaboration based on co-authorship data derived from the bibliometric dataset.

In this density visualization, each organization is represented by a yellow-green luminous circle, where larger node sizes and brighter color intensity indicate institutions, whose affiliated authors have produced a higher volume of journal publications on the topic. Organizational co-authorship analysis is determined by the

number of documents produced through collaborative authorship among researchers affiliated with the same or different institutions. The absence of explicit connecting lines between nodes suggests that inter-institutional collaboration remains limited. The results highlight several institutions that are closely associated with influential authors and higher publication output in this research field, notably UIN Maulana Malik Ibrahim, Universitas Darussalam Gontor, Universitas Airlangga, Universitas Padjadjaran, and Universitas Mataram. These institutions emerge as core organizational contributors, playing a central role in shaping scholarly discourse on Islamic boarding school programs at the university level. Their higher density levels indicate consistent research engagement and institutional focus on this theme.

At the same time, the visualization reveals a concentration of research activity within a limited number of institutions, while other organizations appear as peripheral or isolated nodes with lower density intensity. This pattern reflects uneven institutional participation and suggests that research on Islamic Boarding School Programs at Universities is still institutionally centralized rather than broadly networked.

Overall, the VOSviewer map indicates that research on Islamic Boarding School Programs at Universities has been conducted by authors affiliated with institutions from various countries, demonstrating emerging international interest. However, the relatively low density of inter-organizational connections suggests that the field has not yet developed into a well-integrated global research network. Consequently, there remains substantial potential for strengthening cross-institutional and international collaboration to enhance research diversity, methodological rigor, and global visibility in future studies.

c. Countries

Software Vosviewer dapat menunjukkan peta bibliometrik bagian organisasi dengan topik *Islamic Boarding School at The University*. Berikut pemetaan bagian organisasi bibliometrik, dapat dilihat pada gambar yang berada di bawah ini:

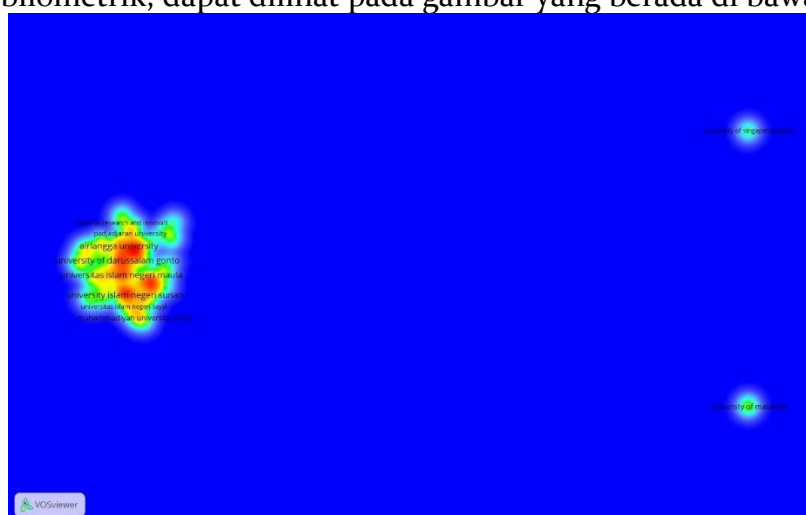


Figure 4. Co-Authorship Organizations Density Visualization

Figure 4 presents the organizational-level bibliometric mapping of research on *Islamic Boarding School Programs at Universities* generated using VOSviewer. This

visualization illustrates patterns of institutional contribution and collaboration based on co-authorship data derived from the bibliometric dataset.

In this density visualization, each organization is represented by a yellow-green luminous circle, where larger node sizes and brighter color intensity indicate institutions, whose affiliated authors have produced a higher volume of journal publications on the topic. Organizational co-authorship analysis is determined by the number of documents produced through collaborative authorship among researchers affiliated with the same or different institutions. The absence of explicit connecting lines between nodes suggests that inter-institutional collaboration remains limited.

The results highlight several institutions that are closely associated with influential authors and higher publication output in this research field, notably UIN Maulana Malik Ibrahim, Universitas Darussalam Gontor, Universitas Airlangga, Universitas Padjadjaran, and Universitas Mataram. These institutions emerge as core organizational contributors, playing a central role in shaping scholarly discourse on Islamic boarding school programs at the university level. Their higher density levels indicate consistent research engagement and institutional focus on this theme.

At the same time, the visualization reveals a concentration of research activity within a limited number of institutions, while other organizations appear as peripheral or isolated nodes with lower density intensity. This pattern reflects uneven institutional participation and suggests that research on Islamic Boarding School Programs at Universities is still institutionally centralized rather than broadly networked.

Overall, the VOSviewer map indicates that research on Islamic Boarding School Programs at Universities has been conducted by authors affiliated with institutions from various countries, demonstrating emerging international interest. However, the relatively low density of inter-organizational connections suggests that the field has not yet developed into a well-integrated global research network. Consequently, there remains substantial potential for strengthening cross-institutional and international collaboration to enhance research diversity, methodological rigor, and global visibility in future studies.

B. Bibliometric Co – Occurance

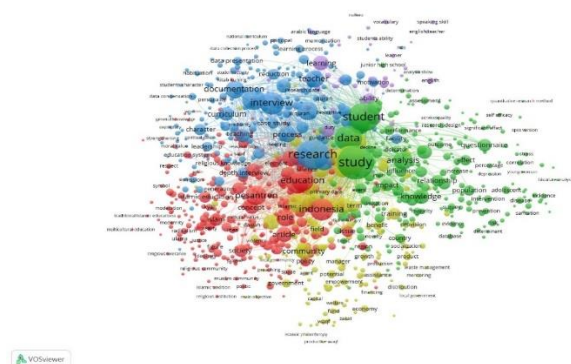


Figure 6. Co-Occurrence Network Visualization

Figure 6 presents a keyword co-occurrence network visualization that maps the thematic structure and intellectual landscape of research related to Islamic Boarding School Programs at Universities. This visualization is generated through bibliometric science mapping, which enables an understanding of key configurations, interdependencies, interactions, and knowledge structures within a particular field of study. By visualizing keyword relationships, the map highlights dominant research themes and their connections across publications from 2021 to 2024.

Overall, the visualization reveals that research on Islamic Boarding School Programs at Universities is multidisciplinary, encompassing educational, religious, social, methodological, and economic dimensions. Several distinct yet interconnected clusters emerge, indicating both thematic diversity and conceptual convergence within the field.

At the center of the network, keywords such as “study,” “research,” “student,” “education,” “pesantren,” “Islam,” and “Indonesia” exhibit the highest density and strongest connectivity. This central positioning indicates that existing research is largely driven by empirical studies focusing on students and educational processes, with Indonesia serving as the dominant contextual and geographical setting. These keywords function as thematic anchors, linking multiple strands of research across different clusters.

The first cluster (red) represents socio-religious and institutional themes, centered on keywords such as pesantren, Islam, Islamic education, society, community, government, and role. This cluster concentrates on social and conceptual issues, particularly the role of pesantren as religious institutions embedded within society. Strong connections between pesantren, community, and Islamic education indicate that pesantren are frequently analyzed as agents of religious transmission, social cohesion, and cultural integration. The linkage of Islam with concepts such as moderation and radicalism further reflects contemporary concerns regarding religious discourse and social harmony. Overall, this cluster highlights the ideological and sociological dimensions of pesantren-based higher education.

The second cluster (blue) focuses on pedagogical and methodological themes, including teacher, curriculum, learning process, teaching, interview, documentation, and case study. This cluster reflects a strong emphasis on qualitative educational research, particularly case studies and interview-based approaches. The close relationship between teacher, curriculum, and learning process underscores the centrality of instructional practices and curriculum design in studies of Islamic boarding school programs at universities. This cluster situates pesantren research firmly within the domain of educational methodology and teaching–learning analysis.

The third cluster (green) centers on empirical and quantitative research themes, with keywords such as student, study, research, data, questionnaire, analysis, knowledge, population, and outcome. This cluster represents studies that rely on surveys, questionnaires, and statistical analyses (e.g., regression, correlation) to examine educational outcomes and student development. Here, students serve as a pivotal node connecting empirical measurement with broader analytical concepts such as effect, influence, and relationship. This cluster indicates a growing interest in

evidence-based evaluation of Islamic boarding school programs at the university level.

The fourth cluster (yellow) highlights economic and empowerment-related themes, including zakat, empowerment, economy, welfare, and development. Although smaller in size, this cluster signals an emerging research direction that positions pesantren-based higher education as a driver of economic empowerment, Islamic philanthropy, and community welfare. The linkage between community, zakat, and empowerment suggests an expanding scholarly focus on the socio-economic contributions of pesantren beyond their educational functions.

In terms of overall connectivity and density, keywords such as research, student, study, Islam, education, and pesantren display the highest prominence, as indicated by larger node sizes and denser connections. These keywords bridge pedagogical, socio-religious, empirical, and economic themes, demonstrating the integrative nature of the research field.

In conclusion, the keyword co-occurrence network visualization shows that research on Islamic Boarding School Programs at Universities is conceptually rich yet thematically concentrated, with strong emphasis on education, students, and religious institutions, particularly within the Indonesian context. At the same time, relatively weak connections to themes such as technology, digital transformation, international comparison, and global collaboration indicate underexplored areas. This suggests that the field is still developing and consolidating, while offering substantial opportunities for thematic diversification and internationalization in future research.

Next, Figure 7 presents a co-occurrence visualization that differs from the previous one. This figure uses overlay visualization, a technique employed to display elements within a specific frame, such as a rectangular or circular layout. In this visualization, colors are assigned based on the year of publication, rather than on thematic clusters.

The primary purpose of the overlay visualization is to illustrate how keywords evolve over time, allowing both long-established terms and newly emerging keywords to be identified within publications discussing *Islamic Boarding School Programs at Universities*. Through this approach, the visualization provides insights into the temporal dynamics of research themes, highlighting shifts in scholarly focus and the emergence of new research directions over the observed period.

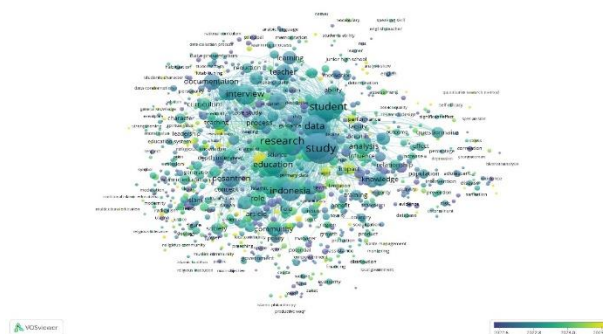


Figure 7. Co-Occurrence Overlay Visualization

Figure 7 presents a co-occurrence overlay visualization that illustrates the temporal development of research themes related to *Islamic Boarding School Programs at Universities*. In this visualization, colors are assigned based on the year of publication rather than thematic clusters. Darker colors indicate keywords that have been used for a longer period in the literature, while lighter colors represent more recently emerging keywords. The size of each node reflects the frequency of keyword occurrence in the analyzed publications.

The overlay map shows that foundational keywords such as “education,” “research,” “study,” “student,” “pesantren,” “Islam,” and “Indonesia” appear in darker tones and occupy central positions in the network. This indicates that these concepts have consistently formed the core framework of research on Islamic boarding school programs at the university level since the early stages of scholarly inquiry (Fatmawati, 2020; Rochmania, 2022).

Among these early and well-established terms, “education” stands out as one of the most prominent keywords. An illustrative example is the study by Zuri Pramuji and Fauzi entitled “*Service Innovation Model in Boarding School Programs for New Students at Islamic Higher Education*” (Pamuji & Fauzi, 2023). This study analyzes service innovation in *Ma’had al-Jāmi’ah* programs at Islamic higher education institutions, particularly during and after the COVID-19 pandemic, demonstrating the sustained relevance of educational themes in this research field.

The study employs a mixed-method approach with an exploratory sequential design, integrating questionnaires, documentation, interviews, and observations. The questionnaire survey involved 172 students. The findings reveal that the CLER configuration model, comprising *configuration*, *linkage*, *environment*, and *resources*, was utilized to implement service innovation through technological support for information dissemination, registration systems, service evaluation, and learning activities (Hamdani, Wijayanti, et al., 2025; Rahman et al., 2023).

Moreover, the implementation of the CLER model was reinforced by incorporating five innovation characteristics derived from diffusion of innovation theory, namely *relative advantage*, *compatibility*, *complexity*, *trialability*, and *observability*. The results demonstrate that the service innovation was effective, as reflected in student satisfaction indicators related to clarity of information, ease of registration, clarity of learning materials, and the achievement of BTA-PPI competencies, with a reported pass rate of 78%.

In contrast to these foundational themes, the overlay visualization also highlights a few lighter-colored keywords, such as *analysis*, *impact*, *outcome*, *relationship*, *performance*, *questionnaire*, and *knowledge*, which indicate more recent research trends. These emerging terms suggest a growing scholarly shift toward evaluative, outcome-oriented, and evidence-based approaches, particularly those employing quantitative methods to assess program effectiveness and student development.

Overall, the co-occurrence overlay visualization demonstrates that research on *Islamic Boarding School Programs at Universities* has evolved from conceptual and descriptive educational studies toward more analytical, methodological, and impact-focused investigations. While traditional educational and religious themes remain

dominant, the emergence of newer keywords reflects the field's gradual maturation and highlights opportunities for further innovation, particularly in areas such as technology integration, program evaluation, and comparative international studies.

Findings

This study finds that the topic of *Islamic Boarding School Programs at Universities* appears in a wide range of journals and scholarly articles that have been published in recent years. However, popular research themes are still predominantly centered on Islamic boarding schools in general, with primary focuses on institutional management, character formation of santri or students, and curriculum development. University-based Islamic boarding school programs are commonly discussed as initiatives that support students' independence, self-management, character development, leadership skills, and the cultivation of competencies that are relevant to future professional careers (Al Muiz et al., 2023).

Most existing studies emphasize traditional pesantren education or independent boarding school institutions, whereas this research highlights the integration of Islamic boarding school programs within the university ecosystem (Parihat et al., 2025). A relevant example is a case study of *Ma'had Baitul Qur'an Madura*, which examines how pesantren traditions, such as *ta'zim* (respect) and daily social practices, influence the moral development of santri (Halim et al., 2024). The findings of that study demonstrate that pesantren traditions can function as effective instruments for emotional and moral education. Within the context of higher education, the present study extends this understanding by emphasizing that university-based Islamic boarding school programs are not merely religious environments but constitute structural components of Islamic higher education, integrating religious values with academic learning to create a holistic educational habitat.

By comparing research trends on Islamic boarding school programs in Indonesia with practices in other countries, this study broadens its scope to an international level. A relevant comparative reference is the study *Islamic Education Models: A Bibliometric Analysis of Challenges and Prospects*, which analyzes 1,377 global publications from 2015 to 2024 and identifies key challenges and opportunities in Islamic education across diverse contexts (Elbanna & Muthoifin, 2024). Using keyword mapping and institutional collaboration patterns, the present study positions Indonesia within the global discourse on pesantren–university integration while simultaneously highlighting opportunities for cross-national research collaboration.

Furthermore, this research connects theories of traditional pesantren education with contemporary pedagogical approaches in higher education, forming an integrative conceptual framework. Previous studies, such as *Bibliometric Analysis of the Use of VOSviewer in Educational Research*, show that the use of VOSviewer as a literature mapping tool in educational research has increased significantly since 2020 and has contributed to methodological improvements in educational studies (Patty et al., 2024). Accordingly, this study provides new insights into research trends on Islamic boarding school programs at universities.

The practical contribution of this research includes policy-oriented

recommendations to assist universities and pesantren administrators in designing integrative programs that are not merely symbolic but effectively strengthen the academic, spiritual, and residential organizational dimensions of contemporary universities.

CONCLUSION

The results of this bibliometric study reveal that the topic of *Islamic Boarding School Programs at Universities* remains relatively underexplored in the existing scholarly literature. During the three-year period from 2021 to 2024, only 41 publications specifically addressing this topic were identified. This finding indicates that, despite growing interest in Islamic education, research focusing explicitly on university-based Islamic boarding school programs is still limited.

The research landscape on *Islamic Boarding School Programs at Universities* is mapped through co-authorship analysis and keyword co-occurrence analysis. In terms of authorship, Akhmad Sirojuddin, Ari Kartiko, and Muhamad Arif emerge as prominent authors with relatively higher connectivity to other researchers, suggesting their influential roles within this research field. At the organizational level, several institutions demonstrate higher research productivity and publication output related to this topic, notably UIN Maulana Malik Ibrahim, Universitas Darussalam Gontor, Universitas Airlangga, Universitas Padjadjaran, and Universitas Mataram.

These institutions function as core contributors to the development of scholarly discourse on Islamic boarding school programs at the university level. From a geographical perspective, Indonesia and Malaysia dominate research output on *Islamic Boarding School Programs at Universities*, reflecting strong regional interest and long-standing traditions of Islamic education integrated within higher education systems. Keyword analysis further shows that terms such as student, study, research, education, pesantren, and Islam exhibit the highest frequency and dominance in the literature. These keywords indicate that existing studies primarily emphasize educational processes, student development, and the integration of Islamic values within university-based boarding school contexts.

Based on these findings, several recommendations are proposed. For future researchers, it is recommended to expand the database scope beyond Dimensions (such as Scopus or Web of Science) and incorporate qualitative or empirical approaches to gain deeper insights into curriculum integration. For university administrators and policymakers, these findings highlight the need to foster cross-institutional and international research collaborations—particularly beyond Indonesia and Malaysia—to enhance the global visibility and academic framework of campus-based Islamic boarding schools.

DAFTAR PUSTAKA

- Al-Azhar Al-Sharif at Britain. (n.d.). the Foremost Seat of Islamic Learning in the World. Al - Azhar College Of Islamic Studies.
- Al Muiz, M. N., Assegaf, A. R., & Machali. (2023). Ma'had al-Jāmi'ah: Synthesis of Islamic Boarding School and University. Cendekia: Jurnal Kependidikan Dan

- Kemasyarakatan, 21(1), 29–47. <https://doi.org/10.21154/cendekia.v21i1.6062>
- Campus and Facilities. (n.d.). Cenfinity.
- Elbanna, M., & Muthoifin. (2024). Islamic Education Models: A Bibliometric Analysis of Challenges and Prospects. *Solo Universal Journal of Islamic Education and Multiculturalism*, 3(01), 11–26. <https://doi.org/10.61455/sujiem.v3i01.231>
- Fatmawati, E. (2020). Integrasi Pesantren dan Pergurua Tinggi : Studi Tipologi dan Kurikulum Pesantren Mahasiswa. *Jurnal Ilmiah Al – Hadi*, 5(2), 113–141. <https://journal.pancabudi.ac.id/index.php/alhadi/article/view/1088/983>
- Hadi, A., Anim, S., Yasin, H., & Sutiono, S. (2025). Moderate Islamic Education: A Comparative Study of Indonesia's *Insan Cendekia* and Turkey's Imam Hatip Schools. *International Journal of Emerging Issues in Islamic Studies*, 5(1), 1–15. <https://doi.org/10.31098/ijeis.v5i1.2864>
- Halim, A., Hanif Fahrudin, A., & Alfiyatin, Y. (2024). Emotional And Moral Development in Pesantren: A Case Study of Ma'had Baitul Qur'an Madura.
- Hamdani, F. F. R. S., Mujahid, I., & Karvito, D. Y. (2025a). MAPPING RESEARCH ON WIFE'S SEXUAL RIGHTS IN ISLAMIC MARRIAGE: A BIBLIOMETRIC ANALYSIS AND ITS IMPLICATIONS FOR ISLAMIC FAMILY LAW IN INDONESIA. *Tahkim: Jurnal Peradaban Dan Hukum Islam*, 8(2), 89–106.
- Hamdani, F. F. R. S., Mujahid, I., & Karvito, D. Y. (2025b). PEMETAAN PENELITIAN TENTANG HAK SEKSUAL ISTRI DALAM PERNIKAHAN ISLAM: ANALISIS BIBLIOMETRIK DAN IMPLIKASINYA BAGI HUKUM KELUARGA ISLAM DI INDONESIA. *Tahkim: Jurnal Peradaban Dan Hukum Islam*, 8(2), 89–106. <https://doi.org/https://doi.org/10.29313/tahkim.v8i2.8237>
- Hamdani, F. F. R. S., Wijayanti, I. M., Eprianti, N., & Surahman, M. (2025). Peningkatan Literasi Zakat Pengelola Pondok Pesantren Nurul Huda Pajagalan Melalui Kegiatan Pendampingan dan Pemberdayaan. *Al-Afkar: Journal for Islamic Studies*, 8(3), 705–716. <https://doi.org/10.31943/afkarjournal.v8i3.1547>
- Inayah, F. (2024). Integrated Boarding Systems University : An Effective Formula for Creating a Good Man. *At-Ta'dib*, 19(2), 311–327. <https://doi.org/http://dx.doi.org/10.21111/attadib.v19i2.13449>
- Kantor Berita Indonesia. (2024, August). Kemenag Sebut Pesantren Bertambah 11 Ribu Sejak UU Pesantren Disahkan. *ANTARA*.
- Maimunah, I., Huda, M., Haque, A., & Zubaidah, Z. (2021). Islamic Boarding School at University: A Strong Pathway for Integrating Religion and Science. *J-PAI: Jurnal Pendidikan Agama Islam*, 8(1), 37–50. <https://doi.org/10.18860/jpai.v8i1.15361>
- Marlina, L., Rusydiana, A. S., Hidayat, P., & Firdaus, N. (2021). Twenty years of Islamic banking in Indonesia: A biblioshiny application. *Library Philosophy and Practice (e-Journal)*, 4999.
- Mbois, O. (2024, March). Sekilas Sejarah Pesantren Mahasiswa Al Hikam Malang. *NGALAM*.
- Mujib, A. (2024). Model Pendidikan Islam di Turki. *Journal of Islamic Education Studies*, 2(2), 167–176. <https://doi.org/10.58569/jies.v2i2.980>
- PAIPPK. (2019). Pesantren Mahasiswa UNISBA. PAIPPK.
- Pamuji, Z., & Fauzi, F. (2023). Service Innovation Model in Boarding School Programs for New Students at Islamic Higher Education. *Tafkir: Interdisciplinary Journal*

- of Islamic Education, 4(2), 319–334. <https://doi.org/10.31538/tijie.v4i2.443>
- Parihat, Arif, M. F., Rasyid, A. M., Irwansyah, S., Fatwa, F., & Satria, R. (2025). New Student Pesantren Program as an Instrument for Enhancing Fiqh Worship Literacy among Islamic University Students. *At-Taquaddum*, 17(1), 35–45. <https://doi.org/10.21580/at.v17i1.28168>
- Patty, E. N. S., Yorman, Miswaty, T. C., Syahid, A., & Muti'ah. (2024). Bibliometric analysis of the use of VOSviewer in educational research: Trends and implications. *Cypriot Journal of Educational Sciences*, 19(1), 61–76. <https://doi.org/10.18844/cjes.v19i1.9376>
- Rahman, K. A., Yusup, A., & Pratama, F. A. (2023). Potensi Mewujudkan Pondok Pesantren Mahasiswa di Perguruan Tinggi Universitas Jambi Sebagai Penguatan Karakter dan Visi Pendidikan Bangsa Universitas Jambi; Indonesia PENDAHULUAN Aliran agama yang banyak tersebar dan belum bisa diakui tingkat keilmuannya. *INTEGRATIA: Journal of Education, Human Development, and Community Engagement*, 1(2), 157–164.
- Rochmania, D. D. (2022). Implementasi Pendidikan Karakter Berbasis Pondok Pesantren. *Jurnal Basicedu*, 6(2), 1687–1695. <https://doi.org/10.31004/basicedu.v6i2.2293>
- Rokhmanm, M., Wahidin, S., & Suharnoko, D. (2021). Prevention of Radicalism at Islamic Boarding College. *EJ-SOCIAL, European Journal of Humanities and Social Sciences*, 1(4), 33–37. <https://doi.org/http://dx.doi.org/10.24018/ejsocial.2021.1.4.92>
- Rusyiana Aam Slamet. (2019). Bibliometric Analysis of Scopus-Indexed Waqf Studies. *Ekonomi Islam Indonesia*, 1(1), 1–17.
- Sanah, N. (2024). ANALISIS KEBIJAKAN PENDIDIKAN ISLAM DI TURKI: MODEL PENDIDIKAN TERPADU ANTARA TRADISI DAN MODERNITAS. *JURNAL AL-QAYYIMAH*, 7(2), 89–109. <https://doi.org/10.30863/aqym.v7i2.7561>
- Suparta. (2024). RELIGIOUS MODERATION-BASED CURRICULUM FOR URBAN MUSLIMS: A STUDY IN ISLAMIC UNIVERSITY OF INDONESIA ISLAMIC BOARDING SCHOOL. *Akademika: Jurnal Pemikiran Islam*, 29(1), 1–11. <https://doi.org/10.32332/akademika.v29i1.8732>
- UU Nomor 18 Tahun 2019. (2019). BPK RI.
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>