Bibliometric Analysis of the Management School Principals and the Improvement of Teacher Pedagogy in the Digital Era based on the Scopus Database (1966-2024)

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Abstract

This research aims to identify development mapping and research directions on the Islamic ecosystem in publications listed on the Scopus index. The approach used in this research is bibliometric analysis, which is used to explore all publications indexed in the Scopus database related to "Management And Pedagogy" from 1966 to 2024. The data analyzed was processed using Excel and R/R-Studio software. To analyze the occurrence patterns of keywords and document citations simultaneously, this research uses the VOSviewer visual analysis tool. The research results showed that 2663 publications were relevant to the criteria and focus set by the researchers. The main finding of this research is that there is an annual growth of 6.1%, and the peak of publications on "Management And Pedagogy" occurs in 2023. Monash University was identified as the main contributor with an affiliation of 25 documents. A researcher named Alison Ja has the highest productivity in the topic "Management And Pedagogy". However, it is important to note that this bibliometric analysis is based only on data from Scopus, while other national and international data sources are not included in the analysis. Therefore, this study provides a comprehensive overview of the literature that is accessible to researchers interested in the field of "Management And Pedagogy" and also provides suggestions for future research directions.

Keywords: pedagogy, human, education, teaching, curriculum, organization and management, students

Introduction

Education (Sumardjoko & Musyiam, 2018), as the main pillar in the development of a nation (Rajhans et al., 2021), requires a deep understanding of the factors that influence its quality (Macháčková, 2023). Principal management (Alexander, 2002) and teacher pedagogy (Francis & Afful, 2023) play an important role in establishing an effective and quality learning environment (Shafiee & Ghani, 2022). This research uses a secondary data approach (Sarangi et al., 2023) by utilizing research results from the Schopus School Comparative Study to explore (Bitencourt et al., 2021) and analyze the correlation between school principals' management and teachers' pedagogical practices (Peretyat'ko, 2021).

Scopus, as a secondary data source that is rich in information (Solomon et al., 2019), provides a comprehensive overview of various aspects of education at the school level (Dementyeva et al., 2023). This data includes information about the principal's management (Baker, 2021). This study aims to investigate the extent to which principals' management practices influence teachers' pedagogy (Decker et al., 2023) and its impact on student achievement (Macháčková, 2023). Therefore, this research not only provides a deeper understanding of principal management practices and teacher pedagogy (Ugarte et al., 2022) but can also utilize secondary data to draw strong and sustainable conclusions (Sadik & Ottenbreit-Leftwich, 2023).

Bibliometrics are devices that perform the function of evaluating the results of scientific research (Sumardjoko & Musyiam, 2018), examining the interaction between "Management and Pedagogy", producing mapping of areas of knowledge, tracking/tracing developments in the latest information in certain fields, and bibliometrics is a tool in making strategic plans in the future (Zhang et al., 2021). It looks at the ambition to map the development and research path of "Management And Pedagogy" on registered guides using the Scopus database from 1966 to 2024. The year 1966 was chosen as the start of the 12 months based on findings in the Scopus database that the first two courses on "Management And Pedagogy" had been observed in that year.

Prior Reseacrh

Continuity and Understanding of "Management and Pedagogy" (Haron et al., 2021). In continuity with previous research, this research aims to deepen understanding of the important role of schools in "Management and Pedagogy" education

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and the need for more valid and reliable Management instruments to assess supporting approaches in them. (Drake et al., 2023). This endeavor encompasses the creation and validation of a questionnaire titled "Examining the Application of Postcolonial Management Theory in Sport Management Education : Approaches to Enhance Students' Comprehension of Colonial Histories and Challenge Prevailing Ideologies." Further research is essential to scrutinize the utilization of postcolonial theories among sports professionals, with an intriguing gap identified in the realm of sports board training.

The motivation behind this study is to formulate a performative methodology guided by the postcolonial managerial theory and its implementation in sports executive classrooms. The paper primarily delves into critical and progressive performativity as two distinct types. It aims to pinpoint and explore specific teaching methods that educators can employ to facilitate students' understanding of the persisting dominance of Westernized management and organizational concepts. By aligning with the postcolonial managerial theory, performative methodologies in sports, particularly in executive education, intertwined with social teaching methods, seek to acknowledge and disrupt the reliance on Westernized belief systems (McSweeney et al., 2022). The study, titled "Assessing Decision-Making Skills of Pre-Service Teachers in Classroom Management: A Video-Based Evaluation Approach," is part of the broader Classroom Management Skills investigation. The CME-Decide video-based assessment tool is employed to gauge the decision-making capabilities of pre-service teachers. A sample comprising 284 pre-service teachers was exposed to twelve brief teaching practice videos. After each video, participants were queried about their intended actions in the depicted scenarios. Analysis of correlations and regressions uncovered associations between the CME-Conclude test and proficiency in classroom governance, general educational knowledge, demonstrated enthusiasm, and access to school-based learning opportunities. However, no significant correlation was observed with college-based exceptional learning opportunities within the context of day-to-day teaching methods (Weyers et al., 2024).

The preceding Principal Partnership Program Management [20] laid the groundwork for investigating Critical Success Factors (CSFs) in the context of augmenting the adoption of Learning Management Systems (LMS) within Higher Education Institutions (HEIs) in the Kingdom of Saudi Arabia (KSA). Recognizing the pivotal role of LMS in streamlining the learning process and acting as a resource management tool for HEIs, this study aims to delve deeper into understanding the interplay between progress metrics, commonly associated with innovation, and the perspectives of individuals and organizations. Employing an Interpretive Structural Modeling (ISM) approach, the research critically analyzes the deployment of LMS in HEIs across the Saudi Arabian Region. The primary focus lies in the identification of key success factors that wield substantial influence within the ISM framework, taking into account the significant impact of diverse environmental factors. The study's findings underscore specific success factors with a pronounced driving force in the ISM approach, underscoring the necessity for targeted attention due to their profound impact. Importantly, the research underscores the critical roles played by a well-defined Information Technology (I.T.) strategy and a robust innovation infrastructure in effectively managing the technological aspects of LMS implementation (Alduraywish et al., 2022).

May be aimed at developing an underlying model via ISM for progress factors to develop the LMS execution further and then test it using a Primary State View (SEM) (Alduraywish et al., 2022). The study titled "Dual roles of educational robotics in management education : Pedagogical means and learning outcomes" constitutes a noteworthy investigation. This comprehensive paper delves into the academic implications of incorporating educational robotics (ER) in management education. Grounded in Vygotsky's social constructivism, the paper conceptualizes educational robotics as a versatile tool, serving dual roles as both a pedagogical means and an outcome of learning. Through the introduction of diverse practical applications and methodologies, the research explores how educational robotics can offer a range of opportunities for student-centered, experiential, and collaborative instructional approaches to address advanced educational needs and varying levels of knowledge (Tang et al., 2020).

The research titled "The (Im)possibility of Ideal Education : Hope, Uncertainty, and Safety in a Korean International School in Japan" critically examines the dynamics within School K, a newly established Korean international school, through an in-depth ethnographic exploration involving students, teachers, and parents. The study investigates how students strategically select subjects to express their multifaceted identities within the institutional objectives of the school. In contrast to promoting a singular Korean expatriate identity, School K adopts a pedagogical approach centered on transcending borders, utilizing trilingual education to nurture global citizens capable of thriving internationally while embracing their ethnic heritage (Hirano, 2023).

The proposed research aims to investigate the integration of contemporary trends in supply chain management within academic curricula. The field of production networks is evolving rapidly, marked by directors adapting to new practices, ideas, and advancements to enhance the implementation of production networks. The annual publication of the top ten trends in supply chain management by the Association of Supply Chain Management (ASCM) serves as a benchmark for the industry. It is imperative for academic programs to align their curricula with current trends to adequately prepare students for the dynamic landscape of this field (Drake et al., 2023).

The research endeavor titled "Understanding the Technical and Social Paradoxes of Learning Management Systems Usage in Higher Education: A Sociotechnical Perspective" aims to investigate the intricate dynamics and challenges associated with the utilization of Learning Management Systems (LMS) in the context of higher education, particularly against the backdrop of the disruptions caused by the COVID-19 pandemic (Ali et al., 2023).

These studies form a comprehensive basis for understanding the role of schools in democratic education, describe efforts to develop Management and Pedagogy, and explore the impact of extroverted personalities on school leadership management (Kuyurtar & Korumaz, 2023). In addition, the research also highlights the significance of the Principal Partnership Program in improving the quality of education through various collaborative initiatives (Lee et al., 2020). At the same time, School Management and Pedagogy revealed positive benefits in improving the quality of school principals and equalizing the quality of education. In addition, innovative Management and Pedagogy are also proposed, such as a formative evaluation approach with limited funds and the role of school-added value in measuring the effectiveness of school principal leadership (Burn et al., 2022). This study illustrates the complexity of power dynamics in Management and Pedagogy, providing rich insight into the development of school leaders and the importance of validity and reliability in Management education (Myers et al., 2022).

Method

A bibliometric analysis approach was used in this research. Statistics were obtained using a Boolean search engine to comb the Scopus database between 1966 and 2024. The search was carried out on December 9, 2023, at 20.06 WIB. Researchers used R and Rstudio tools, VosViewer and Microsoft Excel to research citations, report content material, and networks. Researchers took three steps in processing the dataset.

Step 1, the researcher will conduct an evaluation of the literature on related topics to ensure relevant research is conducted on the subject of bibliometrics. Likewise, a literature review is useful for determining appropriate key phrases that represent the scope of the research.

Step 2 : The third step involves assessing the final results of the file search using the Scopus Analyzer tool and R and Rstudio software. The goal is to identify a consistent number of files over 12 months, categorizing files by journal and identifying authors, affiliations, countries, and specific situations or disciplines. After that, a community-level analysis of the files was carried out using visualization via VOSviewer, as well as information processing using Microsoft Excel. Complete details regarding this research procedure are in Figure 1 below :
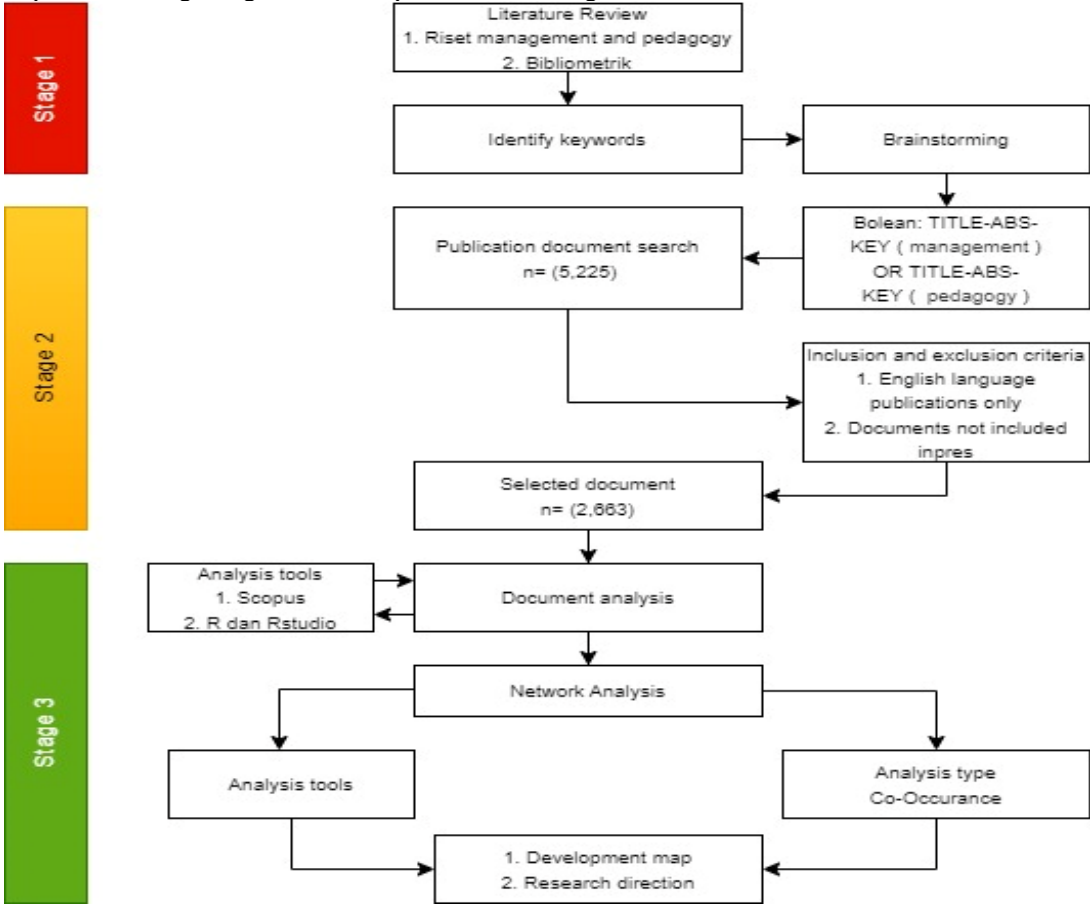

Figure 1. Research Process

## Result and Discussion

a. **Document Analysis**

Table 1 provides an overview of the ten documents collected over one year. This includes 61 authors, one single author, 6.1% international authorship collaboration, and 577 references with an average citation per document of 0 citations.

Table 1. Research Information

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	2023:2024
Sources (Journals, Books, etc)	10
Documents	10
Annual Growth Rate %	-33,33
Document Average Age	-0,4
Average citations per doc	0
References	577
DOCUMENT CONTENTS	
Keywords Plus (ID)	69
Author's Keywords (DE)	54
AUTHORS	
Authors	61
Authors of single-authored docs	1
AUTHORS COLLABORATION	
Single-authored docs	1
Co-Authors per Doc	6,1
International co-authorships %	20
DOCUMENT TYPES	
Article	10

Document by Year

Figure 2 depicts the evolution of publications in "management AND pedagogy" research based on the years 1966 to 2024. Documents first appeared in 1966, experienced a period of stagnation from 1966 to 1983, and then experienced significant growth from 1992 to 2022. It was recorded that the peak of publications occurred in 2022, with a total of 252 scientific papers, but there was a decline in 2023, with only 232 scientific works.
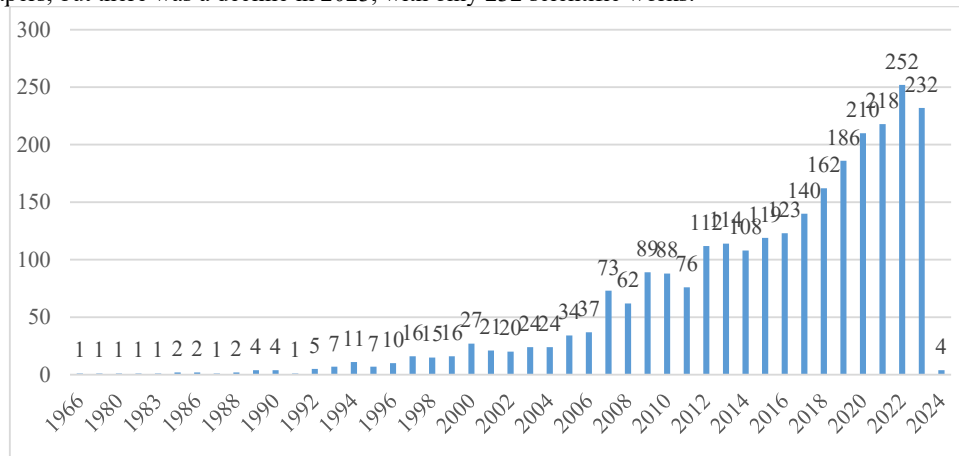
Figure 2. Document by Year

Most Relevant Authors

Figure 3 illustrates the ten most influential authors in publications related to "management AND pedagogy". In this case, Reynolds, M., with a total of 7 publications. This was followed by Dehler, G.E. Hartley, D. with a total of 5 publications and followed by Lawrence, J. Lee, S. Li, H. Myers, N. D. Sinclair, A. and Zhang, J., who each contributed four documents. Arar, K. followed her with a total of 3 publications.
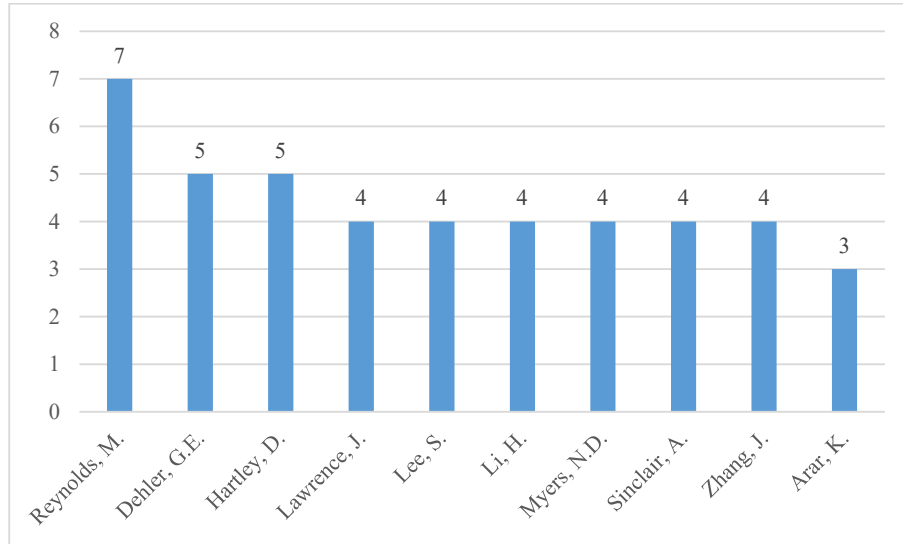
Figure 3. Document by Author

Document by Affiliation

Figure 4 presents an interesting picture of the ten affiliates that have had the greatest influence in publications discussing the topic "management AND pedagogy". In Figure 4, it is clearly seen that Monash University leads with a number of publications, reaching 25 documents, underlining the significant contribution of this institution in developing an understanding of the subject. In the next position, Griffith University has stolen the attention with 23 publications, indicating the important role of this university in research that focuses on management AND pedagogy. Not far away, the University of Melbourne also made a valuable contribution with 21 publications each. Not far away, the Queensland University of Technology also made a valuable contribution with 20 publications each. Not far away, The University of Sydne also makes a valuable contribution with 18 publications each.

Meanwhile, the University of Toronto, Deakin University, and Texas A&M University also made significant contributions with the same number of publications, namely 15. The final achievement came from Arizona State University with 14 publications, which must be addressed. Figure 4 clearly illustrates the diverse distribution of extraordinary contributions from various affiliates in developing relevant knowledge about management AND pedagogy, strengthening our understanding of this realm of science.
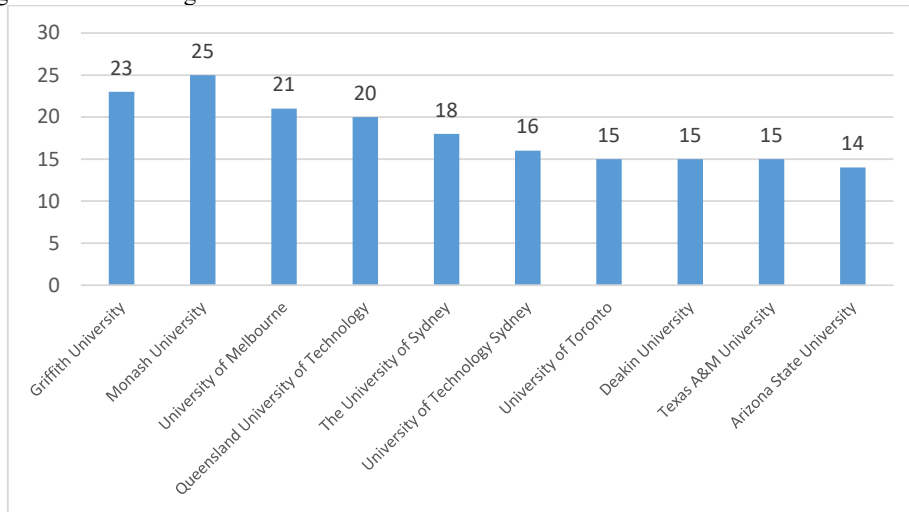

Figure 4. Document by Affiliation

Document by Country

Figure 5 provides an impressive picture of the distribution of publications by country and continent, with a focus on the theme "management AND pedagogy". From Figure 5, it can be clearly seen that the United States (Americas) dominates in this regard, with the number of publications reaching a peak of 951 documents, showing a very significant contribution to the development of knowledge in this field. Not far from the first place, the United Kingdom (Europe)

also makes a valuable contribution with 409 documents. In comparison, Australia (Oceania) is in the next position with 275 documents, strengthening the important role of these countries in the literature on evaluation and principles.

Canada (Americas) followed with a significant number of publications, reaching 160 documents, and likewise, India (Asia) produced 146 documents that contributed to further understanding of this topic. The role of South Africa, which is behind 66 documents, and China (Asia), which made a valuable contribution with 63 documents, must be addressed.

It is important to note that countries such as New Zealand and Malaysia also played a role in the development of this knowledge, with a total number of publications of 53 and 44 documents, respectively, confirming the global character of the topic "management AND pedagogy". In addition, Spain (Europe) also participated in this discussion with 43 documents, reflecting ongoing efforts to develop understanding and insight into evaluation and principles. Figure 1.5 clearly provides an overview of the distribution of these publications across countries and continents, illustrating the key role played by each entity in advancing knowledge on relevant topics.
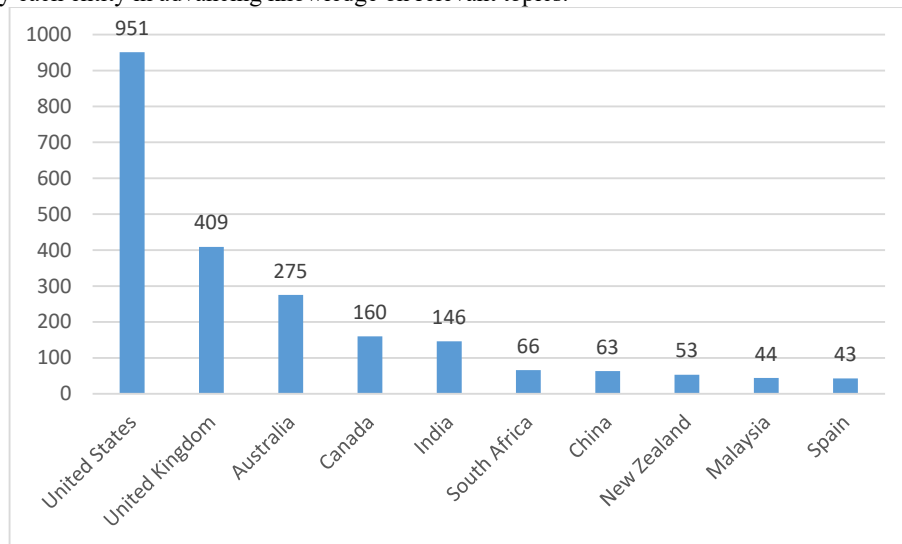
Figure 5. Documents by Country/Territory

Document by Source

Figure 6 provides a comprehensive view of publication distribution patterns by country, with a focus on exploring themes around "management AND pedagogy". In this context, the Journal of Management Education achieved a leading position with 63 documents, a prominent achievement that also confirms the dominant role of this country in providing a meaningful contribution to knowledge in management and relevant pedagogy. Not far from first place, Management Learning follows with 53 documents, underlining the commitment and role played by the country in the same literature. Likewise, publications from the European continent, such as the International Journal of Management Education with 35 documents and the Academy of Management Learning and Education with 22 documents, have also made an important contribution to the development of global understanding of this theme.

Furthermore, Education And Information Technologies and Nurse Education Today, with 21 documents, are the next representatives in this distribution tool. The key presence of continental Europe is also visible through BMC Medical Education's contribution of 20 documents. They were followed by Sustainability Switzerland, who contributed 19 documents. Followed by the Journal of Nursing Education and Medical Teachers with 16 documents, all of which create a diverse and comprehensive mosaic of knowledge.

This figure suggests that various countries located on different continents play a significant role in making important contributions to the development of a global understanding of management AND prevailing pedagogy, proving that this topic is a common concern that crosses geographical boundaries.
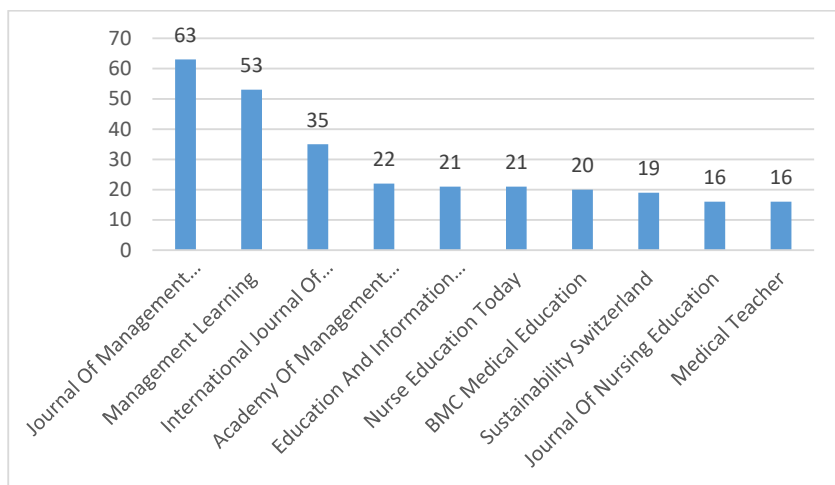
Figure 6. Document per Year by Source
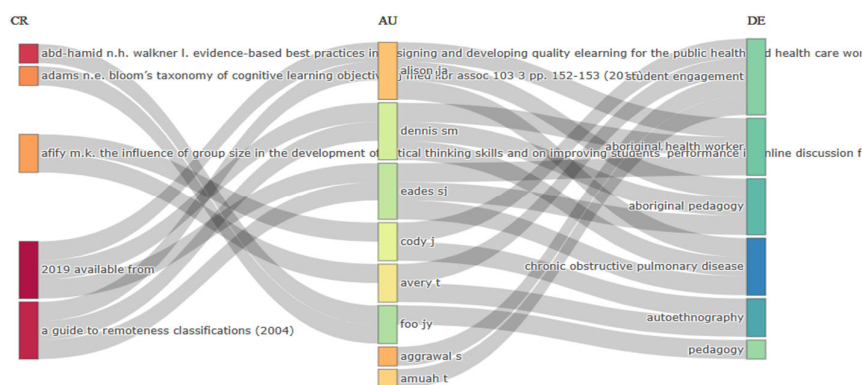
Three-Field Plot

Figure 7. Three-Field Plot

In Figure 7, three keywords are being observed. Five journals are the center of attention. From this collection of journals, it can be seen that 1 of them shows very striking productivity in its publishing activities, especially in the context of research on the themes "2019 Available From" and "A Guide to Remote Classifications (2004)". The journals in question are "An Aboriginal Health Worker", "Aboriginal Pedagogy", and "Chronic Obstructive," which have been compiled by Alison Ja. An introduction to this journal is provided through the provision of a dark red visual marker, which also functions as a link with a number of influential writers such as Dennis Sm Eades Sj. These findings firmly confirm the existence of this journal as a significant contributor to the debate on leadership in school restructuring and also highlight important collaborations with the authors involved.

With the keyword 2, it is clear that two journals are the main focus. The size of the bar chart reflects the number of publications from each researcher in the study. One of the journals that is an important reference by researchers, which discusses the influence of school principals and colleagues on management and pedagogy in "2019 Available From" and "A Guide to Remote Classifications (2004)" is "An Aboriginal Health Worker", "Aboriginal Pedagogy", and "Chronic Obstructive Pulmonary Disease". Dennis Sm compiled this journal. This journal is marked in dark red on the diagram and is connected to other authors who played a role in forming this understanding, such as Alison Ja Eades Sj. Findings This clearly illustrates the key role of this journal as an important contribution to discussions around how leadership and peer collaboration can influence teaching and learning in educational settings.

The keyword to 3, Each research topic is linked to authors who have researched the topics "2019 Available From" and "A Guide to Remote Classifications (2004)". In the results of the analysis carried out, Eades Sj produced a journal that focused on "Aboriginal Health Worker", "Aboriginal Pedagogy", and "Chronic Obstructive Pulmonary Disease." This indicates that these keywords are closely related to research related to pedagogical management.

Corresponding Author's Countries

Figure 8 shows the countries of the corresponding authors in a scientific study. In terms of Single Country Publication (SCP), the USA dominates with the largest number of corresponding authors, followed by the United

Kingdom and Australia. Meanwhile, from the Multiple Country Publication (MCP) perspective, the largest international collaboration is seen between correspondent authors from the USA, followed by the United Kingdom and Australia.

Continental dominance also reflects an interesting picture. The USA is consolidating its position as a major leader in both SCP and MCP, underscoring its major contributions to global scientific literature. On the other hand, Australia's dominance in both SCP and MCP indicates significant cross-continental collaboration in an effort to develop deeper scientific understanding.
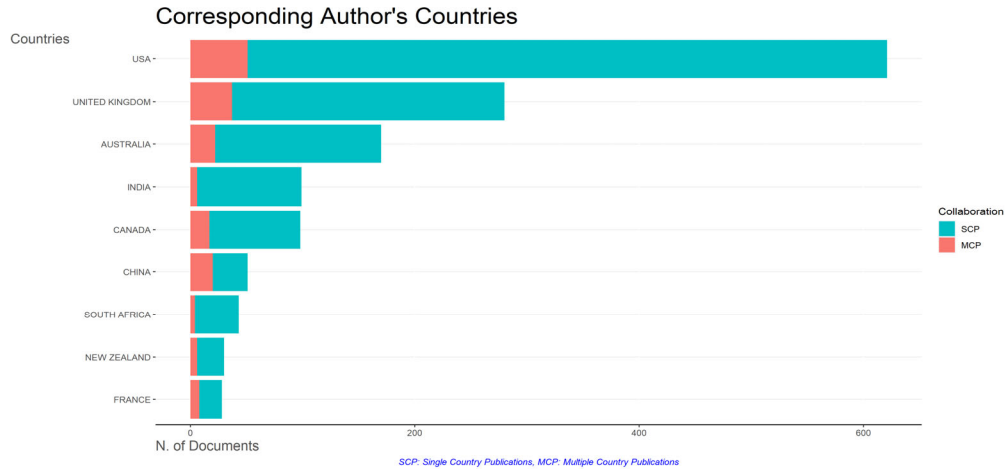

Figure 8. Corres Author's Countries

Most Global Cited Document

Through data analysis, it was found that the paper with the largest total citations was MINTZBERG H, 1990, STRATEGIC MANAGE J, with a total of 806 citations. Apart from that, from the list of papers studied, it was identified that the paper that had the highest Tc per Year was ' AMIR LR, 2020, BMC MED EDUC, with a Tc per Year value reaching 62.75. Interestingly, the analysis results show that there is a positive influence between Total Citations (T.C.) and Tc per Year, which indicates that papers with higher T.C. tend to have higher Tc per Year as well. However, based on existing data, there is no clear relationship between the year the paper was published and Total Citations (T.C.). This indicates that the year of publication may not have a significant influence on the number of citations obtained by a paper.

Table 2. Most Global Cited Document

| Paper	Total Citations	T.C. per Year
MINTZBERG H, 1990, STRATEGIC MANAGE J	806	23,71
ABD-EL-KHALICK F, 1998, SCI EDUC	589	22,65
CUNLIFFE AL, 2002, MANAGED LEARN	437	19,86
GOVINDASAMY T, 2001, INTERNET HIGHER EDUC	436	18,96
REYNOLDS M, 1998, MANAGED LEARN	316	12,15
WEINSTEIN CS, 2004, J TEACH EDUC	282	14,10
BORREGO M, 2014, J ENG EDUC	278	27,80
COPPOLA NW, 2002, J MANAGE INF SYST	274	12,45
AMIR LR, 2020, BMC MED EDUC	251	62,75
LEWIS KL, 2017, ADV SIMUL	233	33,29

Network Analysis
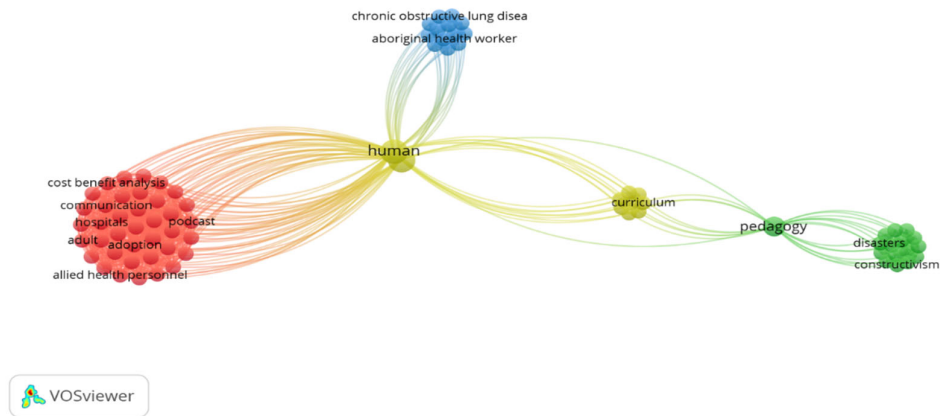
Figure 9. Network Analysis

Analysis 9 describes the results of research that evaluate the role of "management AND pedagogy", using occurrence analysis and considering a minimum cluster size of 1. In this research, four main clusters were formed, each of which was divided into several parts. The first cluster consists of 38 items, the second cluster consists of 16 items, the third cluster consists of 13 items, and the fourth cluster consists of 10 items.

Regarding the keywords that dominate each cluster, it was found that the first cluster was dominated by the theme "adoption". In the second cluster, the keyword that appears is "Pedagogy". Meanwhile, the third cluster focuses on the theme "Australian Aboriginal and Torres Strait Islander peoples", and in the fourth cluster, the theme "human" dominates. Apart from that, in this analysis, "human" component analysis (PCA) is a very dominant keyword with a total link strength of 1060.
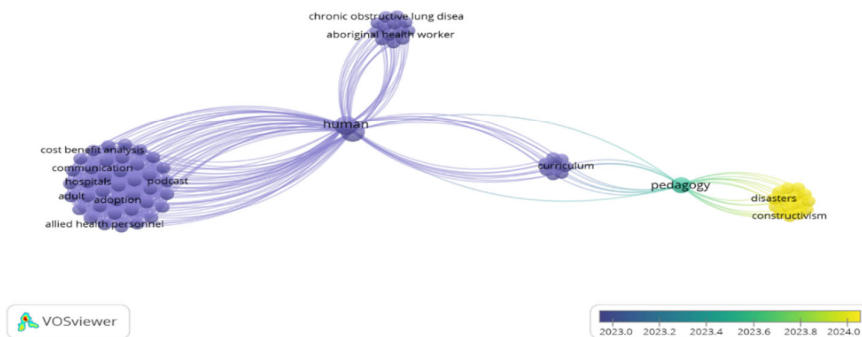
Figure 10. Overlay Visualization

Figure 10 depicts keyword network analysis based on overlap. It can be seen that the keywords "Constructivism", student participation, and disaster analysis are the most recently used keywords, which can be seen from their use in recent years. On the other hand, the keywords "human", "curriculum", and "learning" are examples of keywords that have been used for a longer period, namely around 2023.
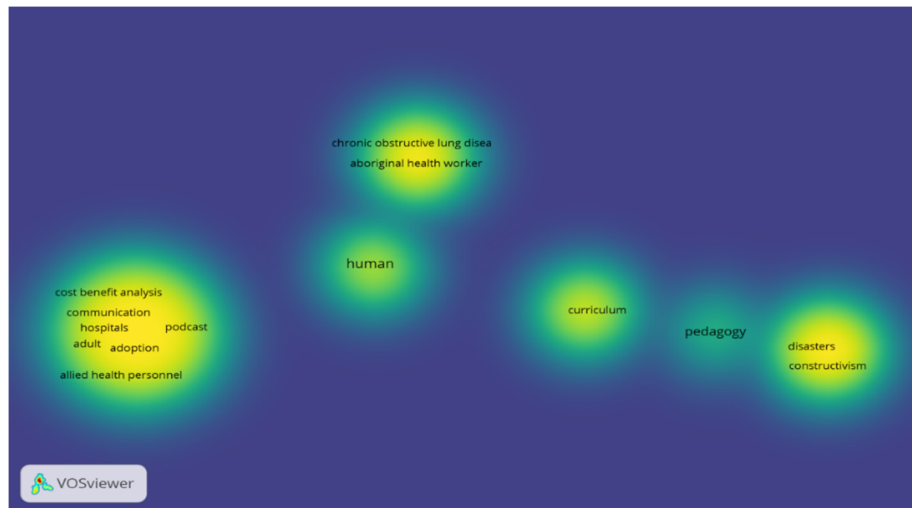
Figure 11. Density Visualization

Research density analysis describes the frequency distribution pattern of keyword use in cultural literature. From Figure 11, it can be seen that a number of keywords, such as "communication", "adoption", and "constructivism", show a high level of density, which is reflected in their significant frequency of appearance. On the other hand, there are also examples of keywords displayed in images with a blurred appearance, such as "pedagogy", which indicates that this keyword is still rarely researched and does not have a significant frequency of appearance in the literature. This type of analysis provides valuable insights into existing research foci as well as underexplored areas.

Table 3. Research Keywords

Keyword	Occurrences	Cluster
1. Adoption	1	1
2. Hospitals	1	
3. Drug safety	1	
4. First Nation	1	
5. Podcast	1	
1. Pedagogy	2	2
2. Constructivism	1	
3. Disaster	1	
4. Students	1	
5. Minecraft	1	
1. Australian Aboriginal and Torres Strait Islander peoples	14	3
2. Lung disease	1	
3. Aboriginal pedagogy	1	
4. Prinet education	1	
5. Indigenous health care	1	
1. Human	3	4
2. Dental materials	1	
3. Learning	1	
4. Longitudinal Studies	1	
5. Materials science	1	

In the analysis using research in the field of "evaluating and principals", 4 clusters can be identified from the keywords given. Cluster 1 relates to "Adoption", "Hospitals", "Drug safety", "Fist nation", and "podcast". Cluster 2 highlights highlight "Pedagogy", "Constructivism", "Disaster", "Students", and "Minecraft". Cluster 3 highlights "Australian Aboriginal and Torres strait islander peoples", "Lung disease", "Aboriginal pedagogy", "Prinet education", and "Indigenous health care". Cluster 4 relates to "Human", "Dental materials", "learning", "Longitudinal Studies", and "Materials science". This explanation is based on the pattern of occurrence of keywords in each cluster and tries to provide a general interpretation regarding the themes represented by each cluster.

Conclusion

The research conducted by researchers used a bibliometric analysis approach to explore the development and direction of research related to "Management and Pedagogy" in the educational ecosystem. The results show significant annual growth in publications, peaking in 2023. Key findings involve identifying key contributors, such as Monash University and prolific researchers on the topic. However, it should be noted that this analysis comes from Scopus data, so other

data sources are not included. In addition, this study provides a comprehensive overview of the literature that is accessible to researchers interested in the field of "Management and Pedagogy" and provides suggestions for future research directions.

This research explores the complexity of power dynamics in "Management and Pedagogy", provides rich insights regarding the development of school leaders, and emphasizes the importance of validity and reliability in educational management. A bibliometric analysis approach method was used, with results showing an annual growth in publications of 6.1%, reaching a peak in 2023. The main finding was that there were 2663 publications relevant to the research criteria and focus. Monash University was identified as the main contributor with affiliations in 25 documents, and researcher Alison Ja showed the highest productivity in the topic "Management And Pedagogy".

References

Alduraywish, Y., Patsavellas, J., & Salonitis, K. (2022). Critical success factors for improving learning management systems diffusion in KSA HEIs: An ISM approach. *Education and Information Technologies*, *27*(1), 1105–1131. https://doi.org/10.1007/s10639-021-10621-0

Alexander, G. C. (2002). Interactive Management: An emancipatory methodology. *Systemic Practice and Action Research*, *15*(2), 111–122. https://doi.org/10.1023/A:1015288407759

Ali, M., Wood-Harper, T., & Wood, B. (2023). Understanding the technical and social paradoxes of learning management systems usage in higher education: A sociotechnical perspective. *Systems Research and Behavioral Science*. https://doi.org/10.1002/sres.2945

Baker, M. A. (2021). Educational Distancing: A Mixed-Methods Study of Student Perceptions in the Time of Coronavirus. *Journal of Hospitality and Tourism Education*, *33*(3), 207–221. https://doi.org/10.1080/10963758.2021.1907194

Bitencourt, M. R., Hizukuri, T. S., Bitencourt, M. R., Alarcão, A. C. J., Carvalho, E. C. A., Andrade, L., Pelloso, S. M., & Carvalho, M. D. B. (2021). VARIABLES INVOLVED IN THE MANAGEMENT OF SCHOOL BULLYING: A BAYESIAN NETWORK ANALYSIS. *Revista Paulista de Pediatria : Orgao Oficial Da Sociedade de Pediatria de Sao Paulo*, *39*, e2019079. https://doi.org/10.1590/1984-0462/2021/39/2019079

Burn, K., Ingram, J., Molway, L., & Mutton, T. (2022). Beyond reactive responses to enduring growth: the transformation of principles and practices within initial teacher education. *Journal of Education for Teaching*, *48*(4), 441–458. https://doi.org/10.1080/02607476.2022.2098007

Decker, K. B., Cook, G. A., Brophy-Herb, H., & Torquati, J. (2023). Students' experiences of reflective practices as pedagogy in early childhood higher education. *Journal of Early Childhood Teacher Education*, *44*(3), 261–287. https://doi.org/10.1080/10901027.2021.2020938

Dementyeva, N., Kosherbayeva, A., Korvyakov, V., & Sadykova, S. (2023). Methodological Aspects of Content – Based Strategies in Classroom Managerial Activity. *European Journal of Contemporary Education*, *12*(2), 426–433. https://doi.org/10.13187/ejced.2023.2.426

Drake, M. J., Pittman, P. H., & Talbert, M. (2023). Analysis of the incorporation of current trends in supply chain management within curricula. *International Journal of Logistics Research and Applications*. https://doi.org/10.1080/13675567.2023.2235295

Francis, T., & Afful, J. B. A. (2023). Epistemological orientations of ideal pedagogical practices in higher education: Perspectives of lecturers. *Cogent Education*, *10*(1). https://doi.org/10.1080/2331186X.2023.2219951

Haron, M. N., Wahab, N. B. A., & Kasim, R. (2021). A Framework of Risk Management Practice for Forestfriendly Pedagogy (Perimba) as a Guide for Indigenous School Teacher [Kerangka Amalan Pengurusan Risiko untuk Pedagogi Mesra Rimba (PeRIMBA) sebagai Panduan untuk Guru Sekolah Asli]. *Review of International Geographical Education Online*, *11*(4), 775–781. https://doi.org/10.33403/rigeo.8006791

Hirano, K. (2023). The (Im)possibility of ideal education: Hope, uncertainty, and being safe in a Korean international school in Japan. *Contemporary Japan*. https://doi.org/10.1080/18692729.2023.2247738

Kuyurtar, D., & Korumaz, M. (2023). Culturally Relevant Leadership: Bridging the Equity Gap. *Research in Educational Administration and Leadership*, *8*(3), 506–547. https://doi.org/10.30828/real.1291612

Lee, M. F., Lim, S. C. J., & Lai, C. S. (2020). Assessment of teaching practice competency among in-service teacher degree program (PPG) in Universiti Tun Hussein Onn Malaysia. *Journal of Technical Education and Training*, *12*(1 Special Issue), 181–188. https://doi.org/10.30880/jtet.2020.12.01.019

Macháčková, K. (2023). The Nature of Project Management Found in Nature: Comparative Study at High Education Institutions. *International Journal of Engineering Pedagogy*, *13*(6), 108–122. https://doi.org/10.3991/ijep.v13i6.39199

McSweeney, M., Teare, G., & Liu, H. (2022). Examining the Use of Postcolonial Management Theory in Sport Management Education: Strategies to Enhance Student Learning of Colonial Histories and Challenge Dominant Ideologies. *Sport Management Education Journal*, *16*(2), 142–153. https://doi.org/10.1123/SMEJ.2021-0023

Myers, N. D., Lee, S., Chun, H., & Silverman, S. (2022). Measurement in Physical Education and Exercise Science (MPEES): A Summary of MPEES-related Activities in 2021. *Measurement in Physical Education and Exercise Science*, *26*(3), 256–265. https://doi.org/10.1080/1091367X.2022.2071126

Peretyat'ko, A. Y. (2021). Curriculum Development in the Kharkov Educational District of the Russian Empire: Best

Practices in 1861. *European Journal of Contemporary Education*, *10*(3), 799–811. https://doi.org/10.13187/ejced.2021.3.799

Rajhans, V., Ve, R., Mohammad, C., & Rege, S. (2021). Development and validation of competency framework for teaching management of refractive errors: A participatory Delphi approach. *Indian Journal of Ophthalmology*, *69*(12), 3690–3696. https://doi.org/10.4103/ijo.IJO_3312_20

Sadik, O., & Ottenbreit-Leftwich, A. T. (2023). Understanding U.S. secondary computer science teachers' challenges and needs. *Computer Science Education*. https://doi.org/10.1080/08993408.2023.2209474

Sarangi, C., Mohanta, T., Pradhan, M., & Guru, N. (2023). An analytical study on integration of pedagogy and technology in secondary science classes of India during COVID-19. *Journal of E-Learning and Knowledge Society*, *19*(3), 49–58. https://doi.org/10.20368/1971-8829/1135859

Shafiee, N. S., & Ghani, M. A. (2022). The Influence of Teacher Efficacy on 21st Century Pedagogy. *International Journal of Learning, Teaching and Educational Research*, *21*(1), 217–230. https://doi.org/10.26803/IJLTER.21.1.13

Solomon, G. T., Alabduljader, N., & Ramani, R. S. (2019). Knowledge management and social entrepreneurship education: lessons learned from an exploratory two-country study. *Journal of Knowledge Management*, *23*(10), 1984–2006. https://doi.org/10.1108/JKM-12-2018-0738

Sumardjoko, B., & Musyiam, M. (2018). Model of civic education learning based on the local wisdom for revitalizing values of pancasila (Bahasa Indonesia). *Cakrawala Pendidikan*, *37*(2), 201–211.

Tang, A. L. L., Tung, V. W. S., & Cheng, T. O. (2020). Dual roles of educational robotics in management education: Pedagogical means and learning outcomes. *Education and Information Technologies*, *25*(2), 1271–1283. https://doi.org/10.1007/s10639-019-10015-3

Ugarte, C., Urpí, C., & Costa-París, A. (2022). The need of autonomy for flexible management in the fostering of school quality. *International Journal of Leadership in Education*, *25*(1), 124–146. https://doi.org/10.1080/13603124.2019.1708468

Weyers, J., Kramer, C., Kaspar, K., & König, J. (2024). Measuring pre-service teachers' decision-making in classroom management: A video-based assessment approach. *Teaching and Teacher Education*, *138*. https://doi.org/10.1016/j.tate.2023.104426

Zhang, G.-Z., Tian, J., Zhang, Y.-Z., Li, S.-S., Zheng, H.-Q., & Hu, F.-L. (2021). Investigation of the maturity evaluation indicator of honey in natural ripening process: The case of rape honey. *Foods*, *10*(11). https://doi.org/10.3390/foods10112882