Educational Administration: International Research
Trends and Mapping using Scientometric Analysis

FatkulAnam
Universitas Wijaya Kusuma Surabaya
Surabaya, 60225, Indonesia

Abstract- This research aims to study international research trends and maps in the field of "educational administration". This study obtained data from Scopus with the scientometric method using document search services and analyzed with Scopus analysis features and VOSviewer applications, namely document cited, publication growth, author, author network, country, type, institution affiliation, subject area, keyword network, and source. This survey identified keywords related to Educational administration to search for and identify related articles in the Scopus database for 1,945 international studies published from 1914 to 2019 at the international level. The results of the research show that there is a trend of increasing number of researches in the field of "Educational administration" each year at the international level. Author, country, type, institution affiliation, subject area, and source with the most publications are Oplatka, I. 19 documents, USA, articles, University of Toronto, social science and educational administration quarterly.

Keywords: Educational administration, Scientometric, Education, VosViewer, Scopus.

Introduction

Education is one of the main goals of a country whose development is influenced by facilities in the era of globalization. Reality in the globalization era positively or negatively has dominated and influenced the world of education (Bannier, 2016). Education is a process of child development through mentoring, teaching and training activities to achieve educational goals. Education occupies first place in the goals of a country. Like education administration, which has an important role in education success. Educational administration is a porous, open, and outward-oriented field (Wang & Bowers, 2016). The development of education is influenced by the availability of facilities. Multimedia learning is a facility that involves information technology in the form of computers or Android, by bringing together two or more elements consisting of sound, video, text and images incorporated in multimedia software for students interactively (Iskandar et al., 2018). Education acts as a door and window for every student to face the present and future by learning from past wisdom to become a superior person. Modern education is usually fully supported by professional educational administration (Bilan et al., 2020).

Educational administration includes a policy, leadership, management that is held by important agents of professionals. A finding highlights the paradigm shift from "educational administration" to "educational leadership" for six decades. Other important findings identify "leadership for student learning and development" as a "cognitive anchor" of the intellectual structure of the Educational Administration knowledge base. There are 4 identifications about the main Schools of Thought that have emerged from time to time that focus on Leadership for Learning, Leadership and Cultural Change, School Effectiveness and School Improvement, and Leading Teachers (Hallinger & Kovačević, 2019). The editors have expanded and redefined educational administration not only as government and governance, but also as policy, leadership and management (Wilkinson & Brooks, 2018). Professionals in educational administration are important agents in the field of education because they act as intermediaries between the Central Administration where political choices are made, and the schools where this policy is enforced (Ball & Junemann, 2012; Singh et al., 2013).

The proportion of Principal's work in general is still dominated by administrative work. In fact, teacher professional development activities including supervision have also been carried out, although the portion still needs to be increased (Kurniatun et al., 2019). An effective headmaster's leadership style supported by professional educational administration can help overcome problems in difficult schools, such as low student performance and high dropout rates (Urick & Bowers, 2014). Efforts are needed to improve, curriculum development, and the quality...
of education and skills gradually and continuously (Ahida Suci et al., 2018). However, in general, prior research related to Educational administration is limited to researching in one country (Asiyai, 2020; Spillane & Kenney, 2012), one time and one field (Beycioğlu et al., 2019).

There is a need for information and knowledge relating to the development of trends and educational administration research maps using the helicopter view perspective. However, there is no research on educational administration that shows the big picture that is visualized every year with data from all countries. Also, there is no research that specifically addresses the relationship between authors, affiliates, keywords, and the impact of their research. The growing number of academic documents related to the topic of education administration has been published and indexed by Scopus from 1914 to 2019. Therefore, this study aims to study trends and international research maps in the field of "educational administration" using scientometric analysis.

**Method**

This research measures trends and research maps in the field of "educational administration" at the international level. This study processes data using scientometric analysis with the analyze search results service feature on Scopus and VOSViewer applications (van Eck & Waltman, 2010). This survey identified keywords related to education administration to search for and identify related articles in the Scopus database for 1,945 academic documents published from 1914 to 2019 at the global level. The research data was obtained from the Scopus database using the document search service in January 2020. The query command that is applied when mining data on Scopus was TITLE-ABS-KEY ("educational administration") AND (PUBYEAR < 2020)).

**Result and Discussion**

**Keyword Network**

There were 5 groups of research keywords related to the field of educational administration as shown in Figure 1.

1. Red Cluster - sub topik: educational administration, leadership, educational leadership, principals.
2. Green Cluster - sub topik: education, teaching, students, management.
3. Blue Cluster - sub topik: educational policy, administration, educational development, education reform.
5. Purple Cluster - sub topik: schools, trust, teachers, administrators.

**Figure 1. Keyword Network**
Most Frequent Type Document of Educational Administration Research

The most types of documents in educational administration research was articles with 1444 documents (74.2%). Followed by reviews with 229 documents (11.8%), conference papers with 105 documents (5.4%), book chapters with 82 documents (4.2%) and books with 46 documents (2.4%).

Most Frequent Institution Affiliation of Educational Administration Research

The research institution that has the largest contribution and conducts research in the field of educational administration were shown in Figure 3 is the University of Toronto with 28 documents. Followed by Pennsylvania State University with 23 documents, Tel Aviv University with 22 documents, University of Utah with 21 documents, University of Wisconsin-Madison with 21 documents, University of Melbourne with 20 documents, University of Illinois at Urbana-Champaign with 19 documents, Columbia University in New City York with 18 documents, Deakin University with 17 documents and Indiana University with 17 documents.
Documents per Year from the Field of Educational Administration

The number of published international studies on educational administration has shown an increasing trend every year. This can be seen in Figure 4, the highest publication peak in 2019 with 28 documents. Research on management education has been started since 1914. The number of documents per year in education administration publications is in 2019 there are 110 documents, in 2018 there are 83 documents, in 2017 there are 70 documents, in 2016 there are 84 documents and in 2015 there are 60 documents.

Most Individual Authors of Educational Administration Research

The author with the most research in the field of education administration was Oplatka, I. with 19 documents, Eacott, S. with 16 documents, Samier, EA with 16 documents, Young, MD with 16 documents, Hoy, WK with 15 documents, Hallinger, P with 14 documents, Willower, DJ with 12 documents, Evers, CW with 11 documents, Lakomski, D with 11 documents, and Daly, AJ with 10 documents.

Author Collaboration Network

There was a collaborative pattern of five groups between researchers in the field of educational administration as seen in Figure 6.

1. Red Cluster: heck, r.h.; hallinger, p.; leithwood, k.
2. Green Cluster: orr, m.t.; hollingworth, l.; murphy, j.
4. Yellow Cluster: mcleod, s.; young, m.d.; baker, b.d.
5. Purple Cluster: walker, a.
International research in the field of educational administration which is the most cited as a form of academic impact is the work of Robinson, V.M.J., Lloyd, C.A., Rowe, K.J. in 2008 entitled the impact of leadership on student outcomes: An Analysis of the differential effects of leadership types cited 704 documents. The top 10 most cited publications are shown in Figure 7.

<table>
<thead>
<tr>
<th>No</th>
<th>Document Title</th>
<th>Authors</th>
<th>Year</th>
<th>Source</th>
<th>Cited by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>effects of leadership types</td>
<td>Rowe, K.J.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Social justice educational leaders and resistance: Toward a theory of social</td>
<td>Theoharis, G.</td>
<td>2007</td>
<td>Educational Administration Quarterly 43(2), pp. 221-258</td>
<td>289</td>
</tr>
<tr>
<td></td>
<td>justice leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Educational change over time? The sustainability and nonsustainability of three</td>
<td>Hargreaves, A., Goodson, I.</td>
<td>2006</td>
<td>Educational Administration Quarterly 42(1), pp. 3-41</td>
<td>213</td>
</tr>
<tr>
<td></td>
<td>decades of secondary school change and continuity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>review of normative, empirical, and critical literature on the practice of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>educational administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>community, trust, efficacy, and shared responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>May, H.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Testing a conception of how school leadership influences student learning</td>
<td>Leithwood, K., Patten, S.,</td>
<td>2010</td>
<td>Educational Administration Quarterly 46(5), pp. 671-706</td>
<td>179</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jantzi, D.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Linking leadership to student learning: The contributions of leader efficacy</td>
<td>Leithwood, K., Jantzi, D.</td>
<td>2008</td>
<td>Educational Administration Quarterly 44(4), pp. 496-528</td>
<td>175</td>
</tr>
</tbody>
</table>

Figure 6. Author Collaboration Network

Figure 7. Document Cited of Educational Administration Research
Most Frequency of Educational Administration Research by Subject Area

The most subject area in international research in the field of education administration is social science with 1731 documents (70.7%). Followed by business, management & accounting with 201 documents (8.2%), arts and humanities with 115 documents (4.7%), computer science with 90 documents (3.7%) and techniques with 75 documents (3.1%).

Most Frequent Country Affiliation of Educational Administration Research

The country that has the largest contribution and conducts research in the field of educational administration shown in Figure 9 is the United States with 782 documents. Followed by Australia with 136 documents, United Kingdom with 119 documents, Canada with 118 documents, China with 110 documents, Turkey with 64 documents, Israel with 57 documents, Spain with 42 documents, New Zealand with 35 documents, and Hong Kong with 33 documents.
Documents Based on Sources of Educational Administration Research

Number of documents per year Based on sources in research published internationally in the field of education administration is educational administration quarterly with 434 documents. Followed by journals of educational administration with 248 documents, journals of research on leadership with 130 documents, international journals on educational management with 47 documents and journals of educational administration and history with 37 documents.

Conclusion

The results of this study indicate that a map has been formed and an increasing trend in the number of international researches in the field of "educational administration". There are 5 groups of research keywords related to the field of educational administration. There is a collaboration pattern of five groups so that the number of research collaboration groups between researchers needs to be increased. Author, country, type, institution affiliation, subject area, and source with the most publications are Oplatka, I. with 19 documents, USA, articles, University of Toronto, social science and educational administration quarterly.

Acknowledgements

We would like to thank our parents, family, Nahdlatul Ulama and Indonesia.

References:


DOI: 10.5373/JARDCS/V12I2/S20201427
*Corresponding Author: Fatkulanam, Email: fatkulanam@yahoo.co.id
Article History: Received: Jan 02, 2020, Accepted: Mar 12, 2020


Biography
FatkulAnam is an Associate Professor, and faculty member of the mathematics education department in Universitas Wijaya Kusuma Surabaya, Indonesia. He earned bachelor's in mathematics education from IKIP Surabaya, Indonesia, masters in mathematics from Universitas Gadjah Mada, Indonesia and doctor in educational management from Universitas Negeri Malang, Indonesia. He has published journal, conference papers, and books. His research interests include educational management, primary education, Islam, mathematics, and technology. He is rector of UniversitasNahdatul Ulama Sidoarjo, Indonesia.