



Future Economic Education Research: A Bibliometric Analysis (2004–2024)



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ABSTRACT

Economic Education is a field of study that does not only focus on economic aspects alone, but also reaches various other branches of science. This complexity is what makes economic education a very rich field to be researched and developed sustainably. The purpose of this study is to see how far economic education has been studied over the past 20 years. This research explores Trends in publications and the growth of literature on economic education from 2004-2024. This research uses a bibliometric approach. This data is downloaded as CSV and extracted by VOSviewer. The data source from Scopus is 465 articles. From the above exposure, it is also known that over the past 20 years, the themes in economic education research have varied, indicating that economic education is a very complex problem. The more varied themes in economic research suggest that economic education is an exciting theme to research. The results of future research directions and opportunities based on the results of bibliometric visualization in the field of economic education, namely, not many have conducted research on the theme of economic education in the family.

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1. INTRODUCTION

Understanding economic issues is very important because economics is crucial; it is used to solve problems related to economics in everyday life (Happ et al., 2018). In life, there must be something called choice. Ordinal theory explains that the level of consumer satisfaction cannot be calculated but can only be compared using an indifference curve that shows two combinations of two kinds of goods to provide the same level of satisfaction for a consumer. Satisfaction may be the only option, as the optimal outcome may not be calculable or well-defined (Katsikopoulos, 2014).

A person acts rationally. That is, the person acting is well thought out and is based on accurate and objective information (Hidayat, 2016). According to (Stanovich & West, 2014), rationality means taking appropriate actions to achieve expected life goals in the best way, as a belief held by individuals, where these beliefs are supported by evidence where the principles of rational decision-making can help improve the quality of their lives (Krueger et al., 2011). The neoclassical approach explains that rationality and utility or profit maximization have a relationship. Individuals who act rationally will succeed in economics. Rationality can be defined as positive and descriptive ideas (Sent, 2018). The assumption of self-interest maximization encourages people to behave more self-interestedly (Coyle, 2019). However, this is refuted, where individuals are said to be rational if they are selfless to maximize their satisfaction (Hidayat, 2016). From the explanation above, it is clear that economics is closely related to decision making in everyday life, and also emphasizes the relevance of how individuals can allocate limited resources effectively.

Nowadays, the problems arising from economic activities are very complex. Economic terms often relate to asset acquisition, management, and distribution (Borg, 2017). Economics is a social science that studies how people choose to get what they want. In addition, economics is also defined as the study of scarcity and choice, which is basically about individual choice. Economics also discusses production, consumption, and distribution (Facts, 2020). In economics, individuals and communities make choices about the use of scarce resources that have been provided by nature. This science can also be said to be the science of making choices (Case & Fair, 2007). In addition, it discusses the unlimited desires of humans and provides solutions on how to fulfill human needs with their limitations (Backhouse & Medema, 2009). Given the limitations of individuals in meeting their unlimited needs, economic education can serve to provide in terms of providing decision-making skills. Therefore, economic education can be considered as a life skill needed to navigate these problems.

Education is a means of transmitting all knowledge. The existence of education is expected to improve the quality of human life. Besides that, education also aims to improve the standard of living of the Indonesian people, especially in tackling the problem of ignorance and dealing with the issue of poverty, so education has developed as the key to prosperity (Olsson et al., 2016). Given the breadth and complexity of the scope of economics education and its relevance to 21st-century problems, a systematic mapping of research directions and trends in this area is needed. Bibliometric research is an appropriate method to determine the development of the number of publications, collaboration between authors, dominant keywords, and the main topics highlighted in the past two decades. This study not only provides an overview of the extent to which economic education has been investigated but can also serve as a reference for researchers, educators, and policymakers when designing more responsive and strategic economic education research and policies.

Given the increasingly complex economic problems and the important role of economic education in preparing individuals to face the challenges of the 21st century, a systematic mapping of the direction and trends of research in this field is needed.

Thus, the research question in this study:

RQ 1: What is the trend of publication and growth of literature on economic education over 20 years, namely 2004-2024, with data sourced from Scopus?

RQ 2: What are the future research directions and opportunities based on the results of bibliometric visualization in economic education?

2. METHOD

This research uses a bibliometric approach. Bibliometric analysis is focused on several aspects, namely the number of publications, the most productive authors, the most cited journals, and the most cited journals and keywords (Marshall, 2022). Meanwhile, there are five stages carried out to conduct bibliometric analysis, namely: 1) definition of the field of study only in economic education, (2) database selection, (3) research criteria adjustment, (4) codification of recovered material, and (5) examination of the information (Casado-Belmonte et al., 2020).

Data were collected from the Elsevier Scopus database from 2014 to 2024 related to economic education. The data obtained from Scopus is quite reasonable because it has been recognized as having a good reputation and represents a comprehensive view. In this study, we combined two combinations of search phrases, namely "economic education" or "economic education" from the title, abstract, and keywords relevant to the theme of economic education. More detail can be seen in the Prisma Chart in Figure 1.

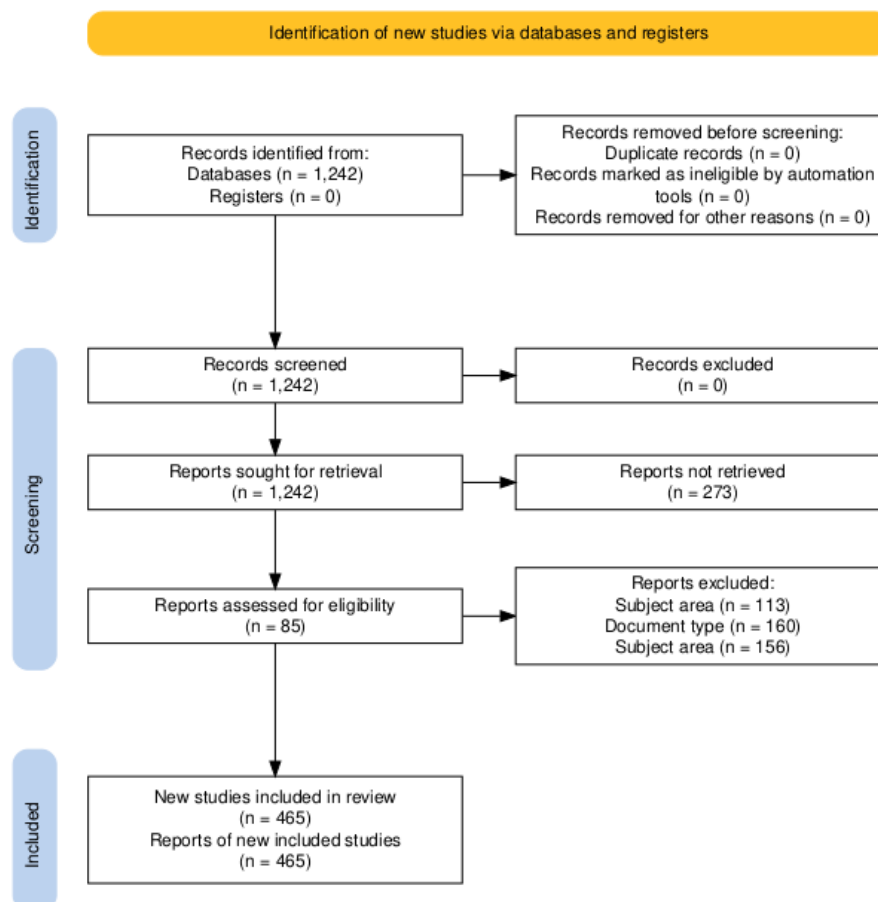


Figure 1. Prisma Chart

Sources: (Haddaway et al., 2022)

3. RESULTS AND DISCUSSION

3.1 Number of Publications

Figure 2 shows the number of research articles on economic education published in Scopus-indexed journals. The number of publications for each year has increased. From 2004 to 2015, there was a significant increase in the publication of research articles, starting with only two research articles in 2004 and increasing gradually to 32 research articles in 2015. Then, from 2016 to 2018, there was a slight downward trend in publications before a significant surge in publications again in 2019. Then, the following year, there was an increasing trend of publications until 2024, with 42 publications of research articles.

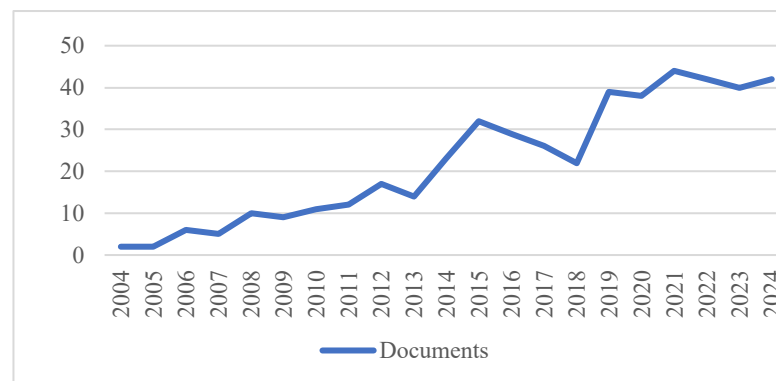


Figure 2. Number of Publications

Source: www.scopus.com

3.2 Number of Author Contributions

Figure 3 shows the number of author contributions in publishing research articles in Scopus-indexed journals on economic education from 2004 to 2024. The author with the most published articles is Happ, R., with eight research articles. The next position is followed by Asarta, C. J., Grimes, P. W., and Walstad, W. B., with six research articles each. Then, Allgood, S., Förster, M., Lopus, J. S., Mixon, F. G., Schug, M. C., and Wahyono, H. also contributed to publishing research articles with five articles each.

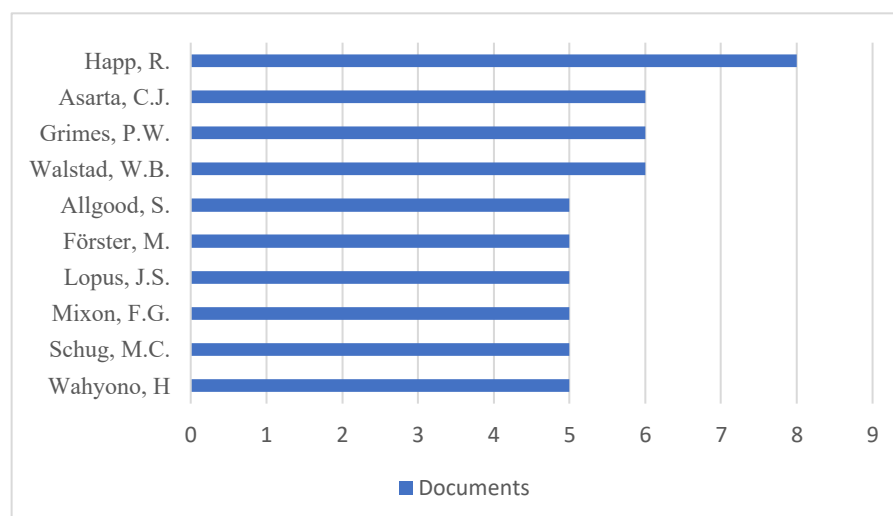


Figure 3. Number of Author Contributions

Source: www.scopus.com

3.3 Total Country Contributions

Figure 4 shows the 10 countries with the most research articles published in Scopus-indexed journals on economic education from 2004 to 2024. The United States has the highest productivity in publishing research articles, with 216 documents. The second position is Germany, which has 49 research articles. Then, the Russian Federation became the third country with 29 research articles. The fourth position is occupied by Indonesia, which has 23 research articles. The fifth to tenth positions are Ukraine, South Africa, the United Kingdom, Poland, Romania, and the Czech Republic.

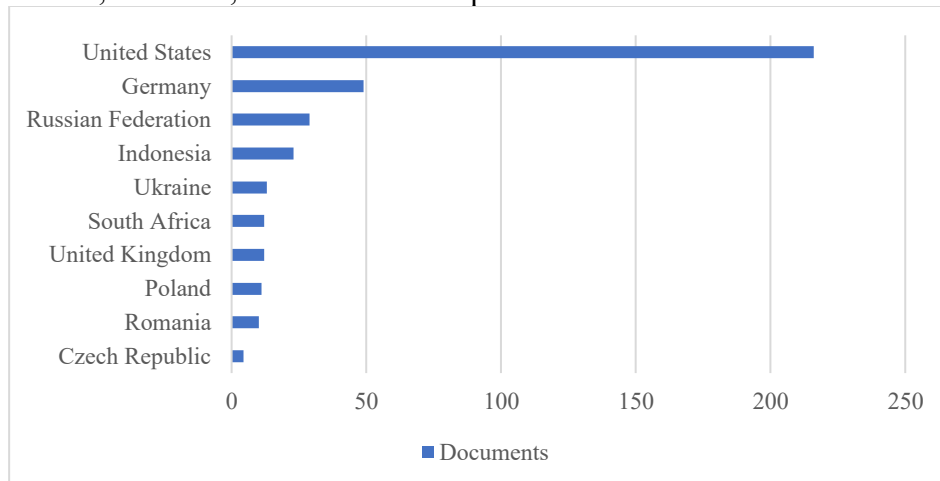


Figure 4. Total Country Contributions

Source: www.scopus.com

3.4 Total University Contributions

Figure 5 shows the 10 highest university affiliations of the authors in publishing their research in Scopus-indexed journals on economic education from 2004 to 2024. The highest affiliated university is the University of Nebraska-Lincoln, which has 16 research articles. The State University of Malang ranks second with 10 research articles, followed by Florida Atlantic University, Johannes Gutenberg-Universität Mainz, and Federal Reserve Bank of St. Louis, each with nine articles. The following positions are at James Madison University, Robert Morris University, and the University of Delaware, with seven research articles each. Meanwhile, Prague University of Economics and Business has six research articles, and Universiti Kebangsaan Malaysia has five.

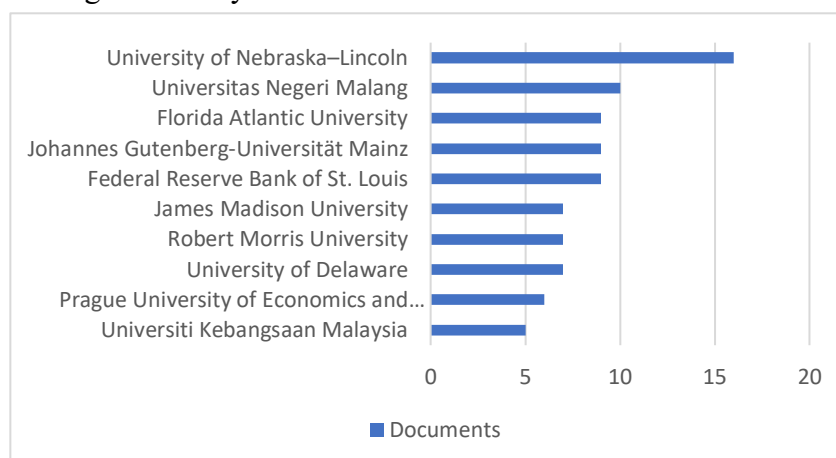


Figure 5. Total University Contributions

Source: www.scopus.com

This information is useful for identifying leading institutions that consistently contribute to the field of economic education research. These affiliations reflect institutional capacity, academic interests, and collaboration trends. In addition, the presence of universities from developed countries (e.g., the US, Germany) and developing countries (e.g., Indonesia, Malaysia) highlights the global scope of economic education as a research domain. These findings also help researchers identify potential collaborators or institutions with a strong publication record in this area.

3.5 Top Journals

Figure 6 shows the most productive journals publishing research articles on economic education from 2004 to 2024. The Journal of Economic Education is the most productive journal, with 89 published research articles. The second position is the International Review of Economics Education, with 25 research articles, followed by the Journal of Private Enterprise, with 21 research articles. The American Economist occupies the fourth position with 20 research articles. The fifth to tenth positions are International of Pluralism and Economics Education, Eastern Economic Journal, Citizenship Social and Economics Education, Journal of Social Science Education, International Advance in Economic Research, and Economics and Sociology.

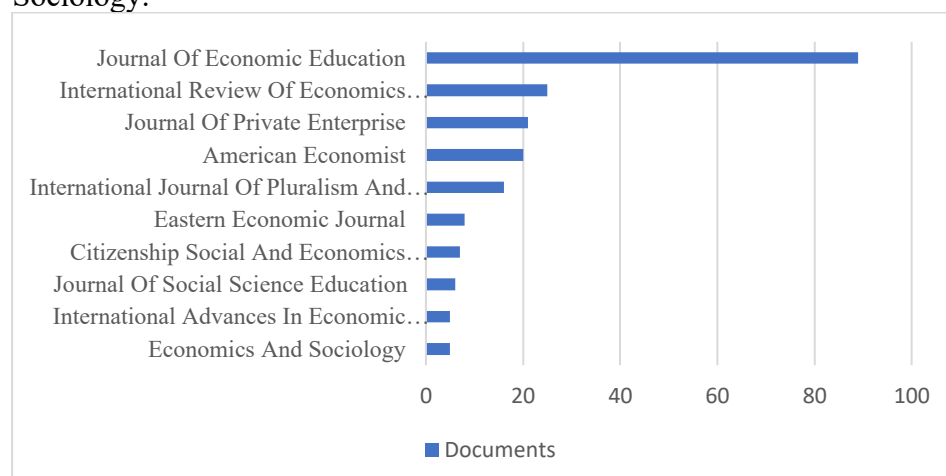


Figure 6. Top Journals

Source: www.scopus.com

These findings are important because they highlight the most influential publication platforms in the field. Knowing which journals frequently publish research on economic education can help future researchers identify appropriate journals for submission, understand dominant academic discourse, and follow relevant trends. Furthermore, the diversity of journals—from those focused on economic education to interdisciplinary outlets—demonstrates the broad and dynamic nature of the field.

3.6 Most Cited Journals

Table 1 shows articles on economic education with the most citations on the Scopus database. Articles are said to be productive or greatly influenced if the number of citations in the article is high (Goyal & Kumar, 2021). Based on Table 1, the article with the most citations on the economic education theme is "Teaching teenagers in finance: Does it work?" It has been cited 93 times. This article assesses the effectiveness of a short financial education program for high

school students in Germany. The results showed that implementing the program significantly increased students' interest in finance, improved their ability to assess asset risk, and decreased their tendency to make impulsive purchases (Lührmann et al., 2015). Second, the article "Additional evidence on the relationship between class size and student performance" has been cited 87 times. This article applies experimental research to students in an economic principles course by using the same instructor for all groups and measuring work based on exam points. The findings of this article are different from those of the previous article. This article finds evidence that small class size significantly positively affects learning achievement (Arias & Walker, 2004). Third Place, the article "Using short movie and television clips in the economics principles class" has been cited 66 times. This article describes a teaching method that utilizes contemporary film and television clips to illustrate economic concepts more interestingly and contextualized (Sexton, 2006). The fourth article, "Economic education for battered women: An evaluation of outcomes," has been cited 65 times. This article uses a quasi-experimental approach to assess the outcomes of a financial literacy program specifically for battered women. The findings showed increased financial knowledge and a significant increase in their financial self-efficacy (Sanders et al., 2007). The fifth article, "Organizing for Economic Empowerment of Battered Women: Women's Savings Accounts," has been cited 65 times. This article discusses the collaboration of domestic violence service providers for the economic empowerment of battered women. Findings include providing economic education, credit counseling, savings programs, advocacy, and support for more structured economic services (Sanders & Schnabel, 2006).

Table 1. Most Cited Journals

No	Journal	Sources	Author	Year	Cites
1	Teaching teenagers in finance: Does it work?	Journal of Banking and Finance, 54, pp. 160- 174	Lührmann, M., Serra-Garcia, M., Winter, J.	2015	93
2	Additional evidence on the relationship between class size and student performance	Journal of Economic Education, 35(4), 311- 329	Arias, J.J. & Walker, Douglas M.	2004	87
3	Using short movie and television clips in the economics principles class	Journal of Economic Education, 37(4), pp. 406- 417	Sexton, R. L.	2006	66
4	Economic education for battered women: An evaluation of outcomes	Affilia - Journal of Women and Social Work, 22(3), pp. 240- 254	Sanders, C. K., Weaver, T. L., & Schnabel, M.	2007	65
5	Organizing for economic empowerment of battered women: Women's savings accounts	Journal of Community Practice, 14(3), pp. 47- 68	Sanders, C. K. & Schnabel, M	2006	65
6	Effects of prior economic education, native language, and gender on economic knowledge of first-year students in higher education. A comparative study between Germany and the USA	Studies in Higher Education, 40(3), pp. 437- 453	Brückner, S., Förster, M., Zlatkin-Troitschanskaia, O., & Walstad, W. B.	2015	60
7	The test of economic literacy: Development and results	Journal of Economic Education, 44(3), pp. 298- 309	Walstad, W. B., Rebeck, K., & Butters, R. B.	2013	51
8.	Saving behavior and financial literacy of Russian high school students: An application of a copula-based bivariate probit-regression approach	J Children and Youth Services Review, 127	Gilenko, E. & Chernova, A.	2021	41

No	Journal	Sources	Author	Year	Cites
9	Women and the choice to study economics	Journal of Economic Education, 43(4), pp. 349-362	Emerson, T. L. N., McGoldrick, K., & Mmford, K.	2012	38
10	Family economics education, peer groups, and students' entrepreneurial intention: the mediating role of economic literacy	Heliyon, 7(4)	Suratno, Narmaditya, B. S., & Wibowo, A.	2021	34

Sources: www.scopus.com

Sixth Place, with the article titled "Effects of prior economic education, native language, and gender on economic knowledge of first-year students in higher education. A comparative study between Germany and the USA" has been cited 60 times. This article uses a comparative study to assess the economic knowledge of first-year students in Germany and the United States by adapting the fourth edition of the TUCE. The findings of this study were that previous economic education had a positive influence only on microeconomics scores. However, gender and native language had more influence on macroeconomics scores in both countries (Brückner et al., 2015). The seventh Place, with the article titled "The test of economic literacy: Development and results," has been cited 51 times. This article describes revising the fourth edition of the economic literacy test, a standardized measurement tool for US high school students based on the Voluntary National Content Standards in Economics (Walstad et al., 2013). Eighth Place, the article "Saving behavior and financial literacy of Russian high school students: An application of a copula-based bivariate probit-regression approach" has been cited 41 times. The article assesses the effect of financial literacy on saving intention among 1,243 Russian high school students, controlling for endogeneity by applying a copula-based bivariate probit-regression approach. The findings show a larger effect when endogeneity is controlled for and discuss the factors that influence financial literacy and saving behavior (Gilenko & Chernova, 2021). Ninth Place, with the article titled "Women and the choice to study economics," has been cited 38 times. This article traces students' decisions to take introductory economics and intermediate theory and eventually major in economics using the Multiple-Institution Database for Investigating Engineering Longitudinal Development (Emerson et al., 2012). In the article "Family Economics Education, Peer Groups and Students' Entrepreneurial Intention: the mediating role of economic literacy," Tenth Place" has been cited 34 times. This article used 1,000 university students for research. The findings of this study show that family economics education and peer group influence are positively correlated with economic literacy and entrepreneurial intention, and economic literacy as a mediator (Suratno et al., 2021).

This comprehensive mapping not only serves as a snapshot of what has been achieved but also provides strategic direction for future research. The strong representation of both developed and developing countries and institutions reflects the universal relevance of economic education. Meanwhile, the concentration of citations around themes such as classroom strategies and financial empowerment points to practical applications. Future researchers are encouraged to explore underdeveloped areas, including economic education for younger children and in informal family contexts, to broaden the scope of this field and its social impact.

3.7 Network Visualization

Figure 7 shows the results of network visualization analysis from VOSviewer software on co-occurrence with economic education with various nodes representing keywords connected. From the analysis using VOSviewer software, 27 items or keywords are divided into 8 clusters

with 64 links attached to each item or keyword. Cluster 1 is red with a focus on integrating assessment and online learning to improve economic literacy and sustainable entrepreneurial intention with seven keyword items: assessment, e-learning, economic literacy, entrepreneurial intention, entrepreneurship, higher education, and sustainable development. Cluster 2 in green focuses on active methods and critical thinking development in microeconomics classes with four keyword items: active learning, critical thinking, microeconomics, and team-based learning.

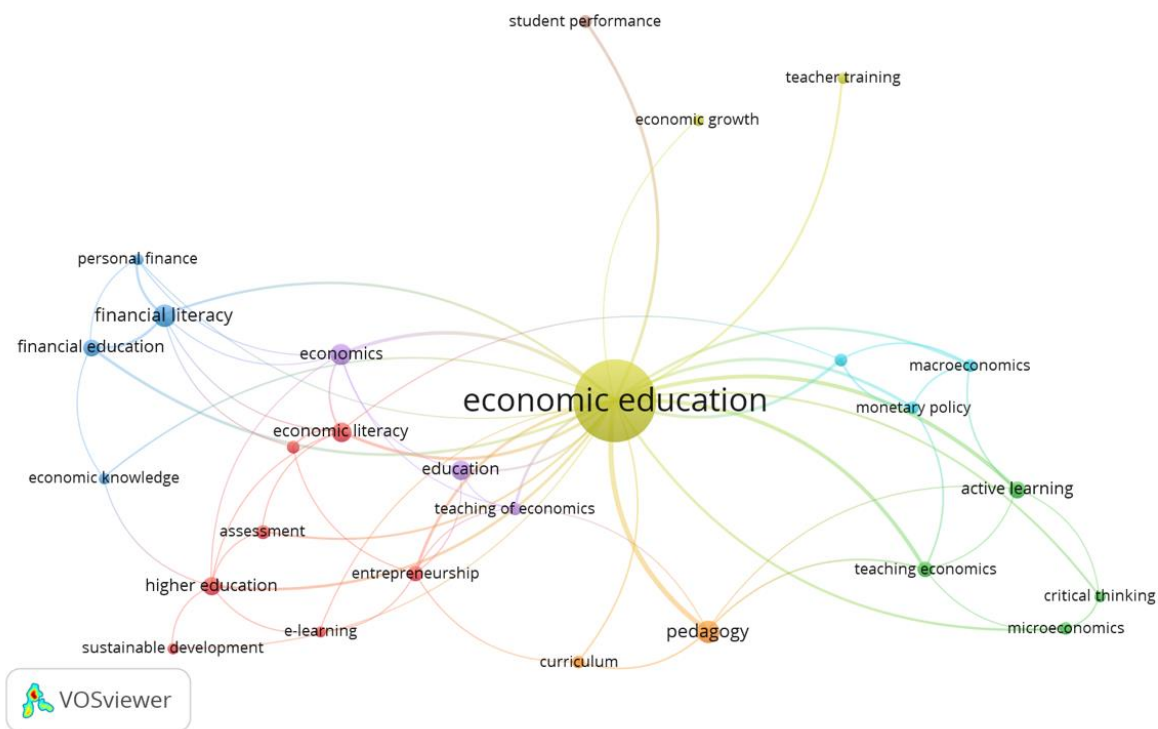


Figure 7. Network Visualization

Source: Processed by Researcher: 2025

Cluster 3 is dark blue, focusing on programs and determinants of personal financial literacy with four items: economic knowledge, financial education, financial literacy, and personal finance. Cluster 4 is yellow, focusing on the relationship between economic education, economic growth, and teacher training with three keyword items: economic education, economic growth, and teacher training. Cluster 5 is purple, focusing on the general theory and methodology of teaching economics with three keyword items: economics, education, teaching, and training. Cluster 6 is light blue, focusing on the foundations of teaching introductory macroeconomics and monetary policy with three keyword items: introductory economics, macroeconomics, and economic policy. Cluster 7 in orange focuses on curriculum design and pedagogical approaches in education with two keyword items: curriculum pedagogy. Cluster 8 is brown, focusing on learning outcome evaluation and student performance achievement with one keyword: student performance.

3.8 Overlay Visualization

Figure 8 shows the results of the overlay visualization analysis using VOSviewer software. Research on economic education experienced a shifting trend each year. In the early phase,

from 2016 onwards, research trends focused on curriculum design, theories and practices of traditional economics teaching, and evaluation of learning outcomes and the relationship with economic growth. Then, in 2018, research trends shifted to integrating technology and more innovative methodologies. Then, in 2018-2022, there was a shift in research trends towards literacy aspects and more specific learning strategies. Then, in 2022, the trend of economic education research began to be associated with monetary policy and the sustainable development agenda. Thus, it can be concluded that economic education research trends have shifted from traditional teaching foundations, then the adoption of technology and literacy, to sustainable development.

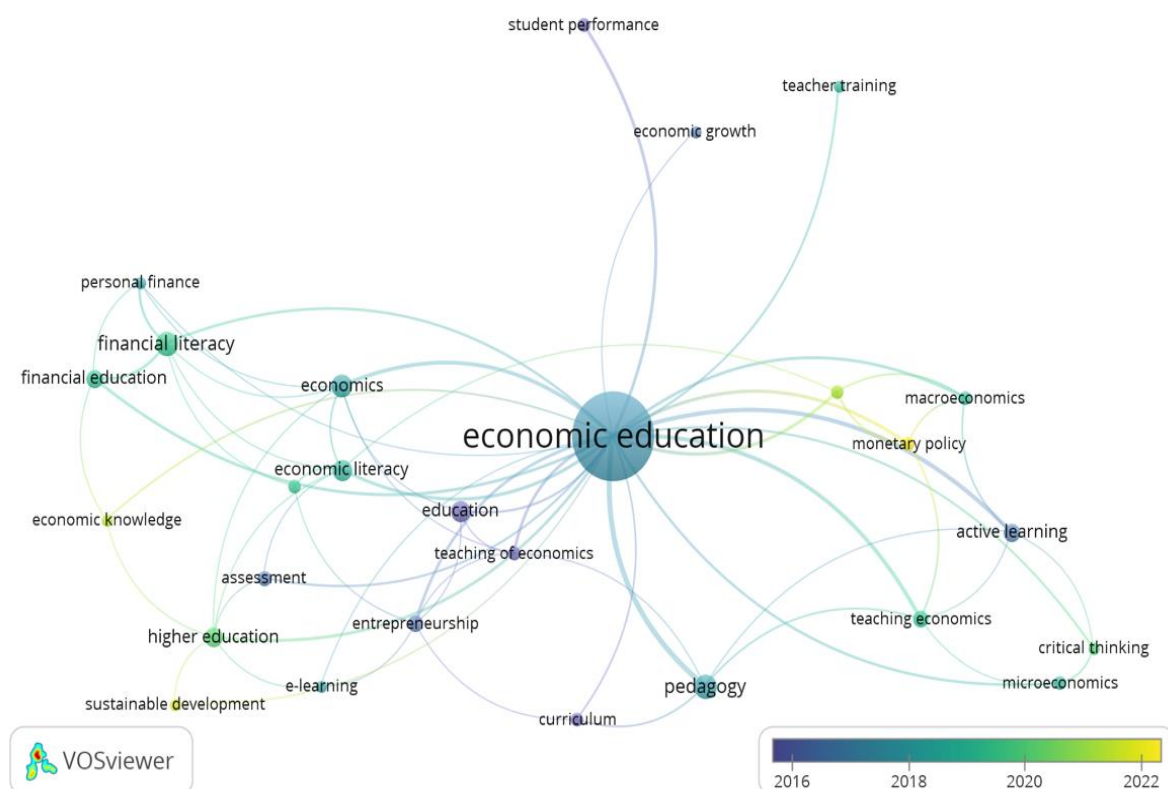


Figure 8. Overlay Visualization

Source: Processed by Researcher: 2025

3.9 Density Visualization

Figure 9 shows the results of density visualization analysis from VOSviewer software. Based on the density visualization analysis results, it can be interpreted that the brighter the war density, the more frequent or critical the keywords are in the analyzed research. (Prabowo et al., 2024; Venigalla et al., 2022). In the density visualization results, it is found that the node "economic education" occupies the most central position in this topic, as evidenced by the density of the lightest colour. This finding indicates that "economic education" is most frequently used and appears in the data set. Then, the other keyword items have a faint colour density. This finding indicates that other keyword items are rarely used and appear in the data set.

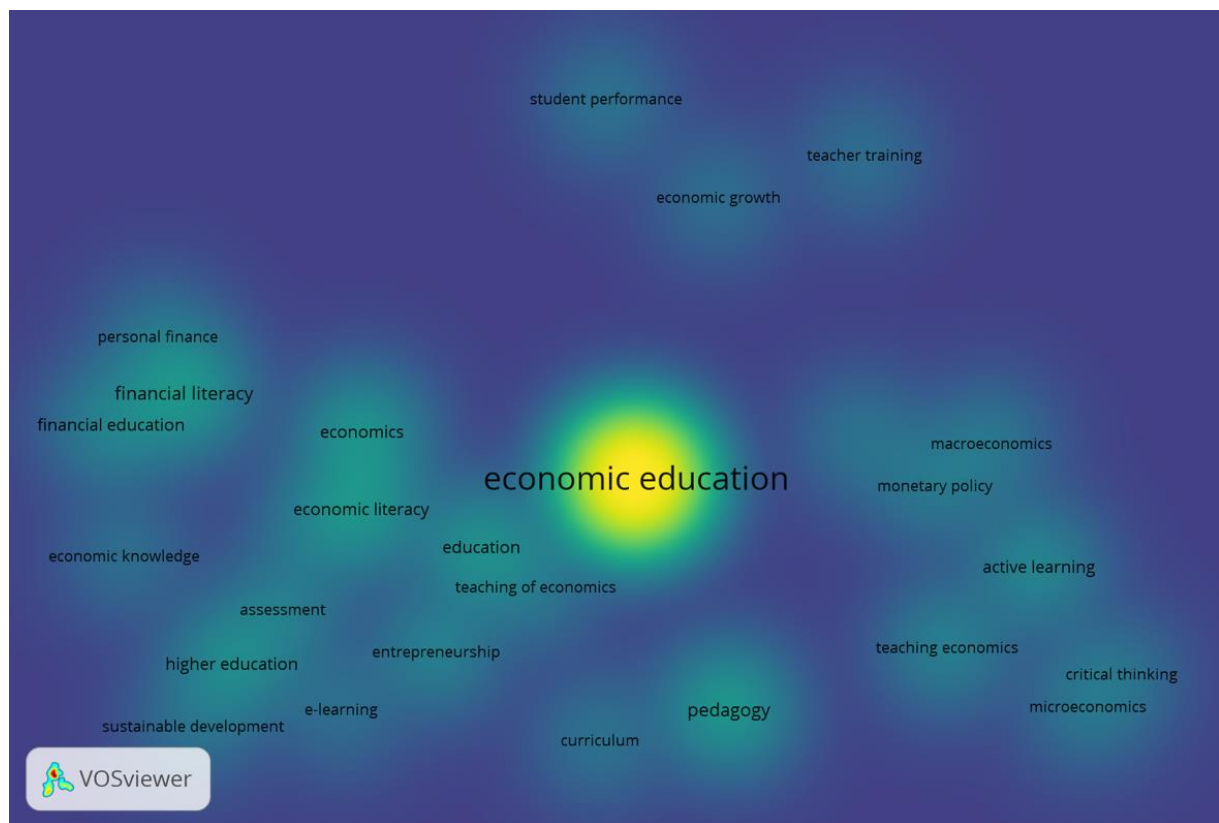


Figure 9. Density Visualization

Source: Processed by Researcher: 2025

4. CONCLUSION

The purpose of this study is to see the extent to which the development of economic education has been researched in a period of 20 years. Trends in publications and growth of literature on economic education in 2004-2024. The more varied themes in economic research suggest that economic education is an exciting theme to research. The results of future research directions and opportunities based on the results of bibliometric visualization in the field of economic education, namely, not many have conducted research on the theme of economic education in the family or themes on how to teach basic life skills for elementary school children as a provision for doing economic activities properly, because economic education has been known to children since childhood so that it becomes an input for future research to raise the theme of economic education research at elementary school age or for ages under 7 years.

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