

## Studies of multicultural education in three last decades: global trends and future directions in educational researches

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### ABSTRACT

The publication trend regarding multicultural education studies has been increasing in three last decades. Nevertheless, systematic studies providing comprehensive bibliographic and bibliometric review related to this issue has not been performed nor also reported in the electronic journals or conference proceeding. A systematic review combined to bibliometric analysis was used to present global trends and future directions in educational researches related to multicultural education. 284 eligible documents from Scopus database published in 2001–2023 were involved as the data. Results revealed that in the period of 2001–2023, publication trend of multicultural education studies slightly soared while citation trend on the documents regarding multicultural education studies relatively fluctuated. The productive and influential documents, authors, countries, institutions, and sources contributed most to the development of multicultural education studies. Moreover, a lot of authors and institutions in the world jointly worked and also generated research networking in conducting the studies of multicultural education, mainly authors come from United States and educational institutions located in United States. Additionally, at least there are several major emerging themes related to multicultural education studies such as methodology, learning environment, main topic in multicultural education, affective and cognitive domain, participant, and theoretical framework. The future researches related to this topic should develop valid, practical, and effective learning models for multicultural competence referring to culturally responsive transformative teaching approach.

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## 1. INTRODUCTION

The issue regarding the diversity in culture has been popular and essential to be discussed in every field, no exception on educational field. The implementation of multicultural education has become a research trend internationally conducted in various countries [1]–[3]. Through this education, students' attitudes and thoughts will be more open to understanding and appreciating diversity. Moreover, multicultural education requires instilling the values of equality and togetherness in the classroom [4], [5], and regarding giving attention to aspects of ethnicity, race, religion, gender, culture, language, and so on [6], [7]. It can also be defined as an education about cultural diversity in response to demographic and cultural changes in certain communities and even the world as a whole [8]–[10]. Particularly, the operating model of multicultural education is multicultural learning whereby it can directly influence students in educational institution.

Focusing on multicultural learning, Davies [11] stated that a learning with a multicultural perspective is an educational transformation to overcome community conflicts. Some empirical studies related to the implementation of multicultural learning have been extensively carried out in various countries, such as Hongkong, Japan, United States, South Africa, India, China, Ukraine, and Brazil [12]–[14]. Additionally, numerous studies regarding multicultural learning also have been conducted in Indonesia [15]–[19]. Multicultural-based learning provides the fact that Indonesian society has a diversity of ethnicities, ethnicities, religions, cultures, languages and so on whereby these phenomena are extremely easy to find in educational field [20], [21]. In factual conditions in society, awareness of multiculturalism becomes an asset in social life in society that encourages diversity by preserving a cultural identity within racial, religious and ethnic groups of the state. Moreover, global multicultural schools have become a norm in modern societies with various cultural backgrounds [22], [23].

Specifically in Indonesia, there are many cases of conflict and brawls among students [24], [25], most likely in that they do not understand diversity, the values of equality and togetherness should have been instilled through the learning process. One potential way to overcome this is to incorporate into practice and implementation of a more multicultural education that has the potential and benefits for all students [26]. Multicultural learning also has the potential to enrich the overall educational experience and promote personal and intellectual growth [27], [28]. It can be the best solution to anticipate cases like this issue. The importance of multicultural-based learning is also supported by a lot of studies focusing on the implementation of multicultural-based learning in Indonesia. Investigating the presence of ethnic Chinese in Indonesian society, it can be stated that ethnic Chinese also have schools spread throughout Indonesia [29], particularly it is related to multicultural education policies of the Chinese ethnic minority. Additionally, Choi and Mao [30] reported that multicultural-based learning in religious schools is specifically aimed at Islamic-based schools and seek to universalize religious education in the Indonesian realm, and has simulated multicultural learning in Indonesia with the help of computer programs. Generally, these studies prove that multicultural-based learning is suitable and very feasible to be implemented in Indonesia.

Even though the issue related to multicultural learning has been increasingly popular, moreover, numerous studies regarding this topic also have been electronically published in various journals or conference proceedings, no systematic review studies presenting global trends and future directions of multicultural education researches have been found based on searches performed and published by researchers in the Scopus database. Meanwhile, this review is essentially required to see the extent of global trends of multicultural education studies in three last decades, and then future directions that can be taken for carrying out the innovative topic in educational researches. To date, there are some systematic review studies that have been performed by researchers related to multicultural education studies [31]–[34]. Nevertheless, these studies have not presented the global trends and future directions related to this issue in that they do not involve bibliometric approach. Additionally, a few of bibliometric analysis studies have presented regarding those points [35]–[37]. These studies, however, only limit it for Indonesia context and use Google Scholar as a search engine whereby this database cannot filter the qualified document. On the other hand, this current study utilizes Scopus database as a search engine and allows it for global context. Therefore, by providing a bibliometric and bibliographic review, this recent study aims to present global trends of multicultural education studies in three last decades, and future directions to do next researches in this educational field.

## 2. METHOD

To provide a bibliometric and bibliographic review of multicultural education studies, a bibliometric analysis was performed. Moreover, Donthu *et al.* [38] argued that bibliometric analysis is a well-known and harsh method to explore and analyze the large volumes of scientific data in which it can get a one-step overview, acquire novel ideas for next researches, and recognize knowledge gaps. There were five stages to carry out bibliometric analysis that were: i) specifying the search keyword; ii) exploring initial search results; iii) refining the documents; iv) compiling the initially statistical data; and v) analyzing the data [39]–[42]. Particularly, every stage to conduct bibliometric analysis in this study was elucidated in the following subsections.

### 2.1. Specifying the search keyword

To discover the documents regarding multicultural education studies, Scopus database was utilized in that it had many electronically well-qualified documents from numerous scientific field [43], [44]. The specific keyword (“multicultural education”) was established to seek the prospective documents which was suitable to multicultural education studies. The search process of documents in Scopus database was performed in August 9th, 2023, specifically at 11.59 PM in Western Indonesian Time.

## 2.2. Exploring initial search results

The results of initial search discovered 4,119 documents published in the period of 1976–2023 and sourced from journal, book, conference proceeding, and book series. The publication stage of documents was in final and press whereby those consisted of article, book chapter, conference paper, review, editorial, conference review, book, note, short survey, letter, erratum, and data paper. The documents were written in a lot of languages such as English, Spanish, Russian, Portuguese, German, Chinese, French, Turkish, Slovenian, Afrikaans, Lithuanian, Korean, Italian, Croatian, Hungarian, Slovak, Polish, Czech, Bosnian, Swedish, Malay, Indonesian, Finnish, Dutch, and Arabic. Additionally, the subject areas of the document were such as social sciences, arts and humanities, psychology, computer science, business, management and accounting, engineering, medicine, nursing, economics, econometrics and finance, health profession, environmental science, mathematics, decision science, energy, earth and planetary science, physics and astronomy, pharmacology, toxicology and pharmaceuticals, neuroscience, agricultural and biological sciences, multidisciplinary, biochemistry, genetics and molecular biology, materials science, chemistry, chemical engineering, dentistry, veterinary, immunology, and microbiology.

## 2.3. Refining the documents

To gain the documents related to multicultural education studies, some inclusion criteria were established. Firstly, the title of document had to contain the keyword “multicultural education”. Secondly, the document was only written in English and the publication stage of document had been published in final and also in press. Thirdly, the document only sourced from the journal and the type of document was article and review. Fourthly, the subject area of the document consisted of social sciences, arts and humanities, and multidisciplinary. Fifthly, the document was published in the period of 2001–2023. The document which did not meet the inclusion criteria were removed from the selection process. Some literatures stated that there were five steps to select the document systematically that were identification, screening, eligibility, and inclusion [45]–[52]. The process of document selection is systematically presented in Figure 1.

## 2.4. Compiling the initially statistical data

The eligible documents were downloaded from Scopus database in two formats that were comma separated values (CSV) and research information system (RIS), whereby the formats contained some information such as bibliometric information, abstract and keyword, and bibliographic information [40]. Additionally, the RIS format presented in the software of Perish or Publish (PoP) provided the data such as author names, number of document citations, document titles, publication years, document sources, publishers, and document types [42]. Moreover, the appearance of PoP software presented the descriptive analysis summary such as the total of publication (TP), the total of citation (TC), the number of citations per year (NCY), the number of citations per publication (NCP), the number of authors per publication (NAP), h-index, g-index, and the period of publication and citation years [40]. On the other hand, the CSV format presented in the software of VOSviewer displayed the most numerous publication and citation viewed from the unit of document, author, country, source, and institution, and also keyword occurrence, total of strength link, some visualizations, and clustering [42].

## 2.5. Analyzing the data

Some analyses such as performance analysis, citation analysis, co-authorship analysis, and co-word analysis were performed to analyze the data. In particular, performance analysis was applied to present the development of publication and citation of multicultural education studies in three last decades. In addition, citation analysis was used to provide the information regarding the productive and influential documents, authors, countries, institutions, and sources contributing most to multicultural education studies. Moreover, co-authorship analysis was performed to show the social interactions among authors and authors' countries related to multicultural education studies. Then, co-word analysis was employed to present the most frequently emerging keywords and the distribution of appearing keywords regarding multicultural education studies in the current period in which at least it could provide some themes to propose future directions in educational researches. Co-authorship and co-word analysis were enriched by some additional analyses such as visualization analysis and thematic analysis. According to Fuad *et al.* [39], performance analysis could be supported by the software of PoP. In contrast, the software of VOSviewer supported other analyses such as citation analysis, co-authorship analysis, and co-word analysis.

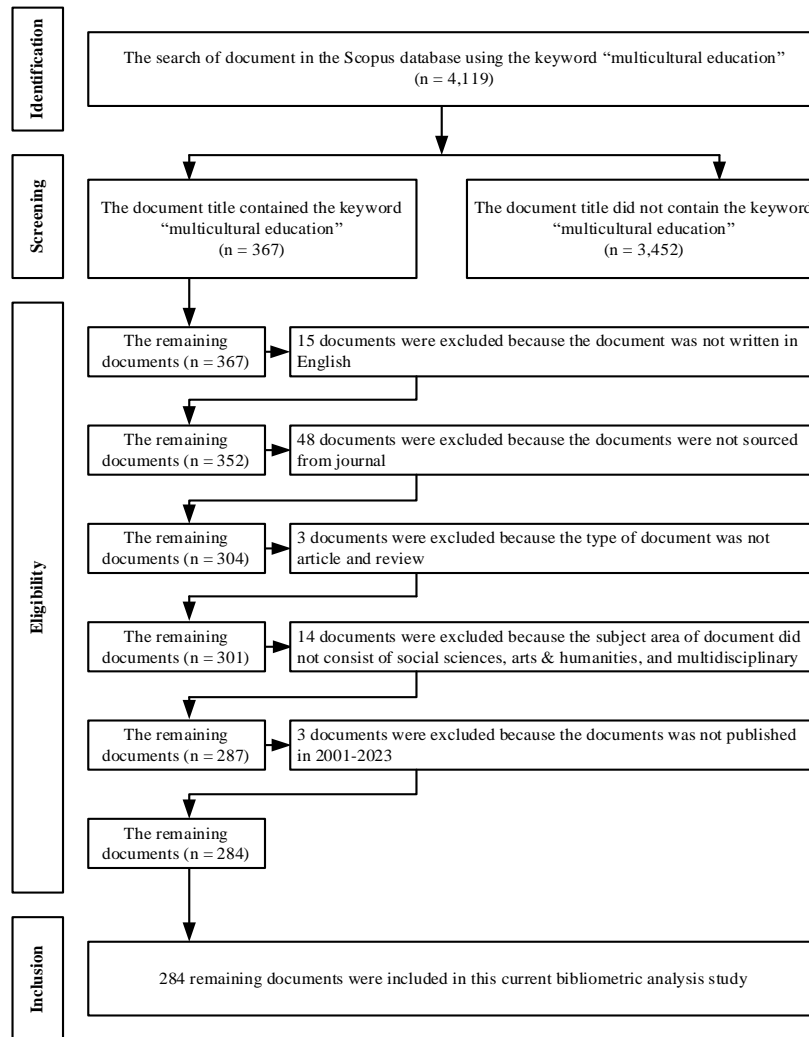


Figure 1. The process of document selection

### 3. RESULTS AND DISCUSSION

As many as 284 eligible and qualified documents discussing multicultural education were involved as the data in this recent study whereby the documents were article and review sourced from electronic journal and published in the period of 2001–2023. Additionally, the documents were written in English and those covered some subject areas, such as social sciences, arts and humanities, and multidisciplinary. Some analyses, such as performance analysis, science mapping, and network analysis were performed in this study in which each analysis was explained and discussed in the following subsections.

#### 3.1. The development of publication and citation of multicultural education studies

Performance analysis was used to present the development of publication and citation of studies related to multicultural education in three last decades. The publication development of multicultural education studies represented how productive the documents are in contributing to multicultural education studies. Meanwhile, the citation development on multicultural education studies represented how influential the documents are in supporting to multicultural education studies. The development of publication and citation of multicultural education studies is presented in Figure 2. During three last decades, a lot of electronic journals had published one document related to multicultural education studies in 2001, followed by one document in 2002, five documents in 2003, six documents in 2004; two documents in 2005, five documents in 2006, six documents in 2007, seven documents in 2008, 10 documents in 2009, 17 documents in 2010, twelve documents in 2011, nine documents in 2012, twelve documents in 2013, 19 documents in 2014, 16 documents in 2015, 21 documents in 2016, twelve documents in 2017, 14 documents in 2018, 21 documents in 2019, 22 documents in 2020, 27 documents in 2021, 21 documents in 2022, and 18 documents

in 2023. This presents that the development of publications of multicultural education studies slightly increased from 2001 to 2023. This means that multicultural education is a research topic adequately interested by lots of researchers in the fields, such as social sciences, arts and humanities, and multidisciplinary. A few of bibliometric studies also revealed that the topic related to multicultural learning was sufficiently interested by many researchers in that the development of publication regarding this topic slightly soared in the period of 2013–2022 [35], [37]. Moreover, Rodiyana *et al.* [36] also reported that during the period of 2011–2021, the development of publications regarding multicultural education sharply jumped up. These reports provide strong evidences that the topic related to multicultural education is extremely interested by many researchers in some scientific fields in three last decades.

Meanwhile, in the period of 2001–2023, the documents regarding multicultural education studies had been cited as many as 46 times in 2001, followed by no citation in 2002, 101 times in 2003, 282 times in 2004, 46 times in 2005, 19 times in 2006, 138 times in 2007, 234 times in 2008, 193 times in 2009, 577 times in 2010, 463 times in 2011, 57 times in 2012, 150 times in 2013, 182 times in 2014, 300 times in 2015, 148 times in 2016, 180 times in 2017, 100 times 2018, 207 times in 2019, 121 times in 2020, 122 times in 2021, 49 times in 2022, and 5 times in 2023. This shows that the development of citations of documents which studied multicultural education relatively fluctuated. This indicates that the influence of published documents does not undergo consistently on multicultural education studies in three last decades. In a bibliometric review, Mahendra and Maftuh [37] also reported that the development of citations of documents focusing on multicultural learning relatively fluctuated in the period of 2013–2022. In addition, Rodiyana *et al.* [36] also showed that the development of citations of documents regarding multicultural education relatively fluctuated between 2011 and 2021. However, Utari [35] in a bibliometric study revealed that during the period of 2013–2022, the development of citations of documents focusing on multicultural learning relatively increased. These reports strengthen the statement that the influence of published documents related to multicultural education studies is not consistent in the period of 2001–2023.

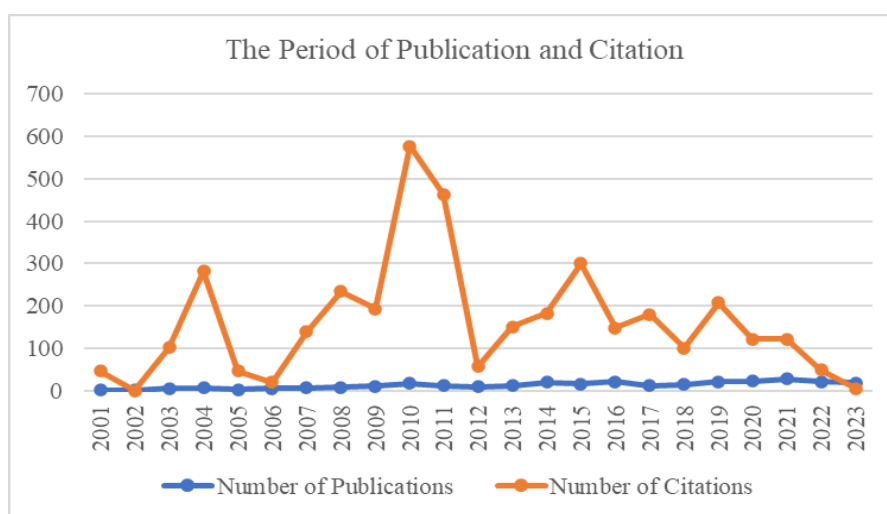


Figure 2. The development of publication and citation related to multicultural education studies in three last decades

### 3.2. The most productive and influential documents, authors, countries, institutions, and sources contributing to multicultural education studies

Citation analysis was used to provide the information related to the productive and influential documents, authors, countries, institutions, and sources contributing most to multicultural education studies. In a bibliometric review, Suyanto *et al.* [42] stated that the most productive documents, authors, countries, institutions, and sources were measured by the number of publications. In contrast, the most influential documents, authors, countries, institutions, and sources were measured using the number of citations.

Firstly, the most influential documents of multicultural education studies were presented by the top five documents with the highest citation as seen in Table 1. The paper entitled “discursive identity: assimilation into the culture of science and its implications for minority students” was the most influential document which studied multicultural education. Particularly, the document studied the assimilation process of the culture to science education and the impact of this assimilation for students in the learning

environment. In an empirical study, Abacioglu *et al.* [8] revealed that cultural assimilation in the learning environment was a fundamental phase in multicultural education in classroom. As a consequence, the facilitators, such as teachers or lecturers have to consider this process.

Secondly, the most productive and influential authors regarding multicultural education studies were presented by top five authors with the highest publication and citation as seen in Table 2. The most productive author published three documents related to multicultural education in three last decades. His papers studied a few topics, such as a strategy for developing multicultural competence among distance learners [53], grassroots suggestions for linking native-language learning, native American studies, and mainstream education in reservation schools with mixed Indian and white student populations [54], and bilingual education in rural schools with native and non-native students [55]. These reports show that the studies of Ngai focus on multicultural education strategy and multilingual in various cultures. Furthermore, the most influential author published one document entitled “discursive identity: assimilation into the culture of science and its implications for minority students”. The article written and published by Brown had been cited as many as 246 times by other relevant articles.

Table 1. Top five document of multicultural education studies with the highest citation

No	Title	Source	Author	Year	Citation
1	“Discursive identity: assimilation into the culture of science and its implications for minority students”	Journal of Research in Science Teaching	Brown	2004	246
2	“Please mind the culture gap: intercultural development during a teacher education study abroad program”	Journal of Teacher Education	Marx and Moss	2011	164
3	“Cultural dimensions of learning: addressing the challenges of multicultural instruction”	International Review of Research in Open and Distance Learning	Parrish <i>et al.</i>	2010	125
4	“Caught in the tower of babel: university lecturers’ experiences with internationalization”	Language and Intercultural Communication	Tange	2010	105
5	“Individual and structural orientations in socially just teaching: conceptualization, implementation, and collaborative effort”	Journal of Teacher Education	Chubbuck	2010	80

Table 2. Top five authors regarding multicultural education studies with the highest publication and citation

Author	Top five most productive authors		Author	Top five most influential authors	
	TP	Institution		TC	Institution
Ngai	3	University of Montana-Missoula, United States	Brown	246	Stanford University, United States
Gao	2	Meredith Middle School, United States	Tange	105	Aarhus School of Business, Denmark
Kim	2	Korean Educational Development Institute, South Korea	Chubbuck	80	Marquette University, United States
Skerrett	2	Texas University, United States	Sleeter	69	California State University, United States
Vizintin	2	Ljubljani University, Slovenia	Wu	62	University of Reading, United Kingdom

Thirdly, the most productive and influential countries regarding multicultural education studies were presented by top five countries with the highest publication and citation as seen in Table 3. Both Ngai and Brown came from United States whereby it was the most productive and influential country contributing to multicultural education studies in the period of 2001–2023. In line to Mahendra and Maftuh [37], United States was the most productive country which had published 73 documents of multicultural education studies from 2013 to 2022. Rodiyana *et al.* [36] also revealed that United States was the most influential country in which the documents of multicultural learning studies had been cited as many as 516 times between 2011 and 2021. These reports support that United States and also authors who affiliated in this country are the productive and influential country contributing most to multicultural education studies in the period of 2001–2023 in which many studies related to multicultural education studies conducted have been referred and used by a lot of researchers in some fields, such as social sciences, arts and humanities, and multidisciplinary.

Table 3. Top 10 countries regarding multicultural education studies with the highest publication and citation

Top five most productive countries			Top five most influential countries		
Country	TP	Continent	Country	TC	Continent
United States	130	America	United States	2,269	America
Australia	15	Australia	United Kingdom	290	Europe
Indonesia	15	Asia	Turkey	139	Europe
Russia	12	Europe	Australia	131	Australia
United Kingdom	12	Europe	Netherlands	128	Europe

Fourthly, the most productive and influential institutions regarding multicultural education studies were presented by top five institutions with the highest publication and citation as seen in Table 4. University of Kazan was the most productive institution which had published 3 documents related to multicultural education studies while Stanford University was the most influential institution in which its published articles regarding multicultural education studies had been cited as many as 246 times by other relevant articles in three last decades. This shows that the institutions located in United States and Russia contribute most to multicultural education studies. Moreover, Utari [35] also revealed that United States had a lot of educational institutions which contributed most to multicultural education studies.

Fifthly, the most productive and influential sources regarding multicultural education studies were presented by top five sources with the highest publication and citation as seen in Table 5. Most of articles written and authorized by top five authors with the highest publication were published in Journal for Multicultural Education and Journal of Teacher Education which were the most productive and influential source contributing most to multicultural education studies. In line to Utari [35], Journal for Multicultural Education was the most influential source whereby its published articles related to multicultural education studies had been cited as many as 132 times from 2013 until 2022. This report promotes that Journal for Multicultural Education contributes most to the development of multicultural education studies.

Table 4. Top 10 institutions regarding multicultural education studies with the highest publication and citation

Top five most productive institutions			Top five most influential institutions		
Institution	TP	Country	Institution	TC	Country
University of Kazan	3	Russia	Stanford University	246	United States
California State University	2	United States	Connecticut University	164	United States
University of Texas	2	United States	University of New Mexico	125	United States
University of Southern Queensland	2	Australia	Aarhus School of Busines	105	Denmark
University of Virginia	2	United States	University of Virginia	90	United States

Table 5. Top 10 sources regarding multicultural education studies with the highest publication and citation

Top five most productive sources			Top five most influential sources		
Source	TP	Publisher	Source	TC	Publisher
Journal for Multicultural Education	9	Emerald	Journal of Teacher Education	400	Elsevier
Education and Urban Society	7	SAGE	Journal of Research in Science Teaching	246	Elsevier
Journal of Teacher Education	6	SAGE	Teaching and Teacher Education	133	Elsevier
Multicultural Education Review	6	Routledge	Journal of Curriculum Studies	133	Routledge
Teaching and Teacher Education	6	Elsevier	Language and Intercultural Communication	122	Routledge

### 3.3. The social interactions among authors and countries regarding multicultural education studies

Co-authorship analysis was used to present the social interactions among authors, institutions, and countries of multicultural education studies. Network visualization and clustering analysis was also involved to enrich this analysis [39], [42]. The visualization analysis among authors was conducted by selecting the minimum number of documents of an author as many as one document and the minimum number of citations of an author as many as no citation. As a result, of 277 authors, two interconnected authors distributed into 276 clusters emerged as seen in Figure 3. Several authors in red cluster, such as Westerlund, Partti, and Karlsen, were linked to each other. Simultaneously, they investigated teaching as improvisational experience during an intercultural project [56]. This shows that authors in red cluster focus on improvisational experience in musical teaching during an intercultural project.

Moreover, the visualization analysis among countries was carried out by selecting the minimum number of documents of an author as many as one document and the minimum number of citations of an author as many as no citation. As a result, 25 interconnected countries distributed into six clusters such as red, green, blue, yellow, purple, and blue-sky appeared as seen in Figure 4. Regarding the social interactions among countries in conducting multicultural education studies, United States, a leading country in blue cluster was connected to Finland, Netherlands, and Italy in green cluster and Thailand in blue-sky cluster. Additionally, United Kingdom, a leading country in purple cluster was associated to Italy and Netherlands in green cluster and Norway in yellow cluster. Then, Netherlands, a leading country in green cluster was hooked to United States in blue cluster, United Kingdom in purple cluster, and Singapore in red cluster. In addition, Norway, a leading country in yellow cluster was related to Finland in green cluster and United Kingdom in purple cluster. Moreover, Thailand was the leading author in blue-sky cluster whereby it was linked to United States in blue cluster. In line to Rodiyana *et al.* [36], in common, United States and some countries in Europe and Asia worked multicultural education studies.

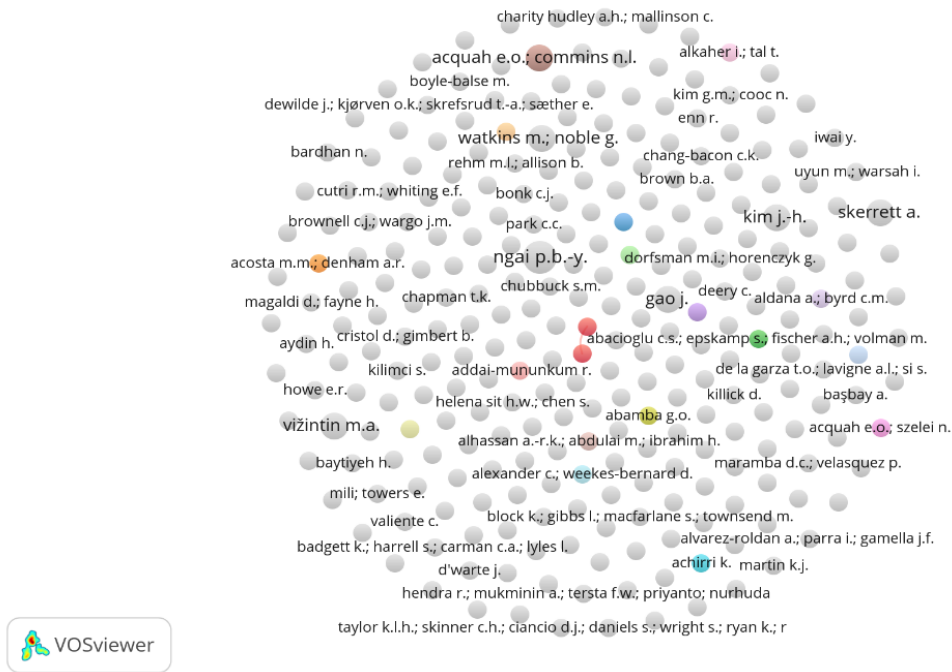


Figure 3. The social interactions among authors regarding multicultural education studies

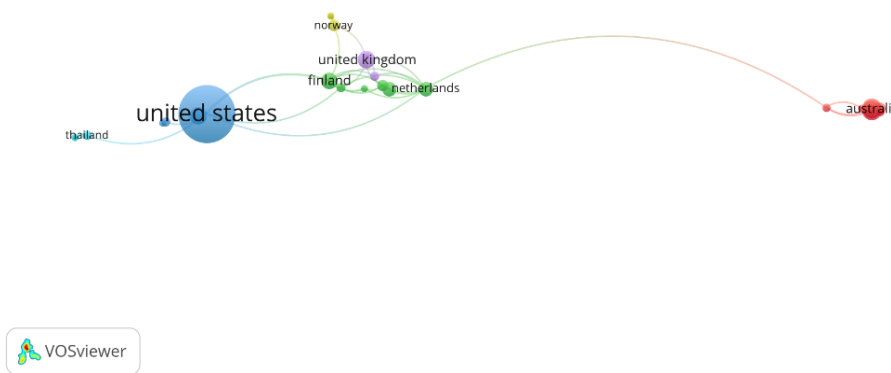


Figure 4. The social interactions among countries regarding multicultural education studies

Subsequently, the visualization analysis among institutions was conducted by selecting the minimum number of documents of an author as many as one document and the minimum number of citations of an author as many as no citation. As a result, of 462 institutions, seven interconnected institutions, such as Wageningen University, Augsburg University, Jacobs University, University of Sunderland, Herriot Watt University, University of Lisbon, and University of Leicester distributed into one cluster emerged as shown in Figure 5.

**3.4. The emerging theme of multicultural education studies and its distribution in the most current period**

Co-word analysis was used to present the frequently emerging keywords and the distribution of appearing keywords regarding multicultural education studies in the current period. Moreover, at least it provided the novelty or the research gap as future direction related to multicultural education studies. The network visualization analysis was conducted to show the frequently emerging keywords regarding multicultural education studies. The minimum number of occurrences of a keyword as many as two occurrences were selected, so 57 interconnected keywords appeared as seen in Figure 6. Subsequently, thematic analysis was conducted to group some similarly emerging keywords into a theme as seen in Table 6.



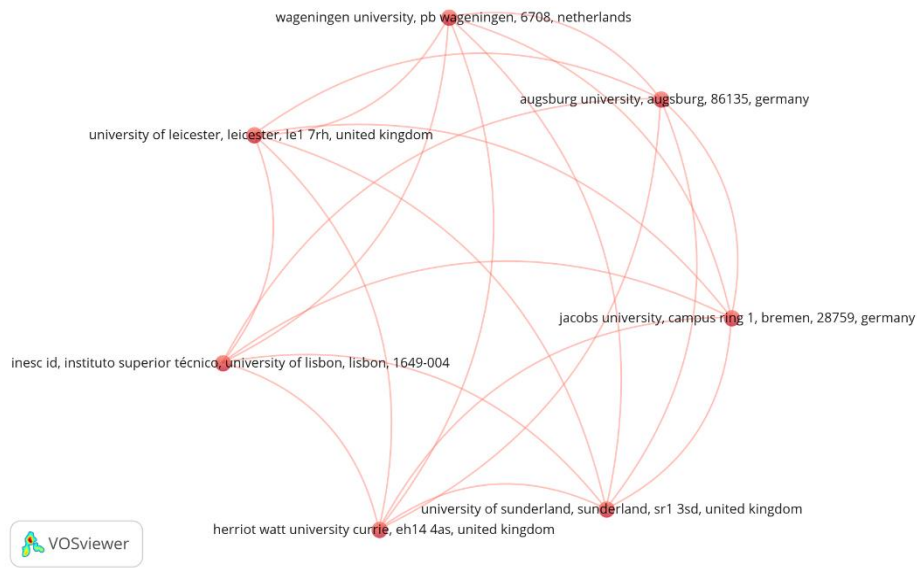


Figure 5. The social interactions among institutions regarding multicultural education studies

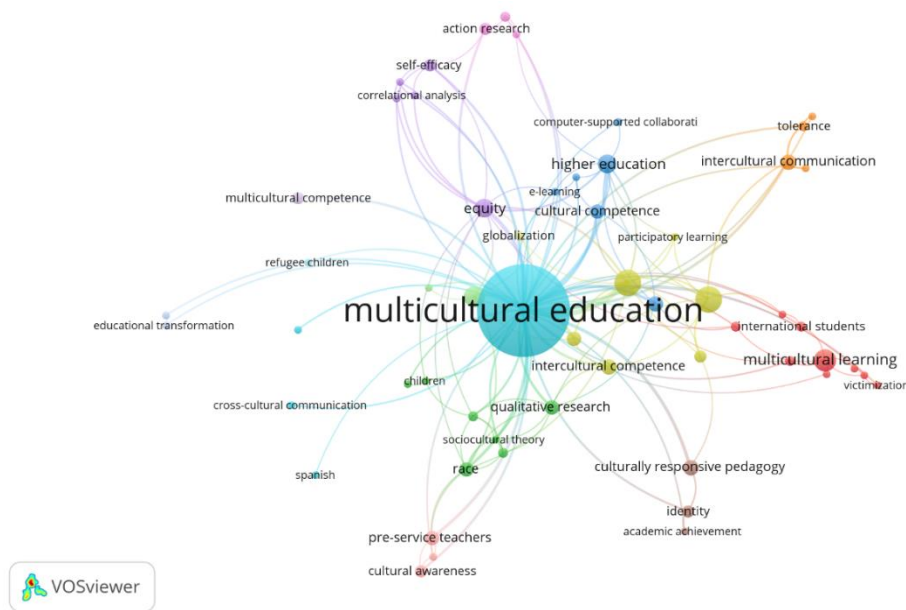


Figure 6. The network visualization of emerging keywords on multicultural education studies

Thematic analysis shows that at least there were six mainly emerging themes regarding multicultural education studies. The first theme was related to methodology applied to carry out multicultural education studies, such as action research, case study, correlational analysis, descriptive analysis, discourse analysis, ethnography, qualitative research, and regression analysis. It can be stated that to perform multicultural education studies, there was a few of research designs used in quantitative approach, such as descriptive design, correlational design and regression analysis. Meanwhile, a few of qualitative research designs were also used to conduct multicultural education studies, such as descriptive design, case study, and ethnography. Additionally, action research was research design using quantitative and qualitative approach. In a literature, Suyanto *et al.* [42] stated that qualitative and quantitative approach is popular to be applied in conducting many studies. Moreover, Fuad *et al.* [39] argued that mix approach combining between quantitative approach and qualitative approach was also familiar to be applied to perform a lot of studies. These show that most of research design in a variety of research approaches are applied to conduct multicultural education studies.

The second theme was related to learning environment implemented to educate multicultural concepts in the classroom, such as blended learning, collaborative learning, distance learning, e-learning, intercultural learning, multicultural learning, online learning, participatory learning, service learning, and transformative learning. From those, it can be stated that there were some interventions provided to educate multicultural concepts, such as blended learning, collaborative learning, distance learning, e-learning, and online learning. This shows that online-based learning is mostly implemented in multicultural education. Litvinova *et al.* [29] stated that online-based learning had the essential role in educating students regarding multicultural concepts. In addition, online-based learning also provided positive effect on students in understanding multicultural concepts [57]. This interprets that online-based learning dominates in intervening students' conceptual understanding related to multicultural.

Table 6. The theme of emerging keywords regarding multicultural education studies

Theme	Keyword	Frequency	
Methodology	Action research	12	
	Case study	3	
	Correlational analysis	10	
	Descriptive analysis	9	
	Discourse analysis	5	
	Ethnography	6	
	Qualitative research	4	
	Regression analysis	3	
	Learning environment	Blended learning	2
		Collaborative learning	9
Computer-supported collaborative learning		7	
Distance learning		6	
E-learning		6	
Intercultural learning		13	
Multicultural learning		2	
Online learning		3	
Participatory learning		2	
Service learning		2	
Transformative learning		2	
Main topic in multicultural education		Community	16
		Culture	11
	Diversity	8	
	Equity	5	
	Ethnicity	6	
	Foreign language	7	
	Globalization	7	
	Identity	7	
	Integration	2	
	Race	2	
	Social justice	2	
	Sustainability	3	
	Tolerance	2	
	Victimization	3	
	Affective and cognitive domain	Academic achievement	7
		Critical pedagogy	6
Cross-cultural communication		6	
Cultural competence		5	
Culturally responsive pedagogy		2	
Cultural awareness		2	
Intercultural competence		2	
Literacy		3	
Motivation		4	
Multicultural competence		5	
Self-efficacy		2	
Participant	Children	14	
	Early childhood	10	
	International students	8	
	Pre-service teachers	2	
Theoretical framework	Socio-cultural theory	4	
	Critical race theory	2	

The third theme was related to the main topic in multicultural education consisting of community, culture, diversity, equity, ethnicity, foreign language, globalization, identity, integration, race, social justice, sustainability, tolerance, and victimization. The ability of students in mastering these topics

indicates that they have understood multicultural concepts. Some essential concepts, such as tolerance, culture, race, diversity, identity, equity, social justice, and ethnicity are important to be delivered on students. In addition, Chang-Bacon [24] revealed that some learning materials containing issues, such as ethnicity, tolerance, diversity, equity, and social justice are extremely essential to be mastered by students.

Subsequently, the fourth theme was related to affective and cognitive domain that has to be achieved by students in multicultural education, such as academic achievement, critical pedagogy, cross-cultural communication, cultural competence, culturally responsive pedagogy, cultural awareness, intercultural competence, literacy, motivation, multicultural competency, and self-efficacy. From these, it can be stated that there were some fundamental outcomes that had to be achieved by students, such as multicultural competence, cultural awareness, academic achievement, literacy, motivation, and self-efficacy. Several items, such as academic achievement, literacy, and multicultural competence can be included in cognitive domain while some items, such as cultural awareness, motivation, and self-efficacy can be included in affective domain.

The fifth theme was related to participants involved in multicultural education studies, such as children, early childhood, international students, and pre-service teachers. From these, it can be stated that multicultural education studies involved students in pre-school, primary and secondary school, and university/college. This indicates that multicultural concepts have been lectured in every educational level. Moreover, the sixth theme was related to theoretical framework used to learn multicultural, such as socio-cultural theory and critical race theory. Fuentes-Vilugrón *et al.* [3] stated that social-cultural theory combines between sociology and cultural science whereby this theory was used as a framework in studying multicultural education. On the other hand, Alkaher and Tal [58] revealed that critical race theory referred to ethical principle criticizing the concept of diversity and equity in multicultural society. These theories substantially facilitate in explaining the phenomena in multicultural education containing some concepts, such as community, culture, diversity, equity, ethnicity, foreign language, globalization, identity, integration, race, social justice, sustainability, tolerance, and victimization.

#### 4. CONCLUSION

In the period of 2001–2023, publication trend of multicultural education studies slightly soared while citation trend on the documents regarding multicultural education studies relatively fluctuated. The productive and influential documents, authors, countries, institutions, and sources contribute most to the development of multicultural education studies. Moreover, a lot of authors and institutions in the world jointly work and also generate research networking in conducting the studies of multicultural education, mainly authors come from United States and educational institutions located in United States. Additionally, at least there are several major emerging themes related to multicultural education studies such as methodology, learning environment, main topic in multicultural education, affective and cognitive domain, participant, and theoretical framework.

A lot of studies related to multicultural education have used a few research approaches, such as qualitative and quantitative, and some research designs, such as correlation, regression, description, case study, and ethnography. This implies that future researches regarding this topic can be directed to use mix approach to educate students about multicultural concepts. Additionally, studies regarding multicultural education have implemented several learning environments, such as blended learning, collaborative learning, distance learning, e-learning, and online learning. Nevertheless, the studies are still seldom in applying culturally responsive transformative teaching as a learning approach. Therefore, future researches related to multicultural education should develop learning models as valid, practical, and effective interventions for multicultural competence referring to culturally responsive transformative teaching approach.

This study only involves the Scopus as the scientific database to search the documents related to multicultural education studies. Even though the Scopus is one of the scientific databases which have the large well-qualified documents, but these documents have not represented the certain field regarding learners' multicultural education. Therefore, this study suggests to involve other scientific databases which also have numerous well-qualified documents such as Web of Science and MDPI. In addition, this study only uses co-word analysis to synthesize the mainly emerging theme of multicultural education studies in the last decade. Meanwhile, there are other analyses such as co-citation analysis and bibliographic coupling that can enrich findings of the mainly emerging theme of multicultural education studies. As a consequence, the involvement of some analyses such as co-citation analysis and bibliographic coupling is needed to enrich co-word analysis.

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