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# The research trends of music general education: A bibliometric review

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**Abstract:** Music general education encompasses various learning methods, including sensory engagement, appreciation, experience, and creation. It leverages music's unique auditory experiences and aesthetic values to cultivate and develop students' musical literacy, imagination, and creativity. However, within the educational system, music general education is often undervalued, leading to a mismatch between its development and its actual educational significance. Despite increasing research interest in this field, a systematic, layered, and focused review and analysis are still necessary. This study employed bibliometric methods to analyze publications from the Web of Science database using VOSviewer. It conducted descriptive statistical analyses on publication quantities, citation trends, highly cited articles, the top 10 journals, countries, and organizations. Additionally, a visual network map analysis was performed on keyword co-occurrence, as well as on countries and organizations based on co-authorship. The results identified the most influential articles, journals, countries, and organizations from 2014 to 2024. The study also mapped the collaborative relationships between different countries and organizations and revealed research hotspots and thematic evolution within this field. These findings provide valuable insights for future research directions and potential collaborative opportunities in the domain of music general education.

***Keywords:*** *Bibliometric, Music education, Music general education.*

## 1. Introduction

Music general education is an educational practice for non-music majors and an indispensable part of the education system. It plays an important role in the cultivation of students' literacy, cognitive development, and character formation [1]. Music general education is a combination of general education and professional education, utilizing the functions and values of the music discipline to enhance students' overall quality [2]. The value of music general education lies not only in helping students acquire the skills required by the curriculum, but also in fostering greater social and emotional harmony among them [3]. Its primary goal is to cultivate students' musical aesthetic, serving an educational purpose that enhances their intellectual development and supports the function of artistic heritage [4]. Therefore, as a part of general education, it is insufficient to merely emphasize the value and aesthetic significance of music through musical works within the general education framework [5].

German educationalist [6] not only viewed music education as a subject but also as integral to holistic education [7]. The importance of music general education has long been reflected in the general education concepts of prestigious institutions worldwide, such as Harvard University's approach to liberal arts education and Tsinghua University's practices in general education [8].

Additionally, the Massachusetts Institute of Technology (MIT), despite being renowned for its strengths in science and engineering, equally values arts education, including music. Since 1975, MIT has established an Arts Education Committee to oversee the university's arts programs, integrating arts education into students' curricula. Similarly, Stanford University's general education courses also include arts education, incorporating music within the scope of the students' academic requirements [9]. In the late 1970s, Shanghai Jiao Tong University in China opened a music course for all students to


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choose from, it is one of the earliest universities in China to offer music general education and is also one of the universities with relatively complete music education [10].

Many previous studies have shown that the study of music general education is important and necessary for the development of music education and educators. For instance, music general education in comprehensive schools in China and Lithuania both include music courses as part of creative comprehensive education [11]. Croatia has emphasized the role of music courses in general education in cultivating students' aesthetics and developing music culture, as well as the significance of addressing educational problems and achieving teacher development in its music curriculum reform [12]. Additionally, music general education is beneficial in enhancing students' innovative capabilities. It plays a crucial role in developing college students' creative thinking and unlocking their potential for innovation [13].

Bibliometrics is a quantitative research method for literature, by analyzing bibliometric data such as authors, citations, keywords and more to identify the development dynamics and new development trends in a specific research field, and it is widely used in various research fields [14, 15]. Therefore, to promote the further development of music general education, this study employs bibliometric analysis to explore and reveal the development trends, cluster analysis, and research hotspots within this field.

## 2. Research Method

This study used Vosviewer to conduct a bibliometric analysis of the field of music general education. Bibliometric analysis is a rigorous and scientific analysis method, which is often used as a method to analyze research hotspots and development trends within a specific field. Its advantage lies in its ability to handle and analyze large volumes of textual data [16]. As one of the most popular and practical methods for analyzing and processing vast amounts of data, bibliometric analysis helps researchers objectively interpret and visualize the development trends and evolutionary maps of a particular research field [14].

### *2.1. Research Objective*

This study aims to provide a comprehensive overview and trend analysis of the field of music general education, with a focus on the period from 2014 to 2024. The goal is to explore the research hotspots and trends in this field over the past decade, offering valuable insights for future studies and providing the most up-to-date understanding of the current dynamics.

To achieve this, the study uses bibliometric visualization mapping techniques, utilizing publications retrieved from the Web of Science database, to gain an in-depth understanding of the research landscape in music general education over the past ten years. The research objectives are as follows:
(1) To analyze the publication and citation trends in the field of music general education between 2014 and 2024.

(2) To identify the most influential articles, journals, organizations, and countries in the field of music general education between 2014 and 2024.

(3) To identify the collaborations among countries and organizations in the field of music general education between 2014 and 2024.

(4) To reveal the research hotspots and thematic evolution pathways within the field of music general education between 2014 and 2024.

### *2.2. Data Source and Search Strategy*

The sources related to music general education were retrieved from the Web of Science database, with the access date being December 24, 2024. WoS is a reliable and authoritative resource, housing a vast collection of academic articles and peer-reviewed papers relevant to the research field, and it is widely recognized and accepted as a leading database for literature collection and scholarly research [17].

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Due to the variety of terminologies used for music general education in different countries and regions, and to make the search results more specific, this study used the following terms for retrieval: music general education AND music education AND general education AND general music education AND music in general education AND （music general curriculum OR music curriculum）.

*2.3. Article Selection*

A total of 2,468 articles related to music general education were retrieved from the Web of Science database. The inclusion criteria and exclusion criteria are showed in Table 1. Based on the inclusion criteria listed in Table 1, the selection focused on articles published between 2014 and 2024, with article types limited to "article" and "review article", and articles written in English. After applying these filters, 1,278 articles remained for further analysis.

To ensure the relevance and reliability of the selected articles for this study, we applied the exclusion criteria to filter the 1,278 articles obtained in the previous step. Articles were excluded if they focused on areas outside of music and education research, if they were published before 2014, or if they had been retracted. After carefully screening each article according to these criteria, a total of **609** articles were selected for bibliometric analysis in this study.

**Table 1.**
Inclusion and Exclusion criteria.

| Criteria | Content |
|---|---|
| Inclusion Criteria | a. Keywords search in all fields |
| | b. Articles published within 2014 to 2024. |
| | c. Article types limited to article and Review Article |
| | d. Articles written in English |
| Exclusion Criteria | a. Articles published before 2014 |
| | b. Research Area is not relevant to music or education |
| | c. Retracted Articles |

*2.4. Data Extraction*

After selecting the target articles, we extracted the following data for visualization and bibliometric analysis, including but not limited to authors, year, title of publication, organizations，number of publication，number of citation，journals，countries，co-keyword，co-authorship.

*2.5. Data Analysis*

After completing data retrieval, selection, and extraction, this study utilized Microsoft Excel and VOSviewer for data analysis. The selected articles from the Web of Science database were exported in tab-separated file format. The relevant data, including publication source, publication year, the number of publications, citation trends, highly cited articles, the top 10 countries, organizations, and journals, were analyzed using Microsoft Excel and VOSviewer.

VOSviewer is a tool software designed for creating and exploring maps based on network data. It is one of the most widely used and popular bibliometric analysis tools in academic fields today [18]. VOSviewer has the ability to process and analyze large volumes of bibliometric data, converting extensive literature into visual maps, it can provide a fast, easily understandable, intuitive, and scientifically grounded way to display clustering phenomena and structural patterns in the data [19]. VOSviewer satisfied the academic research demand for tools that can handle complex textual data analysis, offering significant technical support for scholarly applications [20].

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## 3. Results and Discussion

### *3.1. The Publication and Citation Trends in The Field of Music General Education Between 2014-2024*

This study retrieved a total of 609 publications published between 2014 and 2024, including 588 articles and 21 review articles. Publication and citation trends in the field were analyzed through the number of publications and citations per year. Figure 1 illustrates the publication and citation trends of these works from 2014 to 2024. Over the past decade, these publications have accumulated a total of 2,197 citations, with an average of 5.25 citations per publication.

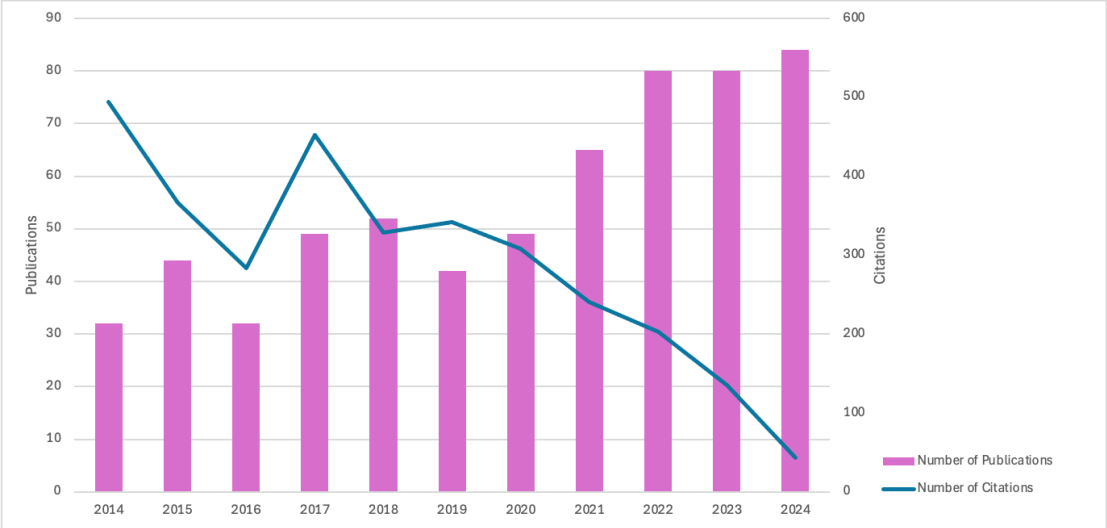


**Figure 1.**
The Trend of Publications and Citations for 2014-2024.

The overall number of publications shows an upward trend. From 2014 to 2020, the number of publications fluctuated, with some increases and decreases, but the overall variation was relatively small. Starting in 2021, the number of publications significantly increased, and 2021 to 2024 accounting for 50.7% of the total publications. Citation numbers declined in 2015 and 2016, but began to rise sharply in 2017, approaching the peak citation level of 2014. 2018 and 2019 showed a stable trend, while citations from 2020 to 2024 followed a declining trend. To sum up, the peak year for publication volume was 2024, with 84 publications, while the peak year for citation count was 2014, with 494 citations.

### *3.2. The Most Influential Articles, Journals, Organizations, And Countries in the Field of Music General Education Between 2014 And 2024*

In this study, the most influential articles were identified by ranking the top 10 highly cited articles based on the total citations of publications. The most influential journals were identified through the number of documents published in each journal and as a percentage of the total, and the top 10 were listed. The top 10 most influential organizations were identified through the number of documents published by each organization and as a percentage of the total. The top 10 most influential countries were identified through the number of documents published by each country and as a percentage of the total.

#### *3.2.1. The Most Influential Articles*

The most influential articles in this study were identified by total citations, Top 10 highly citated articles are presented in Table 2, listed by author, title, source, and total citation. According to Table 2, the most cited article is "Does music training enhance working memory performance? Findings from a

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quasi-experimental longitudinal study" by Roden, et al. [21] there was 95 citations as of December 24, 2024, with an average annual citation of 9.5 citations per year. The next most cited article is "Symptoms of anxiety and depression among Norwegian musicians compared to the general workforce" by Vaag, et al. [22] as of December 24, 2024, this article has been cited 71 times, with an average annual citation of 8.87 citations per year. Both of these highly cited articles have accumulated over 70 citations by December 2024.

**Table 2.**
The most influential articles.

| Author(s) | Document Title | Source | Total citation |
|---|---|---|---|
| Roden, et al. [21] | Does music training enhance working memory performance? Findings from a quasi-experimental longitudinal study | Psychology of music | 95 |
| Vaag, et al. [22] | Symptoms of anxiety and depression among Norwegian musicians compared to the general workforce. | Psychology of music | 71 |
| Castro and Lima [23] | Age and musical expertise influence emotion recognition in music | Music Perception: An Interdisciplinary Journal | 44 |
| Eerola and Eerola [24] | Extended music education enhances the quality of school life | Music education research | 31 |
| Waldron, et al. [25] | A brave new world: theory to practice in participatory culture and music learning and teaching | Music Education Research | 28 |
| Abramo and Austin [26] | The trumpet metaphor: A narrative of a teacher's mid-career pedagogical change from formal to informal learning practices | Research Studies in Music Education | 27 |
| Siljamäki and Kanellopoulos [27] | Mapping visions of improvisation pedagogy in music education research | Research studies in music education | 22 |
| Law and Ho [28] | Music Education and Music Experiences in Hong Kong | Debates-Cadernos do Programa de Pós-Graduação em Música | 21 |
| Rajan [29] | Preschool teachers' use of music in the classroom: A survey of park district preschool programs | Journal of Music Teacher Education | 20 |
| Ho [30] | Music education curriculum and social change: A study of popular music in secondary schools in Beijing, China | Music Education Research | 19 |

*3.2.2. The Most Influential Journals*

This study identified the top 10 most influential journals in the field based on the number of publications. These journals are listed in Table 3, showing the journal sources, number of documents, and the percentage of total publications (609 articles) published in each journal. According to Table 3, there are 7 journals that have published more than 20 articles. Among them, the "International Journal of Music Education" has the largest number of publications, with 68 related articles published, accounting for 11.17% of the total.

**Table 3.**
The most influential journals.

| Sources | Number of documents | % of 609 |
|---|---|---|
| International Journal of Music Education | 68 | 11.17% |
| Music Education Research | 52 | 8.54% |
| Journal of Research in Music Education | 31 | 5.09% |
| Journal of Music Teacher Education | 30 | 4.93% |
| Research Studies in Music Education | 26 | 4.27% |
| Psychology of Music | 26 | 4.27% |
| British Journal of Music Education | 24 | 3.94% |
| Philosophy of Music Education Review | 16 | 2.63% |
| Bulletin of The Council for Research in Music Education | 15 | 2.46% |
| Journal of Historical Research in Music Education | 13 | 2.13% |

The second is "Music Education Research", which has published 52 related articles, accounting for 8.54% of the total. These two journals are the journals with the largest number of publications in this field and have published more than 50 articles until December 2024.

*3.2.3. The Most Influential Organizations*

In this study, the authors identified the top 10 organizations with the largest number of publications among various organizations, listed the number of publications of these organizations and their percentage in the total number in Table 4.

According to Table 4, Hong Kong Baptist University topped the list and is the institution with the most publications in this field, publishing 18 articles, accounting for 2.96% of the total. It was followed by Education University of Hong Kong, which published 15 articles, accounting for 2.46% of the total. It was followed by University of Granada and University of Auckland (9 articles) and University of Valencia (8 articles), followed by University of Michigan, University of Hartford and University of the Arts Helsinki, which published the same number of articles (7 articles), and finally University of Washington and Michigan State University (5 articles).

**Table 4.**
The most influential organizations.

| Organization | Number of documents | % of 609 |
|---|---|---|
| Hong Kong Baptist University | 18 | 2.96% |
| Education University of Hong Kong | 15 | 2.46% |
| University of Granada | 9 | 1.48% |
| University of Auckland | 9 | 1.48% |
| University of Valencia | 8 | 1.31% |
| University of Michigan | 7 | 1.15% |
| University of Hartford | 7 | 1.15% |
| University of the Arts Helsinki | 7 | 1.15% |
| University of Washington | 5 | 0.82% |
| Michigan State University | 5 | 0.82% |

*3.2.4. The Most Influential Countries*

Table 5 showed the top 10 countries with the highest number of publications in the field. Among these countries, USA leads by a wide margin, with 184 publications, accounting for 30.21% of the total. Following is Spain, with 60 publications, which accounts for 9.85% of the total. Close behind is Peoples Republic of China, with 59 publications, which accounts for 9.69% of the total. The United Kingdom published 40 articles, which accounts for 6.57% of the total, while Australia follows with 27 publications, accounting 4.43% of the total.

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**Table 5.**
The most influential countries.

| Countries | Number of documents | % of 609 |
|---|---|---|
| USA | 184 | 30.21% |
| Spain | 60 | 9.85% |
| Peoples Republic of China | 59 | 9.69% |
| England | 40 | 6.57% |
| Australia | 27 | 4.43% |
| Finland | 26 | 4.27% |
| Canada | 24 | 3.94% |
| Germany | 19 | 3.12% |
| Italy | 13 | 2.13% |
| Netherlands | 13 | 2.13% |

Finland has published 26 articles, accounting for 4.27% of the total, while Canada has published 24 articles, accounting 3.94% of the total. Lastly, Germany, Italy, and the Netherlands have published 19(3.12%), 13 (2.13%), and 13 (2.13%) articles respectively. From this, USA is the most influential country in this research field, with the highest number of publications by a significant margin.

*3.3. The Collaborations Among Countries and Organizations in the Field of Music General Education*

In this study, the authors identified the collaboration among countries and organizations based on co-authorship analysis to display the global distribution pattern of research in this field.

*3.3.1. The Collaborations among Countries*

For the countries network analysis, the minimum number of publications and citations per country was set to 5**,** Figure 2 showed the visualization of the country co-authorship network map generated by VOSviewer.

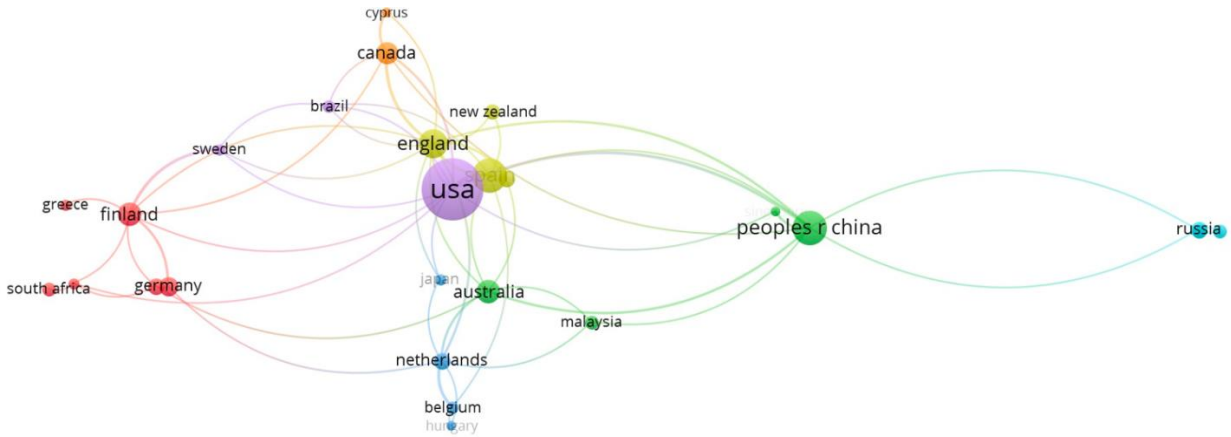


**Figure 2.**
The visualization network of the country co-authorship.

According to Figure 2, a total of 26 countries meets the criteria, which are divided into 7 clusters and 26 items. The first cluster is represented in red (n=6). In this cluster, the largest node is Finland (with 26 publications and a total link strength (TLS) of 11), followed by Germany (with 19 publications and 4 TLS), Greece (with 6 publications and 1 TLS), Israel (with 7 publications and 4 TLS), Norway (with 14 publications and 4 TLS), and South Africa (with 9 publications and 1 TLS).The second cluster (n=4) is represented in green and includes Australia (with 27 publications and 9 TLS), Malaysia (with 9 publications and 3 TLS), Peoples Republic of China (with 59 publications and 14 TLS), and Singapore (with 5 publications and 3 TLS). The largest node in this group is Peoples Republic of China. The third

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cluster (n=4) is shown in blue and represents collaborations between Belgium (with 8 publications and 5 TLS), Hungary (with 5 publications and 2 TLS), Japan (with 7 publications and 3 TLS), and Netherlands (with 13 publications and 11 TLS), the largest node in this group is the Netherlands.

The fourth cluster (n=4) is represented in yellow and shows collaborations between England (with 40 publications and 20 TLS), Italy (with 13 publications and 9 TLS), New Zealand (with 12 publications and 2 TLS), and Spain (with 60 publications and 14 TLS), the largest node in this group is Spain. The fifth cluster (n=3) is represented in purple and includes Brazil (with 8 publications and 5 TLS), Sweden (with 7 publications and 6 TLS), and USA (with 184 publications and 18 TLS), where the USA is the largest node in this group.

The Ocean Blue group (n=3) includes Romania (with 9 publications and 2 TLS), Russia (with 13 publications and 3 TLS), and Ukraine (with 9 publications and 3 TLS). In this group, Russia is the largest node.Finally, the Orange cluster (n=2) includes Canada (with 24 publications and 10 TLS) and Cyprus (with 5 publications and 3 TLS), with Canada being the largest node in this group.

From the visualization map, it is clear that the USA, Finland, Peoples Republic of China, Netherlands, Spain, Russia, and Canada are the largest nodes in these clusters, this aligns with the findings from the previous analysis of the top 10 countries with the highest publication volumes. Therefore, it can be concluded that these countries are leading and authoritative in research within this field.

*3.3.2. The Collaborations among Organizations*

In this study, the minimum number of publications and citations for each organization was set to 3, resulting in a total of 664 organizations, of which 60 met the criteria. However, since some of the qualifying organizations were not connected to one another, ultimately, the relationships between the organizations were divided into 3 clusters with 11 items. Figure 3 presents the visualization of the co-authorship network map between organizations, generated by VOSviewer.


**Figure 3.**
The visualization network of the organization co-authorship.

Based on Figure 3, the first cluster, represented in red, consists of four organizations: Arizona State University (with 5 publications and 3 TLS), University of the Arts (with 3 publications and 3 TLS), University of the Arts Helsinki (with 7 publications and 4 TLS), University of Oulu (with 3 publications and 2 TLS).In this cluster, the largest node is University of the Arts Helsinki.

The second cluster, represented in green, includes four organizations: Northwestern University (with 3 publications and 4 TLS), SUNY Buffalo (with 3 publications and 4 TLS), University of Granada (with 9 publications and 1 TLS), University of Washington (with 5 publications and 4 TLS). In this cluster, the largest node is University of Granada.

The third cluster, represented in blue, consists of three organizations: University of Helsinki (with 5 publications and 4 TLS), University of Jyväskylä (with 4 publications and 2 TLS), University of Lapland (with 3 publications and 3 TLS). In this cluster, the largest node is University of Helsinki.

Therefore, the analysis of the visualization map indicates that there is a strong collaboration between University of the Arts Helsinki, University of Granada, and University of Helsinki. The cooperation among these three organizations aligns with research findings that show Spain and Finland as leading countries. This reflects the academic sharing and collaboration of European countries in this field.

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*3.4. The Research Hotpots and Thematic Evolution Pathways Within the Field of Music General Education Between 2014-2024*

Constructing a keyword co-occurrence knowledge map and identifying the most used keywords can reveal the research hotspots, form new research themes, and provide valuable reference and guidance for future studies in the field.

*3.4.1. The Research Hotpots*

In this study, the minimum threshold for the frequency of each keyword was set to 5, resulting in a total of 2005 keywords, of which 42 keywords met the criteria and the keyword co-occurrence visualization network map for this study is shown in Figure 4.

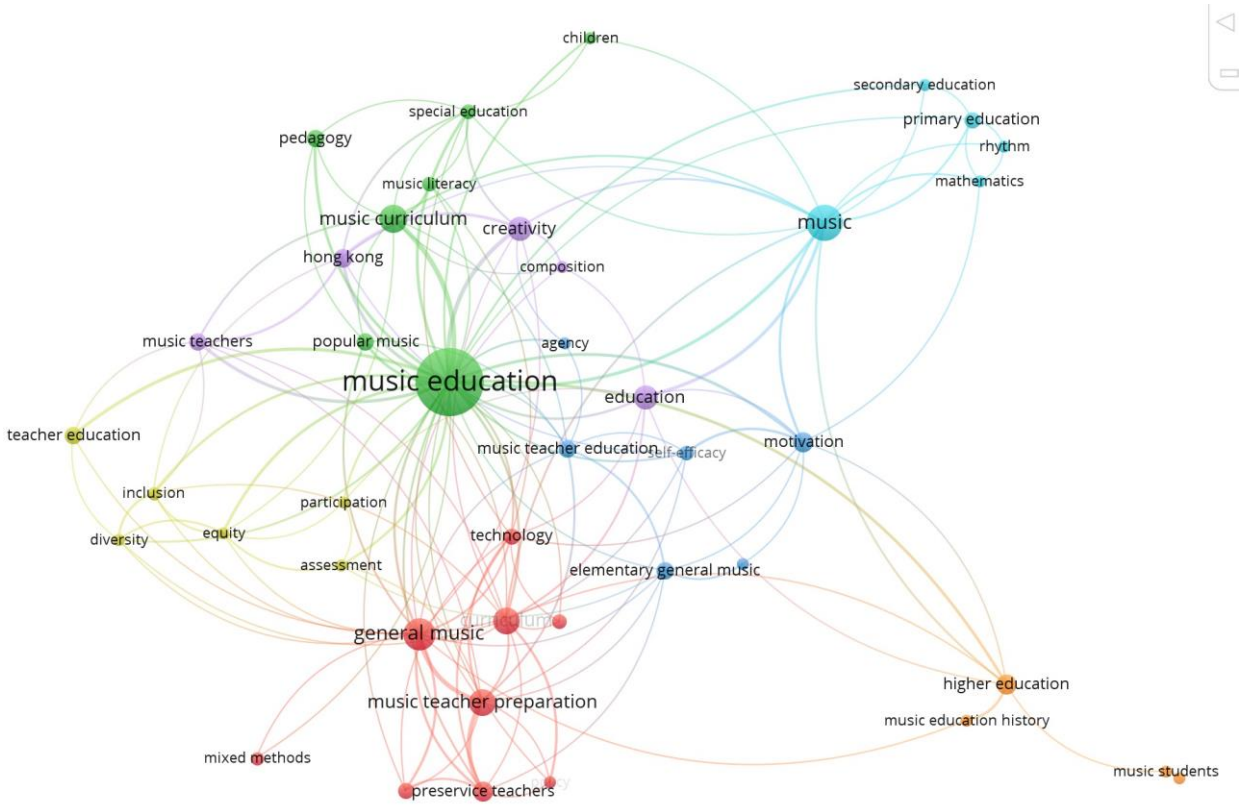


**Figure 4.**
Keyword co-occurrence network visualization.

Based on Figure 4, the keyword co-occurrence network in this study is divided into 7 clusters. According to the highest nodes in each group, the most commonly used keywords in this field are: music education (green cluster) ,music(ocean blue cluster),motivation (blue cluster) ,higher education (orange cluster), general music (red cluster), teacher education(yellow cluster),creativity(purple cluster).

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**Table 6.**
Most frequently used keywords.

| Authors' keywords | Occurrences | TLS |
|---|---|---|
| Music Education | 135 | 103 |
| Music | 40 | 30 |
| General Music | 30 | 34 |
| Music Curriculum | 23 | 24 |
| Music Teacher Preparation | 22 | 32 |
| Curriculum | 22 | 21 |
| Creativity | 18 | 21 |
| Education | 17 | 15 |
| Higher Education | 13 | 13 |
| Motivation | 12 | 16 |

Table 6 shows the occurrence frequency and TLS of the most frequently used keywords. According to Table 6, the most frequently used keyword is "music education", with an occurrence frequency of 135 and a TLS of 103. The second most frequently used keyword is "music" (40 occ, 30TLS). It is followed by "general music" (30occ, 34TLS), "music curriculum" (23occ, 24TLS), "music teacher preparation" (22occ, 32TLS), "curriculum" (22occ, 21TLS), "creativity" (18occ, 21TLS), "education" (17occ, 15TLS), "higher education" (13occ, 13TLS), "motivation" (12occ, 16TLS).

*3.4.2. The Thematic Evolution Pathways*

Figure 5 illustrates the thematic evolution pathways of the research field based on keyword trends from 2018 to 2023, revealing the thematic development over the past five years.

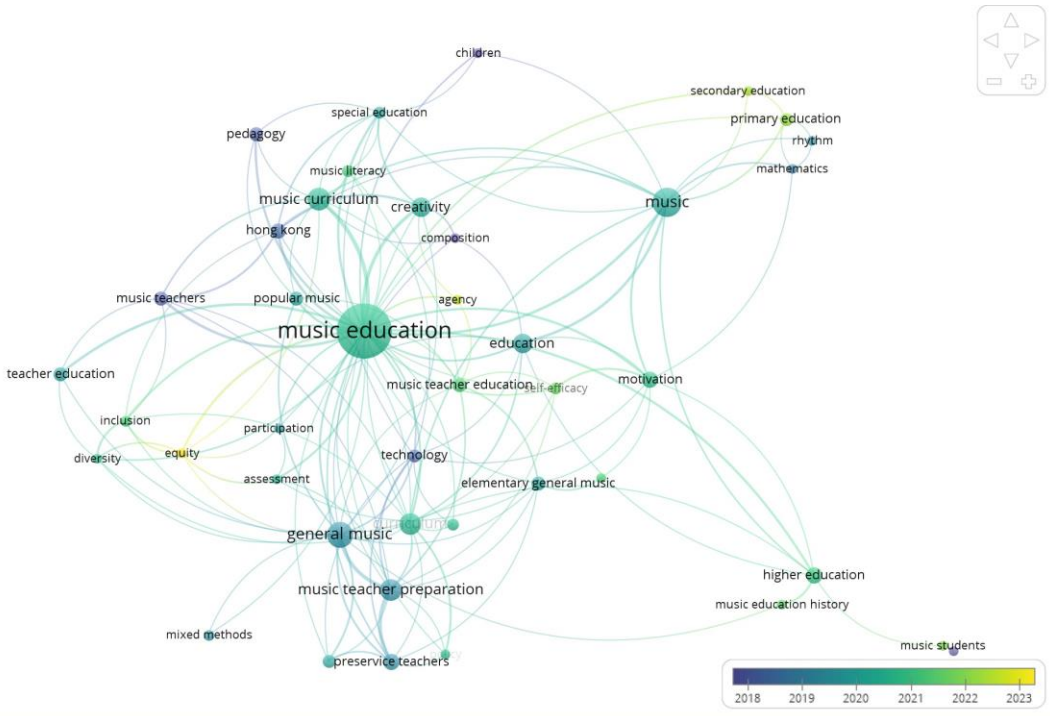


**Figure 5.**
Network mapping of trending topics based on co-keyword.

As shown in Figure 5, the thematic development in this research field from 2018 to 2020 shifted from keywords like "pedagogy," "Hong Kong," "music teachers," "popular music," and "technology"

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towards a focus on "music," "general music," "music teacher preparation," and "education". After 2020, the research field gradually shifted from themes such as "music education," "higher education," "diversity," "music curriculum," "creativity," and "motivation" towards the development of themes including "music literacy," "inclusion," "music teacher education," "self-efficacy," "equity," "agency," "secondary education," and "primary education."

"Music education" and "music" have consistently been the two most frequently used and prominent keywords, underscoring the central role of music and music education in the field. These keywords reflect the core aim of music general education, which is to emphasize the functional and distinctive qualities of music. The topic evolution map clearly indicates that the theme "Hong Kong" aligns with the findings of the organizations that published the most in this area, reinforcing the geographical relevance of this research. Over the past five years, the field's research focus has shifted from broader topics such as music teaching methods, curricula, and teacher preparation, toward more specific and contemporary themes like creativity and self-efficacy. This transition shows that researchers are increasingly focusing on more detailed and nuanced aspects of the field, signaling a shift from general education themes to more specialized topics. Moreover, this trend reflects a broader expansion of research, not only focusing on higher education but also extending to primary and secondary education.

## 4. Conclusion

This study explored and revealed the research and trends related to music general education through bibliometric analysis, based on 609 publications selected from the Web of Science database.

According to the findings, the number of publications in this field has been continuously increasing from 2014 to 2024, with a particularly sharp rise in the number of publications in 2021. From 2021 to 2024, the number of publications accounted for more than 50% of the total publications over the past decade. This indicates a growing interest in the field, with an increasing number of scholars and researchers becoming engaged in music general education.

The research findings indicate that, in addition to focusing on teaching methods and the role of music education, future research in this field should aim to further concretize emerging research themes. Scholars should expand the scope of their studies, giving more attention to the potential of new and evolving topics such as "motivation," "music literacy," "self-efficacy," and "equity." These emerging areas present significant opportunities for further exploration and should be prioritized in future research. Additionally, there is a need to extend the focus beyond higher education and broaden the research scope to include secondary and primary education. Emphasizing the importance of music education in basic education is crucial.

Furthermore, to accelerate and enhance the development of academic research in this field, it is essential to strengthen collaboration and exchange between academic organizations and countries. Particularly, universities in Hong Kong, which have been identified as major contributors to the field, should increase their collaboration with academic organizations in countries like the United States, Spain, and Finland. This will help increase the number of publications and their citation value and ensure that academic influence and the number of academic publications grow simultaneously.

## Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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## References
[1] G. Song and L. Wang, "The significance and role of general music education in the cultivation of innovative talents in colleges and universities," *Journal of Anhui Institute of Science and Technology*, vol. 2, pp. 84–88, 2019. https://doi.org/10.19608/j.cnki.1673-8772.2017.0633

[2] J. Huang, "Research on the development trend of music education in university general education," *Northern Lights*, vol. 12, pp. 53-54, 2019.

[3] E. Varner, "SEL, mindfulness, and the art of general music education," *Journal of General Music Education*, vol. 36, no. 2, pp. 34-37, 2023.

[4] T. Wang, "Research on music education in the perspective of general education," *Drama House*, vol. 2, pp. 108–112, 2018.

[5] A. Odendaal, O.-T. Kankkunen, H. M. Nikkanen, and L. Vakeva, "What's with the K? Exploring the implications of Christopher Small's 'musicking' for general music education," *Music Education Research*, vol. 16, no. 2, pp. 162-175, 2014. https://doi.org/10.1080/14613808.2013.859661

[6] L. Kestenberg, *Comprehensive plan for the promotion of music education in schools and adult education*. Berlin: Preußisches Ministerium für Wissenschaft, Kunst und Volksbildung, 1921.

[7] Á. Mike, "The reform of leo kestenberg–kodály parallels in the german music education of the 20th century," *Studia Universitatis Babes-Bolyai-Musica*, vol. 68, no. 1, pp. 101-110, 2023.

[8] Y. Zheng, "Exploration of music general education program in colleges and universities based on aesthetic and humanistic literacy," *Exploration of Higher Education*, vol. 6, pp. 60-64, 2022.

[9] S. Yang, "Development trend of the times: The intermingling of science and humanities," *Guangzhou Vocational Education Forum*, vol. 6, pp. 1–5, 2012.

[10] C. Zhou and C. Yang, "The current situation and thinking of music education in polytechnic University," *Northern Music*, vol. 9, pp. 145-146, 2019.

[11] J. Lasauskiene and Y. Sun, "Challenges and visions in school music education: Focusing on Chinese and Lithuanian realities," *New Trends and Issues Proceedings on Humanities and Social Sciences*, vol. 6, no. 1, pp. 38-46, 2019. https://doi.org/10.18844/prosoc.v6i1.4153

[12] I. Senjan, "Music education in Croatian general secondary education," *Metodički Ogledi: Casopis za Filozofiju Odgoja*, vol. 24, no. 1, pp. 31-72, 2017. https://doi.org/10.21464/mo45.124.3172

[13] H. Li, "The cultivation of innovation ability in general music education of college and university students," presented at the International Conference on Economics, Social Science, Arts, Education and Management Engineering (ESSAEME 2017), 2017.

[14] N. Donthu, S. Kumar, D. Mukherjee, N. Pandey, and W. M. Lim, "How to conduct a bibliometric analysis: An overview and guidelines," *Journal of Business Research*, vol. 133, pp. 285-296, 2021. https://doi.org/10.1016/j.jbusres.2021.04.070

[15] I. Passas, "Bibliometric analysis: The main steps," *Encyclopedia*, vol. 4, no. 2, pp. 1014-1025, 2024. https://doi.org/10.3390/encyclopedia4020065

[16] C. Huang, C. Yang, S. Wang, W. Wu, J. Su, and C. Liang, "Evolution of topics in education research: A systematic review using bibliometric analysis," *Educational Review*, vol. 72, no. 3, pp. 281-297, 2020. https://doi.org/10.1080/00131911.2019.1566212

[17] J. P. Tennant, "Web of science and scopus are not global databases of knowledge," *European Science Editing*, vol. 46, p. e51987, 2020. https://doi.org/10.3897/ese.2020.e51987

[18] H. Arruda, E. R. Silva, M. Lessa, D. Proenca Jr, and R. Bartholo, "Resource review," *Journal of the Medical Library Association*, vol. 110, no. 3, pp. 392-395, 2022. https://doi.org/10.5195/jmla.2022.1434

[19] N. J. Van Eck and L. Waltman, "Software survey: VOSviewer, a computer program for bibliometric mapping," *Scientometrics*, vol. 84, no. 2, pp. 523-538, 2010. https://doi.org/10.1007/s11192-009-0146-3

[20] U. A. Bukar, M. S. Sayeed, S. F. A. Razak, S. Yogarayan, O. A. Amodu, and R. A. R. Mahmood, "A method for analyzing text using VOSviewer," *MethodsX*, vol. 11, p. 102339, 2023. https://doi.org/10.1016/j.mex.2023.102339

[21] I. Roden, D. Grube, S. Bongard, and G. Kreutz, "Does music training enhance working memory performance? Findings from a quasi-experimental longitudinal study," *Psychology of Music*, vol. 42, no. 2, pp. 284-298, 2013. https://doi.org/10.1177/0305735612471239

[22] J. Vaag, J. H. Bjørngaard, and O. Bjerkeset, "Symptoms of anxiety and depression among Norwegian musicians compared to the general workforce," *Psychology of Music*, vol. 44, no. 2, pp. 234-248, 2015. https://doi.org/10.1177/0305735614564910

[23] S. L. Castro and C. F. Lima, "Age and musical expertise influence emotion recognition in music," *Music Perception: An Interdisciplinary Journal*, vol. 32, no. 2, pp. 125-142, 2014. https://doi.org/10.1525/mp.2014.32.2.125

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[24] P.-S. Eerola and T. Eerola, "Extended music education enhances the quality of school life," *Music Education Research*, vol. 16, no. 1, pp. 88-104, 2014. https://doi.org/10.1080/14613808.2013.829428

[25] J. Waldron, R. Mantie, H. Partti, and E. S. Tobias, "A brave new world: Theory to practice in participatory culture and music learning and teaching," *Music Education Research*, vol. 20, no. 3, pp. 289-304, 2018. https://doi.org/10.1080/14613808.2017.1339027

[26] J. M. Abramo and S. C. Austin, "The trumpet metaphor: A narrative of a teacher's mid-career pedagogical change from formal to informal learning practices," *Research Studies in Music Education*, vol. 36, no. 1, pp. 57-73, 2014. https://doi.org/10.1177/1321103X14528454

[27] E. Siljamäki and P. A. Kanellopoulos, "Mapping visions of improvisation pedagogy in music education research," *Research Studies in Music Education*, vol. 42, no. 1, pp. 113-139, 2019. https://doi.org/10.1177/1321103X19843003

[28] W. W. Law and W. C. Ho, "Music education and music experiences in Hong Kong," *Debates – Cadernos do Programa de Pós-Graduação em Música*, vol. 13, pp. 103–114, 2014.

[29] R. S. Rajan, "Preschool teachers' use of music in the classroom: A survey of park district preschool programs," *Journal of Music Teacher Education*, vol. 27, no. 1, pp. 89-102, 2017. https://doi.org/10.1177/1057083717716687

[30] W.-C. Ho, "Music education curriculum and social change: A study of popular music in secondary schools in Beijing, China," *Music Education Research*, vol. 16, no. 3, pp. 267-289, 2014. https://doi.org/10.1080/14613808.2014.910182

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