

# Research of state-of-art in education, music and musical education in Brazil

## Abstract

This text presents the partial results of doctoral research that aims to build the state of art of scientific production in music education in Brazil. In this article, we present data referring to a review of the research already developed on the state of the art of scientific knowledge in the areas of Education, Music and Music Education in Brazil. Initially, we set out the main references of each of these three areas and later, draw a parallel between them, to understand the methodological aspects inherent to this type of research, especially the definitions of literature review, research review, systematic review, meta-analysis, and qualitative research synthesis.

**Keywords:** research, state-of-art, musical education

Volume 5 Issue 2 - 2023

**Eliton Perpetuo Rosa Pereira**

University of Santiago de Compostela, Spain

**Correspondence:** Eliton Perpetuo Rosa Pereira, University of Santiago de Compostela, Spain, Email [elitonpereir@gmail.com](mailto:elitonpereir@gmail.com)

**Received:** April 24, 2023 | **Published:** May 11, 2023

## Introduction

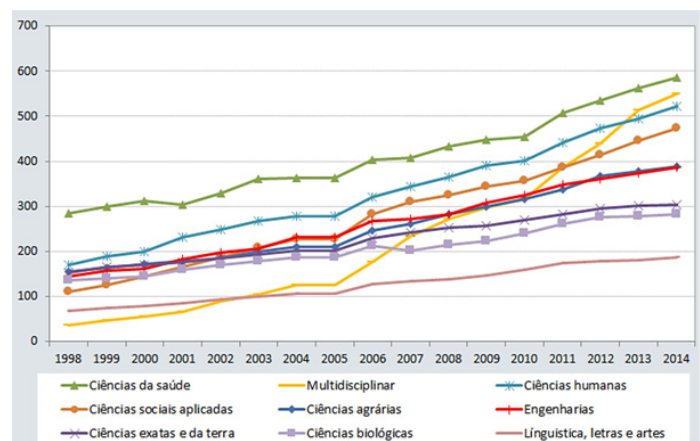
In the context of a larger research, we aim to raise the State-of-art of scientific production in music education in Brazil. For this, we need to know the productions already done with this same purpose, which leads us to present here a review of the research that is configured as 'State-of-Art' research. Our focus is on research related to music education as an area that identifies with education and music.<sup>1</sup> The following text presents a panorama based on the revision of the scientific literature, presenting the already developed studies on State-of-art or State of Knowledge in the research in Education, in Music and in Music Education. We classify the authors by areas and highlight the way each area develops analyzes of its scientific production and brings elements of contribution to the related areas. We identify and differentiate the objectives, methodological aspects, and categories of analysis used by the researchers of each area in this type of research. We present and compare some methodological contributions used in these areas of knowledge to carry out State-of-the-Art research. This, in the context of the meta-analysis, literature review and systematic review, what time have the purpose of analyzing quantitative data, qualitative time, thus seeking to bring light to this intricate methodological context, not always clarified in the academic papers.<sup>2</sup>

## Theoretical references

The area of Education stands out from Musicology and Music Education since it is the area that has been developing academic research for a long time. The area has a larger quantity of scientific production and, consequently, was one of the first, in the twentieth century, to develop studies to review scientific production. In this sense, we consider the data of the Ministry of Science and Technology of Brazil, which show, in chart 1, the growth of post-graduate programs by major area of knowledge, from 1998 to 2014. In this graph, it is possible to observe that the large area, which is linked to Education, Human Sciences, has grown much more than the area to which Music is linked: Linguistics, Literature, and Arts. However, as you can see in Figure 1, both areas in 15 years have more than doubled their programs.<sup>3-9</sup>

With regard to Master's and Ph.D. programs in Arts/Music, it is possible to check with the Ministry of Education's website that 52 academic masters courses, 7 professional master's degrees, and 28

Ph.D. courses in Arts/Music, totaling 87 postgraduate in Arts/Music in Brazil. Table 1 below shows that we currently have 19 institutions offering masters and 10 courses in which doctoral researches are developed in the field of music education.<sup>10</sup>



**Figure 1** Growth of postgraduate programs, by major area, from 1998 to 2014 – Brazil.

**Source:** Ministry of Science and Technology

In Education in Brazil, we currently have 74 doctoral courses, 175 master's degrees, totaling 249 courses in Brazil.<sup>11-18</sup> According to Fernandes,<sup>19</sup> the majority of researches in music education are developed in graduate programs in Education or Arts / Music. In this sense, we present here some national surveys of the State-of-art type, in the areas of Education, Music and Music Education. In Table 2 we present a classification of authors who develop State-of-art research on scientific production in music in Brazil.<sup>20</sup>

The studies of State-of-art in music education research in Brazil, to which we had access, were presented in Table 3, classified by general objective, which in the case may be by a survey of original data, analysis by periodical or by subject and contextual reflections based on previous studies.<sup>21-26</sup>

Table 4, below, exemplifies authors who have developed State-of-art research on scientific production in education in Brazil.<sup>27</sup>

**Table 1** Masters and PhDs in Arts / Music with research in Music Education (until June 2017)

Universities	Acronyms	Official sites
University of São Paulo	USP	<a href="http://www3.eca.usp.br/pos/ppgmus">http://www3.eca.usp.br/pos/ppgmus</a>
State of Campinas	UNICAMP	<a href="http://www.iar.unicamp.br/pos-graduacao-em-musica">http://www.iar.unicamp.br/pos-graduacao-em-musica</a>
State Paulista Júlio de Mesquita Filho	UNESP	<a href="http://www.ia.unesp.br/#!/pos-graduacao/stricto---musica">http://www.ia.unesp.br/#!/pos-graduacao/stricto---musica</a>
State of Rio de Janeiro	UNIRIO	<a href="http://200.156.25.90/posmusica">http://200.156.25.90/posmusica</a>
Federal of Rio de Janeiro	UFRJ	<a href="http://ppgm.musica.ufrj.br">http://ppgm.musica.ufrj.br</a>
Federal of Rio Grande of Sul	UFRGS	<a href="http://www.ufrgs.br/ppgmusica">http://www.ufrgs.br/ppgmusica</a>
Federal of Bahia	UFBA	<a href="http://www2.ppgmus.ufba.br">http://www2.ppgmus.ufba.br</a>
Federal of Paraíba	UFPB	<a href="http://www.ccta.ufpb.br/ppgm">http://www.ccta.ufpb.br/ppgm</a>
Federal of Minas Gerais	UFMG	<a href="http://www.musica.ufmg.br/ppgmus">http://www.musica.ufmg.br/ppgmus</a>
Federal of Paraná	UFPR	<a href="http://www.ppgmusica.ufpr.br/">http://www.ppgmusica.ufpr.br/</a>
Federal of Goiás	UFG	<a href="http://mestrado.emac.ufg.br">http://mestrado.emac.ufg.br</a>
Federal of Uberlândia	UFU	<a href="http://www.ppga.iarte.ufu.br">http://www.ppga.iarte.ufu.br</a>
Federal of Rio Grande of Norte	UFRGN	<a href="https://sigaa.ufrn.br/sigaa/public/programa/portal.jsf?lc=pt_BR&amp;id=7261">https://sigaa.ufrn.br/sigaa/public/programa/portal.jsf?lc=pt_BR&amp;id=7261</a>
Federal de Pernambuco	UFPE	<a href="https://www.ufpe.br/musica">https://www.ufpe.br/musica</a>
Federal of Brasília	UNB	<a href="http://www.ida.unb.br/musica">http://www.ida.unb.br/musica</a>
State of Santa Catarina	UDESC	<a href="http://www.ceart.udesc.br/ppgmus">http://www.ceart.udesc.br/ppgmus</a>
Federal of São Carlos	UFSCar	<a href="http://www.ppgis.ufscar.br">http://www.ppgis.ufscar.br</a>
Federal of Pará	UFPA	<a href="http://ppgartes.propesp.ufpa.br">http://ppgartes.propesp.ufpa.br</a>
State of Amazonas	UEA	<a href="http://www.pos.uea.edu.br/letraseartes">http://www.pos.uea.edu.br/letraseartes</a>

**Source:** Sites indicated and Platform Sucupira: <https://sucupira.capes.gov.br/sucupira>.

**Table 2** State-of-art on scientific production in music

Broad search with data	Research in a specific subject or specific location
Zille <sup>70</sup>	Barros <sup>5</sup>
Tomás <sup>64</sup>	Nascimento <sup>43</sup>
Ulhoa <sup>65</sup>	Kerr, Carvalho <sup>33</sup>

**Source:** Prepared by the author.

**Table 3** State-of-art on scientific production in music education

Wide area analysis with data collection	In a specific theme or in specific periodicals	Wide analysis and contextualization from a study already carried out
Araújo, Toscano <sup>3</sup>	By Journal (ABEM)	By Topic
Fernandes <sup>21</sup>	Campos <sup>10</sup>	Cerqueira <sup>12</sup>
Fernandes <sup>22</sup>	Del-Ben <sup>19</sup>	Pires, Dalben <sup>47</sup>
Fernandes <sup>23</sup>	Galizia, Lima <sup>29</sup>	Fernandes, Coutinho
Fernandes <sup>24</sup>	Mateiro, Vechi, Egg <sup>41</sup>	Ida
		Niéri <sup>45</sup>
		Vieira <sup>67</sup>
		Santos <sup>60</sup>
		Del-Ben <sup>17</sup>
		Del-Ben <sup>18</sup>
		Del-Ben, Souza <sup>19</sup>
		Figueiredo <sup>28</sup>

**Source:** Prepared by the author.

**Table 4** State-of-art on scientific production in education

Broad search with data	Research on specific themes	Sociological or epistemic approaches
Magalhães, Souza <sup>38</sup>	André <sup>1</sup>	André, Simões, Carvalho, Brzezinski <sup>1</sup>
Magalhães <sup>37</sup>	Canen, Arbache, Franco <sup>11</sup>	Calderón, Ferreira <sup>9</sup>
Santos <sup>60</sup>	Fernandes <sup>21</sup>	Lamar <sup>35</sup>
Segenreich, Freitas <sup>61</sup>	Pimenta <sup>47</sup>	Nevado, Fagundes, Basso <sup>44</sup>
Search in specific location	Search in specific journal	Sacardo <sup>54</sup>
Coelho <sup>13</sup>	Bittar, Silva, Hayashi <sup>6</sup>	Sánchez Gamboa <sup>57</sup>
Kauchake <sup>32</sup>	Ramos <sup>51</sup>	Sánchez Gamboa <sup>58</sup>
Mendes, Silva <sup>42</sup>	Santana <sup>59</sup>	Silva <sup>55</sup>
Sánchez Gamboa <sup>56</sup>		

**Source:** Prepared by the author.

## Methodology

This study is based on a systematic literature review.<sup>28</sup> We also use here techniques of content analysis, based on the methodological indications of Bardin<sup>29</sup> that guides the work of analysis by classification and categorization. Although we identify this study as a systematic review of the literature, it is verified that the national publications on methodology do not present a clear systematization on this type of research identification and generalize the work of literature review to construct the theoretical framework.<sup>30</sup> In this sense, we intend to reflect on this methodological question, based on the international literature on research methodology.<sup>31–49</sup> Based on these authors we arrive at the most used expressions related to the studies identified as State-of-art, organized in Table 5, below.

We start from the simplest to the most complex, to reveal how literature review research has evolved, where we first have the non-systematic literature review; the systematic review; the meta-analysis and the qualitative synthesis of research. We thus punctuate the main procedures indicated by the authors. Initially the non-systematic review of literature, which is a thematic choice of the researcher, being arbitrary and usually with a subjective trait, also called narrative literature review.<sup>50</sup> The systematic review of literature can be labeled differently: literature review, research review, systematic review, research synthesis, and meta-analysis. Some of these terms are interchangeable, while others have broader or narrower meanings, but the more comprehensive term is the literature review.

In these typologies of studies, most categories of analysis are easily identified. Literature reviews can focus on research results, research methods, theories, or research applications for real-world problems. According to Cooper,<sup>51</sup> the literature review is indicated where the reviewer hopes to present the theories offered to explain a particular phenomenon and to compare them in the works. The comparisons will examine the breadth of the theories, internal consistency, and the nature of their predictions. Cooper<sup>52</sup> creates a taxonomy for the systematic review of the literature described in Table 6 below. In this context of the research of systematic review of literature, the concept of Bibliographic or Bibliographic / Documentary research appears. Some authors will bring together these two approaches and others will argue that documentary research refers only to documents that have not been processed - unlike scientific works: articles, dissertations, and theses. In this sense, the work of Volpato,<sup>53</sup> by Sá-Silva, Almeida and Guindani<sup>54</sup> and the work of Pizanni et al.,<sup>55</sup> review these typologies of studies and explain that although there is disagreement in relation to conceptualization, the treatment of information is similar. In this context of the research of systematic review of literature, the concept of Bibliographic or Bibliographic / Documentary research appears. Some authors will bring together these two approaches and others will argue that documentary research refers only to documents that have not been processed - unlike scientific works: articles, dissertations and theses. In this sense, the work of Volpato,<sup>56</sup> by Sá-Silva, Almeida and Guindani<sup>57,58</sup> and the work of Pizanni et al.,<sup>59</sup> review these typologies of studies and explain that although there is disagreement in relation to conceptualization, the treatment of information is similar.

**Table 5** Methodological complexity of the types of literature reviews

Type / Trend	Methodology	Procedures	Goals
Narrative literature review	Bibliographical or bibliographic / documentary study	Exploratory, Descriptive, Analytical.	Theoretical Framework: Define categories.
A systematic review of the literature	State-of-art; or	Meta-Analysis Quantitative Approach	Bibliometrics Measure, compare and infer trends
	State of Knowledge.	QUALITATIVE RESEARCH SYNTHESIS	Discourse Analysis, Content Understanding concepts, positioning and inferring trends

**Source:** Prepared by the author.

**Table 6** Taxonomy of literature review

Feature	Categories	Feature	Categories
Focus	Search results Research Methods Theories Practice or application	Roof	Exhaustive of all studies Exhaustive with selective citation Representative citations Central or main quote
Goal	Integration Generalization Conflict Resolution Linguistic bridge construction Criticism Central Issue Identification	Organization	Historical Conceptual Methodological
Perspective	Neutral Representation Positioning display	Public	Academic Specialists General Students Policy Managers and Executors General public

**Source:** Cooper.<sup>14</sup>

In analyzing several works developed on the State-of-art, Ferreira<sup>60</sup> questions whether it would be possible to interrogate the history of academic production in a certain area of knowledge by choosing only to read bibliographic data and abstracts. The author criticizes studies based on the lists of institutional catalogs taking the productions as a documentary source. Thus, this type of analysis would be insufficient for a mapping of academic production in research. For the author, it is necessary to create a network formed by different links of categories linked from the same material medium, whose analysis must be “by the theoretical option manifest, by the theme that announces, by the explicit purpose of the research, by the methodological procedure adopted by the researcher”.<sup>61</sup> For Romanowski<sup>62</sup> State-of-art, in the field of education, seek the constitution of the theoretical field of an area of knowledge, because they seek to understand how the production of knowledge occurs in a given area. They examine topics covered in the research, methodologies used, theoretical references, the relationship between research and pedagogical practice. For the author, this type of research usual in the American scientific literature is little known among researchers in Brazil. The term state of the art results from a literal translation of English, and, according to the author, aims to carry out surveys of what is known about a certain subject based on research conducted in a given area.<sup>63</sup>

The work of Vosgerau and Romanowski<sup>64</sup> presents a very thorough analysis of the types of studies involved in State-of-the-art research. The authors highlight nomenclatures, identifications and methodological procedures based on examples of concrete research. However, although they cite the typologies of systematic reviews, they suggest that the whole framework is clustered on the axis entitled: review studies. On the other hand, it is verified that the systematic reviews of literature depend on deepening in quantitative and qualitative treatments of the data coming from the “bibliographic documents” in question. Borenstein<sup>65</sup> explains that systematic reviews began in the mid-1980s and took root in the 1990s, where researchers departed from the narrative review and adopted systematic analyzes and meta-analyses. For systematic reviews, a clear set of rules are used to collect studies and then to determine which elements will be included or excluded from the analysis. A key element in most systematic reviews is the statistical synthesis of data, meta-analysis. In contrast to the narrative review, where the reviewers implicitly attribute some level of importance to each study, in the meta-analysis, the weights assigned to each study are based on specified mathematical

criteria.<sup>66</sup> Although reviewers and readers may still disagree on the substantial significance of results, the statistical analysis provides a transparent, objective, and replicable framework.<sup>67</sup> The meta-analysis is offered as a method or even a paradigm, from which the researcher takes a new approach when gathering results and conclusions from others. It is distinguished from the usual bibliographical review, common in scientific activity, because quantitative techniques assume a prominent place in it.<sup>68</sup>

On the other hand, the synthesis of qualitative research, according to Cooper is intended to replace the previous documents that were lost sight of and to direct future research. For the author:

Research syntheses focus on the results of empirical research and aim to integrate past research by drawing general conclusions (generalizations) from several separate investigations that address identical or related hypotheses. The purpose of the research synthesizer is to present the state of knowledge about the relationship (s) of interest and highlight important questions that the research left unsolved.<sup>69</sup>

At its most essential level, the synthesis of qualitative research is an approach that uses qualitative methods to analyze, synthesize and interpret the results of qualitative studies. According to Major & Savin-Baden<sup>70</sup> the qualitative synthesis has the following advantages: It provides a way of dealing with the explosion of scientific information; Helps researchers avoid reinventing the wheel; Makes connections between existing studies; It complements primary empirical studies or existing syntheses; It provides a different perspective on a given phenomenon; Provides a way to advance theory; Helps identify gaps and omissions in a particular body of research; It allows dialogue and debate; It allows the development of practices and policies based on evidence; Provides a cost-effective approach to qualitative research.

## Discussion and results

We have developed a timely analysis of cutting-edge research in these three areas: music, education and music education. Tables 7–9 below, show the expressions taken from abstracts and texts searched State-of-art investigations. Through this work of codifying texts and selecting expressions and terminologies, we arrive at an interpretation of how each area develops, conceives this type of research here still in an exploratory way. We consider the objectives, methodological aspects and categories of analysis worked on in these investigations.

**Table 7** Content analysis of state-of-art in music

	Goals	Methodological / Practical aspects	Analysis of categories
Music	Directions, Dimensions, Balance, Perspectives, Characterization, Territorial delimitation, Diagnosis of intellectual production; Production in the area; Provide a catalog; Analytical descriptive inventory; Aiming trends and problems; Publicize the surveys; To train undergraduate and graduate students; Reflection of a specific field;	Cataloging; Ranking; Identification of bibliographic data; Survey of quantitative data; Review parameters to extract information; Interpretive sketch of production; Elaboration of tables; Brief institutional history; Organization of the whole;	Number of works; Periods; Database; Newspaper; Title; Author; Institutional affiliation; Town / Region; Abstracts; Keywords; Thematic; Classification by area; Approaches used in a subarea; Bibliographic references; Research methodology; Type of vehicle and occurrence;

**Source:** Prepared by the author.



**Table 8** Content analysis of State-of-art in Music Education

	Goals	Methodological / Practical aspects	Analysis of categories
Musical education	Survey; Survey of articles; Outline the area; Production characterization; Deepening the theoretical discussion; Reflection of the research about itself; Present the situation of the field; Description; To compare the production of postgraduate courses; Field situation; Map the literature; Understand trends; State of art; Map the field; Internal evaluation; Policies for research; Interest of researchers; Referential for consultation;	Selection of subthemes; Abstract; Categorization; Catalog; Metric studies; Document Analysis; Textual analysis; Reading protocol; Listing; Ranking; Statistical / Catalytic Method; Sort categories; Reflections, Comparisons; Analyzes; Map thematic trends; Organization; Theoretical-bibliographic study; Critical analysis; Qualitative research of bibliographic character; Database; Reading summaries;	Problems; Concept (pedagogical ideology); Number; Volume; Thematic; Subjects; Epistemology of the area; Ways of thinking; Scientific speeches; Pedagogical discourses; Author; Title; Date of defense; Advisor; Themes in the Newspaper; Sources; Pedagogical aspects; Technical and theoretical research construction; Variability of the field; Different visions; Research object; Critical points of the area; Condition of research development.

**Source:** Prepared by the author.

**Table 9** Content analysis of state-of-art in education

	Goals	Methodological / Practical aspects	Analysis of categories
Education	Review of investigations; State of knowledge; State of art; Integrative synthesis; Researches that study research; Determine the object of study of the area; To know all the studies; Quantitative and qualitative growth and dissemination; Individual publication index; Aim theoretical clues; Emergence of a theme in a specific context; Detect emphases, silences and potentialities; Aiming trends; Suggest perspectives; Evaluate production; Thesis impact on the production of articles; Produce indicators of scientific production; Indicators of research quality; Constitution of the scientific field of the area; Evolution of knowledge production; Epistemological vigilance; Create indicators of the epistemological matrix;	Survey of documents; Comprehensive tracking; Nuclear thematic; Literature review; Monitoring the growth of the area; Percentage; Temporal distribution; Integrative synthesis; Bibliometria; Statistical indicators; Analytical-descriptive history; Reading and categorization; Comparative dialogue; Theoretical Dialogism; Analysis of subject-author interaction with socio-historical conditions; Speech analysis; Measure publication rate; Critical-epistemological analysis; Speech analysis; Preparation of Excel forms; Mixed methods; Historicizar (historical-philosophical); Relate socio-political-economic determinants;	Approaches; Gray literature; Universities; Geographical regions; Newspapers that publish thematic; National or foreign; Research focus; Research methodology; Political dimension; Genre; Ethnicity; Modality and educational level; Social movements; References used; Thematic, theoretical and methodological trends; Research object; Conception of pedagogical ideas (man, society, education, school, teacher, teaching-learning); Ideological aspects; Sense arising from the statements; Epistemological barriers; Epistemological breakdowns; Changes in beliefs, values and pedagogical practice; Epistemological matrix; Clues, characteristics and scope: Method (Dialectic or Phenomenological); Objectives of study; Methodologies and procedures; Theoretical-methodological approaches; Theoretical-philosophical trends; Epistemological and ontological implications; Theoretical-epistemological articulation;

**Source:** Prepared by the author.

It is verified that in music the works are more descriptive and quantitative, arriving at thematic classifications of the several subareas of the musical knowledge. In music education, in addition to quantification and thematic classifications, there are analyses of comparative, explanatory, conceptual/pedagogical categories, as well as an analysis of the relationship between scientific production and the development of socio-cultural / educational policies. In addition to these aspects of research in music and music education, research on education presents other elements such as: analysis of the structure and internal quality of scientific production, analysis of concepts linked to pedagogical ideas (conception of man, society, education, school, teacher, teaching-learning), as well as philosophical / sociological / epistemological analyzes.

In relation to the impact on the pedagogical practice or the creation of policies aimed at sociocultural change, few works were found. Researchers generally focus more on surveying and processing data or on epistemological and sociological interpretations. There is a certain difficulty in meeting these two fronts, collection, and analysis; this is the function of the complexity and volume of work inherent to this type of research. In general, there is a lack of methodological foundation in the elaboration and development of this type of

research in the areas of music and music education, mainly. At this point the international references mentioned here can collaborate, to allow a refinement in the proposal of researches that go beyond the comprehensive analyzes. Thus, the totality sought by the 'State-of-art' research can be added to more focused analyses of the theoretical/academic/scientific works.

## Final considerations

The research of State-of-art, or research of systematic review of bibliography, is configured by an epistemological approach that takes into account concrete elements that are not always quantifiable. The theoretical elaborations, the conceptual data, and understandings about certain phenomena are among these qualitative data types. State-of-art researches that seek to publicize the productions of qualitative studies are not strictly meta-analytic but have in the methodology of categorical content analysis a structured procedure for conducting qualitative research syntheses.

Thus, due to the considerable development of the qualitative researches in music education in Brazil, it is up to the researchers of the area to advance beyond the simple description of the research

already done. We believe that the studies already were undertaken corroborate and enable complex and relational interpretations with cultural and social elements reflected on the educational context.

## Acknowledgments

None.

## Conflicts of interest

The author declares that there is no conflict of interest.

## Funding

None.

## References

1. André A MED. Academic production on teacher training: a comparative study of dissertations and theses defended in the 1990s and 2000s. *Brazilian Magazine of Research on Teacher Training*. 2009;1(1):41–56.
2. André M, Simões RHS, Carvalho JM, et al. State of the art of teacher training in Brazil. *Education and Society*. 1999;20(68):301–309.
3. Araújo K, Toscano C. Research in music education from 2001 to 2102. *Annals of the II International Seminar on Social Representations; (Curitiba-Paraná)*. 2013;31232–31245.
4. Bardin L. Content analysis. São Paulo: Editions 70; 2011.
5. Barro L. Points about Music Research in Pará. *Music and Culture*. 2017;6:37–44.
6. Bittar M, Silva MR, Hayashi MCPI. Scientific production in two journals in the area of education. *Evaluation*. 2011;16(3):655–674.
7. Borenstein M. Introduction to meta-analysis. London, United Kingdom: Wiley Publication; 2009.
8. Budasz R. Music research in Brazil: methods, domains, perspectives. Goiânia: ANPPOM. 1(1).
9. Calderón AI, Ferreira AG. RIE thematic trends in the area of education administration (1993-2008): a comparative dialogue with Brazilian scientific production. In ANAIS XXIV Brazilian Symposium on Education Policy and Administration And III Inter-American Congress on Education Policy and Administration. Vitória - ES.
10. Campos GMC. The training of music teachers in the production of the Brazilian Association of Music Education – ABEM (1991 to 2003). Master's Dissertation in Education. Federal University of Goiás – UFG; Goiânia: 2005.
11. Canen A, Arbache AP, Franco M. Researching Multiculturalism and Education: what dissertations and theses say. *Educação & Realidade*. 2001;26(1):161–181.
12. Cerqueira DL. Survey of theses and dissertations on the teaching of musical performance in Brazil. Ensaio Research group on teaching and learning of musical performance. Department of Arts (DEART); 2011:1–24.
13. Coelho M. Theoretical references in the area of foundations of education at PPGE/UFSCAR: an epistemological and bibliometric study of scientific production (1993 to 2007). Thesis (Doctorate in Education). Federal University of São Carlos; SP: 2013.
14. Cooper H. Reporting standards for research in psychology: Why do we need them? What might they be? *The American Psychologist*. 2008;63(9):839–851.
15. Cooper H. Research Synthesis and Meta-Analysis: a step-by-step approach. 4th Ed. San Antonio: Sage Publications Ltd; 2009.
16. Cooper H, Hedges LV, Valentine JC. The Handbook of Research Synthesis and Meta-Analysis. New York, NY: Russell Sage Foundation; 2009.
17. Del Ben LM. Research in Music Education in Brazil: a brief trajectory and future challenges. *Per Musi*. 2003;7:76–82.
18. Del Ben LM. To think about research in music education. *ABEM Magazine*. 2010;24:25–33.
19. Del Ben LM. Ways of thinking about school music education: an analysis of articles from the ABEM magazine. *Inter Half*. 2013;37(19):125–148.
20. Ben L, Souza J. Research in musical education and its interactions with society: a balance of the production of ABEM. 2007:1–13.
21. Fernandes JN. Research in Musical Education: situation of the field in the dissertations and theses of two stricto sensu post-graduation courses in Education. *Revista Opus*. 1999;6:1–14.
22. Fernandes JN. Research in musical education: situation of the field in the dissertations and theses of two post-graduation courses stricto sensu in education. *ABEM Magazine*. 2000;5:45–570.
23. Fernandes JN. Research in musical education: situation of the field in the dissertations and theses of two stricto sensu Brazilian post-graduation courses. *ABEM Magazine*. 2006;15:11–26.
24. Fernandes JN. Research in music education: situation of the field in dissertations and theses of Brazilian courses (II). *ABEM Magazine*. 2007;16:95–98.
25. Fernandes RCA. Trends in academic research on science teaching in the early grades of schooling (1972-2005). Masters dissertation. Campinas State University; 2009.
26. Fernandes SG, Coutinho CP. Technologies in Music Teaching: integrative review of investigations carried out in Brazil and Portugal. *Education, Training and Technologies*. 2014;7(2):94–109.
27. Ferreira NSDA. Research in reading: a study of abstracts of master's dissertations and doctoral theses defended in Brazil, from 1980 to 1995. Doctoral Thesis. Campinas State University; 1999.
28. Figueiredo SLF. Considerations on the research in musical education. In: VLB Freire (Org.), Horizons of Research in Music. (pp. 155-175). Rio de Janeiro: 7Letters; 2010.
29. Galizia FS, Lima EF. Higher Music Education: survey and analysis of the production published in the ABEM Magazine (1992-2013). *ABEM Magazine*. 2014;22(33):77–94.
30. Harden A. Mixed-Methods Systematic Reviews: Integrating Quantitative and Qualitative Findings. *Focus*. 2010;25:1–8.
31. Bispo HC. Piano teaching in Brazil: a literature review. Work Completion of Degree Course in Music. University of Brasília; 2014.
32. Kauchake S. Social movements in academia: a look at theses and dissertations produced at UNICAMP and USP between 1970-1995. Doctoral thesis. Campinas State University; 1997.
33. Kerr D, Carvalho AR. Organ research in Brazil: state of the art. *Per Musi Music Academic Magazine*. 2005;12:25–38.
34. Kraemer RD. Dimensions and Functions of Pedagogical-Musical Knowledge. *Magazine in Agenda*. 2000;11(16/17):48–73.
35. Lamar AR. Educational research and the “Kuhnian” conception of science: the case of FE/UNICAMP doctoral theses. Doctoral thesis. Campinas State University; 1998.
36. Luiz AJB. Meta-analysis: Definition, Applications and Synergy with spatial data. *Science and Technology Notebook*. 2002;19(3):407–428.
37. Magalhães SMO, Souza RCC. The Question of Method and Methodology: an analysis of the academic production on teachers from the Midwest Region/Brazil. *Education and Reality*. 2012;37(2):669–693.

38. Magalhães SMO, Souza, RCCR. Social quality and research: an epistemological and historical analysis of academic production on teachers. *Revista Profissão Docente*, 2015;15(33):91–101.
39. Major C, Savin-Baden M. An Introduction to Qualitative Research Synthesis: Managing the information explosion in social science research. New York, NY: Routledge; 2010.
40. Major C, Savin-Baden M. Integration of qualitative evidence: towards construction of academic knowledge in social science and professional fields. *Qualitative Research*. 2011;11(6):645–663.
41. Mateiro T, Vechi H, Egg M. The practice of singing in elementary school: what ABEM publications (1992-2012) reveal. *Revista da ABEM*. 2014;22(33):57–76.
42. Mendes S, Silva M. Characteristics and trends in the scientific production of master and doctoral professors in the State of Goiás. *Brazilian Congress of Sports Sciences*. 2010;1–4.
43. Nascimento MAT. State of the art on the academic production of music bands in Brazil: Sobral. Federal University of Cear; 2016.
44. Nevado R, Fagundes L, Basso M. An excerpt from the State of the Art: What is being produced? What is missing according to our sub-paradigm? *Anais do XII Brazilian Symposium on Informatics*. 2001.
45. Niéri D. Brazilian research on early childhood music education: theoretical-methodological trends and perspectives. Doctoral thesis. Post-Graduation in Music at the São Paulo State University “Júlio de Mesquita Filho”. São Paulo; 2014.
46. Education at a Glance 2016. OECD Indicators. 2016.
47. Pimenta RW. The meanings derived from statements about education for ethnic-racial relations present in doctoral theses in education (2000-2010). Doctoral thesis in Education. University of Vale do Rio dos Sinos – UNISINOS; 2015.
48. Pires N, Dalben ÂIL. Music in basic education schools: the academic production of stricto sensu graduate courses in Brazil (1972-2011). *OPUS – ANPPOM Electronic Magazine*. 2013;19(2):171–208.
49. Pizanni L. The art of bibliographic research in the pursuit of knowledge. *Rev Dig Bible Ci Inf*. 2012;10(1):53–66.
50. Pritchard A. Statistical bibliography or bibliometrics? *Journal of Documentation*. 1969;25(4):348–349.
51. Ramos PS. Do Graduate Dissertations and Theses generate publication of scientific articles? Analysis based on 3 physical education programs. *Brazilian Journal Biomotricity*. 2009;3(4):315–324.
52. Ribeiro DLG, Castro RCA. State of the art, what is it anyway? *Annals of the III Conedu National Education Congress*. 2003;1–10.
53. Romanowski JP. Teaching degrees in Brazil: an overview of theses and dissertations in the 1990s. (Doctoral Thesis) – Faculty of Education, University of São Paulo; São Paulo; 2002.
54. Sacardo MS. Bibliometric and epistemological study of the scientific production in Physical Education in the Midwest Region of Brazil. Doctoral thesis. Federal University of São Carlos; 2012.
55. Sa-Silva JR, Almeida CD, Guindani JF. Documentary research: theoretical and methodological clues. *Brazilian Journal of History and Social Sciences*. 2009;1:1–15.
56. Sanchez Gamboa SA. The production of knowledge in education: theories and methods, 25 years of spectacle (1987-2012). *Annals of the IV EPISTED – Seminar on Epistemology and Theories of Education*. Unicamp. Campinas. 2012.
57. Sanchez Gamboa SA. Mixed methods in epistemological analyses: balance of knowledge production in Physical Education in Northeast Brazil (1980-2013). *V Ibero-American Congress on Qualitative Research*. 2013;1:1199–1208.
58. Sánchez Gamboa SA. Evolution of the analysis of knowledge production in education and physical education: the dialectic of a spectator (1987-2012). *Philosophy and Education – Epistemology and Theories of Education Dossier*. 2013;5(2):7–28.
59. Santana JVJ. Quilombola School Education at ANPED: analysis of the production of GT 21 – Education and Ethnic-Racial Relations. ACENO – Cosmologies, Territorialities and Policies of Quilombolas and Traditional Peoples (Dossiê), 2016;3(6):137–158.
60. Santos JDS. The production of knowledge in physical education: Epistemological Analysis of Dissertations and Theses of Graduate Programs in Public Universities in the Southern Region of Brazil (2000-2010). Doctoral thesis. Campinas State University; 2012.
61. Santos RMS. The production of knowledge in Music Education in Brazil: balance and perspectives. *Revista Opus*. 2003;9:49–72.
62. Segenreich SCD, Freitas LFC. The Ecosystem of Research on Online Education: an overview of student production in master's and doctoral courses, in the period 1987-2009. *Goal – Evaluation*. 2013;5(13):69–97.
63. Silva RH. Theoretical-philosophical trends of theses on special education developed in doctoral courses in education and physical education in the State of São Paulo (1985-2009). Doctoral thesis. Campinas State University; 2013.
64. Thomas L. Academic Research in the Field of Music: A State of the Art (1988-2013). Porto Alegre: ANPPOM. 2015.
65. UTH C. Discovering the “State of the Art” In: Research Guides at Paul V. Galvin Library. 2016.
66. Valdes R, Silva J, Valderramas Z. Investigations on teacher training in Latin America: An analysis of the state of the art (1985-2003). *Teaching Profession*, 2005;4(12):1–21.
67. Vieira R. Creativity as a focus in Music Education: an overview of research carried out in the Brazilian context. *Anais do III SIMPOM-Brazilian Symposium of Graduate Students in Music*. 2014;402–413.
68. Vosgerau DSR, Romanowski JP. Review studies: conceptual and methodological implications. *Rev Educational Dialogue Curitiba*. 2014;14(41):165–189.
69. Volpato ESN. Bibliographical research in biomedical sciences. *J Pneumol. São Paulo* 2014;26(2):77–80.
70. Zille JAB. Scenario of scientific literature published in the area of music in Brazil in 2012. *Revista Modus*. 2014;9(14):75–94.