

Teachers' conceptions of music teaching: A systematic literature review 2010-2020

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ABSTRACT

This article provides an overview of research in music education between 2010 and 2020 and affords a systematic review of literature related to the experiences of teachers in teaching music in the classroom. The literature reports that music teaching depends mostly on the teacher, who must employ teaching-learning strategies according to the initial training received and the different educational contexts of professional practice. The article has the objective of analyzing the teaching practices that teachers deploy in the regular classroom of primary and secondary education. Bibliographic information was collected from the Web of Science, Scopus, and EBSCO databases. The inclusion of studies was based on having the elements of the search strategy and the selection process through inclusion criteria according to the stated objective. There were 21 selected articles. The results indicate that musical interventions by teachers in the classroom depends on some factors: i) Socioeconomic context of the educational institution; ii) Educational policies, initial teacher training; and iii) Insufficient support for this discipline. The conclusion according to the teachers' perceptions indicate that music teaching depends on the purposes of the educational institution, the professional development of the teacher, and the teacher's preparation in the management of musical content and teaching skills.

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1. INTRODUCTION

Music can be transmitted, taught, and learned, which makes its socialization and enjoyment possible. If we delve into the teaching of this discipline, it should be considered that only in some countries is it mandatory, while in others it is optional. In this line, it should be noted that the State, through the national curriculum, establishes the musical contents that the teacher must teach in the primary or secondary classroom [1], [2]. Likewise, this content taught in classroom depends on the knowledge that the teacher has obtained in his or her initial teacher training [3]–[5]. The musical activities carried out at school are not designed to train musicians, but, through the experience and understanding of musical language, provide the opening of sensory channels, facilitating the expression of emotions, expanding the general culture, and contributing to the integral formation of the human being [6], [7].

For music to exist in the classroom, there must be a teaching process, which is a very particular concept given its variety of interpretations, conceptions and life experiences of the teacher [7], [8]. This often leads to a very distorted view of the educational situation as a whole; however, the authors agree that teaching does not exist without the intention of learning and that, therefore, teaching cannot be characterized without characterizing learning [8]–[10]. Because of the close conceptual connection, the notion of teaching

is dependent for its characterization on the concept of learning and this has important practical implications for the way teachers conceive their work and, therefore, for classroom practice [11]–[13]. On this matter, Shulman demonstrated in his work that pedagogical content knowledge (PCK) represents the knowledge on which the teaching is sustained; in this sense, understanding and mastering its subject is not enough for the teacher [14], [15]. Consequently, in order to teach in an effective way, the teacher must comprehend the content of the discipline, its conceptions and its configuration; then, he must convert it, that is, prepare the thematic, provide himself with a set of resources (images, examples, presentations) and choose the relevant pedagogical strategies; and, consequently, adjust all this to the particularities of his students, considering the notions, the assumptions, the difficulties and the motivations of his students [16]–[18].

In this context, pedagogical knowledge needs to be reviewed and modified according to the social dynamics inside the classroom, since knowledge and pedagogical knowledge need to contemplate a process that sustains and allows the creation and production of knowledge in a constantly changing world [14], [19]. Knowledge is built in the day-to-day exercise of teaching, in such a way that the experience and understanding of pedagogical knowledge consolidate the action and, consequently, the practice is not only the object of reflection, but of resignification on the part of the teachers [20], [21].

In this perspective, the importance of the teacher's role in the teaching of music is fundamental for an enlightening experience and life experiences that reach all students in the classroom, since music is conceived as broad, inclusive, and participatory [22]–[24]. Consequently, the research question is related to knowing how teachers are teaching music education in the classroom. Therefore, the objective of this article is to analyze the teaching practices that teachers deploy for the realization of music education in the classroom.

2. RESEARCH METHOD

In the process of a systematic literature review, it is essential that all the steps of the research are recorded, not only so that it can be replicated by another researcher, but also to evaluate that the ongoing process follows a series of steps previously defined and fully respected in the different stages [25], [26]. The research was developed between May and July 2021, analyzing the teaching practices that teachers deploy for the realization of music education inside the classroom, in scientific articles associated with education in the Web of Science (WoS), Scopus, and EBSCO databases. It was decided to start the entire process in "advanced search" to circumscribe the object of study as precisely as possible. Peer-reviewed articles were accepted, in addition to this inclusion criterion, only articles written in English and Spanish, published between 2010 and 2020, were included in the collection.

The study was based on a systematic review of articles published in journals indexed in international reference databases and which discuss the teaching of music education by teachers in the classroom. Systematic reviews foster the advancement of knowledge on a given subject and, at the same time, allow building the theoretical basis for research [27]. To guide the research process, the methodology proposed by Pérez and Pérez [28] was used, allowing the construction of the study objectives, inclusion and exclusion criteria, quality and methodological validity criteria, and search sources. In addition, it guided the collection of articles, conducted by the researcher, to ensure the trustworthiness of the criteria and the need for discussion to justify the possible inclusions or exclusions of research.

After some exercises and tests to define the most appropriate terms for the search equation, the following descriptors were chosen ("school music", teaching, and primary school teachers). Subsequently, the WoS, Scopus and EBSCO databases were defined, understanding that these databases consider studies on the topic and the specific area of research. The review in the databases, based on the search equation, used the Boolean operators "And" and "Or", and resulted in 27 articles in WoS, 31 articles in Scopus and 21 articles in EBSCO. However, in order to recognize topics that did not meet the criteria and to exclude duplicate studies between databases, the constitution of the group of articles analyzed only occurred after reading the abstracts. Thus, after the review, 79 articles were selected as shown in Table 1. The exclusion criteria considered articles that were duplicated in the databases, that were in languages other than Spanish or English and that presented topics referring to the use of technology, values, business aspects, stress, nationalism, book chapters, student preferences and interculturality. Figure 1 shows the total number of scientific articles obtained, as well as the number of publications included in the sample according to the search engines used. A summary presentation of these is shown in Table 1.

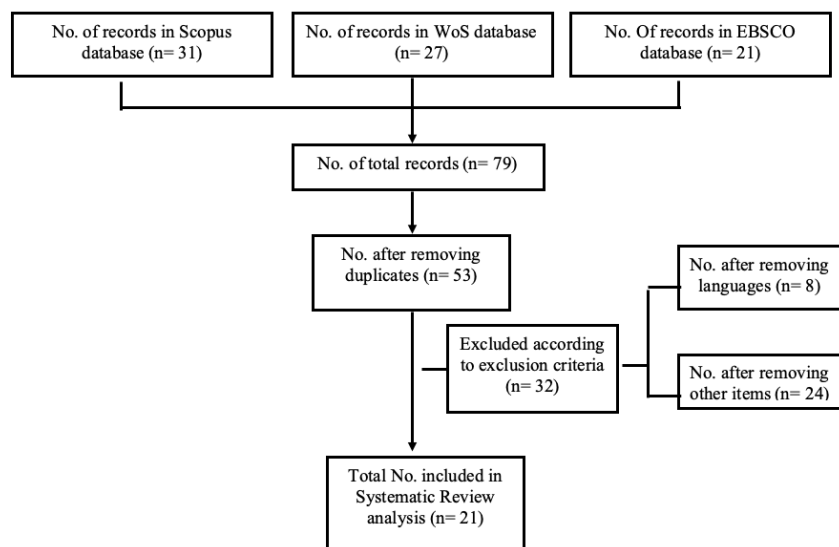


Figure 1. Diagram of the process of information flow through the different phases of the systematic review

Table 1. Systematic review results

No	Article	Research method	Study description	Study findings
1	[29]	a) Qualitative b) Case study	It highlights efforts in music education in primary and secondary schools by applying Finnish teaching in Australia and England.	Four key areas of encouraging music teaching and learning: time commitment to music teaching and learning; teacher education and experience; a diversity, cross-disciplinary and interactive curriculum; transition to post-secondary education.
2	[30]	a) Qualitative b) Interviews and observation	This research overlays efficacy theory on the experiences of a U.S. teacher and the embedded challenges of teaching in a disadvantaged economic environment.	From the inductive analysis, four themes surfaced that indicate the relevance of efficacy theory: The ethos (spirit) of teaching based on unique personal circumstances, acceptance of uncertainty, student-centered and socially conscious teaching and learning, and collaboration. The music teacher turned his means and limitations into a vision around which others could rally and become engaged.
3	[31]	a) Qualitative b) Interviews and observation	This article investigates using duo ethnography and narrative inquiry the perspectives of two elementary school teachers: one of music and the other of mathematics.	The low educational commitment among disadvantaged students is due to a missing sense of belonging to the school community and less willingness to attend and participate. To understand the efficacy of embodied learning, the access and participation strategies, the social experience offered by this program, more research is needed.
4	[32]	a) Qualitative b) Questionnaires and group interviews	Describes the methodological application of project-based learning (PBL). This research focuses on the group of Music Education teachers who teach at the Primary School level in Avila, Spain.	15% of them have received specific training in PBL. 50% of them consider that the teacher's involvement is greater than when using more traditional methodologies. Music teachers value positively and are interested in PBL methodology.
5	[33]	a) Quantitative b) Questionnaire	Study of professional development (PD) from music teachers; 315 primary school music teachers in Singapore are asked to define PD using their words.	Among the findings, we can comment that teachers relate PD to matters of content and results and a much lesser extent to matters of facilitation and forms. Those teachers who alluded to the issue of the form of PD with punctual and isolated events (e for example, workshops, seminars, festivals), some teachers use PD as an obligatory, constant, and/or continuous process or as a succession of activities.
6	[34]	a) Qualitative b) Interviews	Two elementary music teachers are discussed and how changes in administrative functions have influenced the music curriculums in their primary schools.	The stories confirm how critical is school administrators' support for music programs and the teachers who teach music. School administrators made it clear that budget constraints influenced their decision to eliminate the music specialist teacher position. Self-efficacy was also key to the change in roles for the two teachers.

Table 1. Systematic review results (*continued*)

No	Article	Research method	Study description	Study findings
7	[35]	a) Quantitative b) Questionnaire	The study examined the associations between teachers' skills and the subject matter of their music classes. A questionnaire was surveyed 135 Norwegian teachers; generalists, music teachers, and musicians	Teacher training is important and competencies seem to be different between generalists and musicians. It identifies a group of competencies that correspond to higher music studies: making music and playing, instructing, and composing. The teacher's competencies are essential both for musical activities and for the implementation of a curriculum.
8	[36]	a) Qualitative b) Interviews	This study conducts three interviews with elementary music teachers and focuses on whether the absence of clarity about music pedagogy in elementary school may be a contributing factor to the low supply of music workshops.	Elementary music pedagogy is challenging, even for teachers working in the field. The requirement for teachers to "feel like musicians" seems a common thread. It may be beneficial for elementary music teachers to engage in such methods that help them "think, feel, and act like musicians."
9	[37]	a) Qualitative b) Interviews	In-depth interviews are conducted with 30 music teachers identifying the issues and challenges they confront in delivering multicultural music education in Malaysian elementary school classrooms.	Music teachers had inadequate multicultural training during their university studies. The teachers feel that multicultural music learning is an essential part of music education. Music teacher training programs should consider the variety of Malaysian cultures for them to be sensitive, responsive, accepting, and responsive to the integration of multiculturalism in music education.
10	[38]	a) Qualitative b) Interviews	This article explores on the policy of inclusion in relation to music teaching in primary schools in Hong Kong from the views of music teachers.	Hong Kong's curriculum framework has been shown to disadvantage students with special educational needs. When these resources are restricted, as is the situation in Hong Kong, the consequence is that children with special needs who do not take subjects are not supported and are vulnerable to misunderstanding by society until they fail academically in higher secondary school (15-17 years).
11	[39]	a) Quantitative b) Questionnaire	This article applies a questionnaire to 317 music teachers to find out concerns about inclusive music education implemented to music teachers in primary schools in Hong Kong.	Music teachers had six concerns about inclusive education: Learning assistance, learning challenges, Learning requirements, Resources, Education, Curriculum Development, and Assessment. Another relevant fact is that music teachers present a greater academic concern regarding social priority concerning students with special educational needs.
12	[40]	a) Qualitative b) Case study	This research conducts a case study of three purposively selected teachers on music activities taught in elementary schools in metropolitan Melbourne, USA.	Teachers play a supporting role in carrying out musical activities to provide or enhance music education for primary school students. The descriptive accounts address one aspect of the research problem in relation to "missing" data on music programs in Victorian primary schools.
13	[41]	a) Qualitative b) Interview, observation, case study	This research is a case study from Australia. It studies non-music teachers teaching in primary schools. It identifies the types of music teaching that were taught in one school and the elements that made it easy to teach music.	According to the teachers' beliefs, the use of singing and voice as a musical instrument is fundamental since it is a skill that all students possess. The most important support for music education within a school is that of the school principal. For effective teaching, teachers identify professional development as the key to success in teaching music.
14	[42]	Theoretical analysis.	This study examines the music teaching process, theories of learning and music as educational content, and identifies the new roles of elementary and music teachers in light of paradigm shifts.	Music has changed due to the evolution of information and communication technologies (ICT), forcing the reorganization of educational content to adopt new approaches to learning and teaching. Most music educators support the paradigms of behaviorism or constructivism as a means of learning theoretical discourse or criticize them severely claiming that they have adverse effects.
15	[43]	a) Qualitative b) Interviews	This study examines the association between teachers and performers against teaching and learning Cantonese opera over three years.	With the teacher-performer partnership came increased confidence and motivation for the teachers even though for them, the skills are not sufficient to achieve optimal performance. Teachers consider professional development as a fundamental part of the understanding and specific skills required for this style of music.
16	[44]	a) Qualitative b) Interviews	This article studies the conceptions of primary and secondary music teachers in Singaporean schools regarding classroom assessment.	There is no single definition for the concept of classroom assessment by music teachers. The frequency occurred in considering less "assessment for performance."

Table 1. Systematic review results (*continued*)

No	Article	Research method	Study description	Study findings
17	[45]	a) Qualitative b) Case study	This study investigates the teacher education of teachers before and after completing training at a university in Australia. The aim is to find out music content knowledge, general pedagogical knowledge, and music teaching knowledge.	The compulsory music course increased participants' content knowledge, pedagogical knowledge, and music teaching knowledge (PCK). Participants who had content knowledge in music and previous experience playing musical instruments were not necessarily confident in teaching music.
18	[46]	a) Mixed b) Questionnaire and interviews.	This article studies an early-stage "curriculum" in Wales for pupils aged 3 to 7 years and the confidence teachers have in teaching music	The teachers indicated that they have a better understanding of the curriculum and confidence to plan musical activities. They indicated that being able to make music cross-cutting with other subjects made it easier and more enjoyable for them to develop their teaching. They also feel that music has a more prominent role in the classroom.
19	[47]	a) Qualitative b) Narrative, case study	The study is conducted on five generalist teachers in Australia seeking to identify the current practices of these teachers in teaching music, based on self-efficacy.	Factors influencing generalist teacher education include musical history, current engagement with music creation, access to music professional development, access to resources, and music in pre-teaching training. Teachers possess high self-efficacy in teaching music. The integration of a consulting teacher can help music teaching through vicarious experiences.
20	[48]	a) Qualitative b) Narrative, case study.	Based on a narrative from a generalist teacher in Australia, this research studies alternative ways of teaching music.	Melinda clearly feels valued in her school and identifies as part of the wider school community. Melinda's story offers a possible way forward for school principals who want a specialist music teacher and are unable, for whatever reason (e.g., funding, access), to employ a "music teacher."
21	[49]	a) Qualitative b) Interviews and observation	This research conducts four interviews and observations of generalist teachers who believe they are not capable of teaching music.	The teachers in the study with the acquisition of knowledge and skills wanted to develop their music teaching skills. However, teachers are likely to develop teaching self-efficacy and reinforce their musical identity for optimal music teaching.

3. RESULTS AND DISCUSSION

Table 2 presents the results obtained after the literature search, using, for reasons of space, an adapted version of the classification provided by Nahmias *et al.* [50]. The categories were configured according to the topics to which they were related and reiterated in the articles to support the categories. The table also identifies the category together with the authors who mention the topic in question.

Table 2. Categories with authors

Category	Authors
Recommendations for better teaching and learning	[29], [32], [33], [35], [37], [42], [43], [45], [48], [49]
Influence of the social, economic and political context on teaching and learning	[30], [38], [39], [47]
No commitment from the Educational Organization	[31], [34], [40], [41], [47], [48]
Teachers' perceptions of music teaching	[29], [36], [37], [39], [41], [43], [46]

3.1. Recommendations for better teaching and learning

The articles offer a broad overview of current efforts in music education, emphasizing that music education contributes to the enrichment of students' lives beyond educational outcomes, including, among others, the psychological, social, and cultural aspects of the individual [29]. Concerning the teaching of the subject of music, some of the recommendations given by the authors are that the time of the subject of music should be increased in schools so that learning is meaningful. This increase in hours should also be applied to the training of elementary school teachers. A notable difference was observed in the level of knowledge of music teachers: music teachers in countries such as Finland, Spain, and England require a master's degree in education, regardless of the level they teach [29], [32], [46]. On the other hand, it is highlighted that there should be within teacher training a greater increase in methodologies, and improve teaching skills [37]. In this same line, it is suggested to increase the contents such as traditional music of the country and its interpretation as well as to increase their knowledge about evaluation in this area [44]. Studies suggest that the training of music teachers is relevant and that teachers with music teaching competencies seem to teach music in consistently different manners than teachers with lower competencies [35].

An update of teaching and learning tools, such as using project-based learning (PBL), is recommended to improve music classes [29], [35], [43], as well as the use of PCK [45]. Another fundamental recommendation is the professional development (PD) that each teacher should develop during his or her professional life; this concept goes hand in hand with the performance of the music class as it embraces a comprehensive development of the teacher as a professional [33]. In addition, music within the classroom must have an advancement according to the current times, in other words, using information and technologies to reorganize the educational content in music teaching so that the area develops in parallel along with digital trends, adopting new approaches to learning and teaching [42]. Most generalist and specialist teachers are willing to upgrade their students' music learning experience based on new technologies [44].

Generalist teachers who teach music noted in different studies that music is among the primary courses dropped when personal insecurities increase when teaching a specific activity or skill, such as playing an instrument, singing or teaching music reading [41]. In this regard, it has been shown that perceptions of self- effectiveness have an impact not only on the establishment and development of the activity, but also the choice of the specific actions and how to confront the emotional implications. These beliefs influence teachers' thinking, feelings, motivation, and action [47], [49].

3.2. Influence of the social, economic and political context on teaching and learning

Concerning the teaching of music by teachers, the articles indicate that there are external factors that have a direct impact on this process, such as the limitations that socioeconomic contexts may have, given that conventional teaching models tend to be based on a limited set of activities and results, leaving aside the reality, which may be an uncertain context with limited resources [30]. In addition, a relevant aspect is support provided by the educational establishment or the directors for the realization of the music class; either with instruments, training, or hiring experts in certain content so that the teacher has better tools and his teaching is more effective in attending to what the student requires for quality learning in the discipline [34], [38], [47]. On the other hand, mention is made of educational policies determining the need to prioritize student learning by introducing methodologies that facilitate their comprehensive training and, although it is true that the subject of music has a reduced number of hours, it is considered that the social context affects in the implementation of teaching [32]. Some research indicates that, for a music teacher working in under-resourced schools, rather than permitting the constraints of his or her teaching context to dominate his or her program, the teacher can transform those constraints into possibilities for impact in the students' lives, through meaningful learning and significance in their lives [30], [47].

In terms of educational policies, there is great concern about inclusive education in music education and, from studies conducted in Hong Kong, one can reflect the impact of the teaching context, in this case of primary music teachers in Hong Kong, reporting that there are low priorities in support on the social acceptance of students with special educational needs (SEN) regarding the emphasis requested by institutions versus the academic outcomes requested of these students [38], [39].

3.3. No commitment from the educational organization

Support for the development of music is not only based on the delivery of materials but also that the director of the educational institution believes in the "power" and influence that music has for the integral development of the student [41]. The lack of commitment to the development of music in schools not only happens with the educational institution but is also seen in the students, as some may feel disadvantaged and this is due to a lack of a sense of belonging to the school community and, therefore, they are less willing to attend and participate in music classrooms [31], [40]. Most educational organizations avoid granting resources to the areas of the arts because, on several occasions, teachers alluded to friction with administrators on the rare occasions when they supervised their activities. In contrast to the prototypical effective self-employed entrepreneur, music teachers make strategic adjustments in their activities to remain affiliated with the educational organizations that employ them [30]. Many of these studies reflect the importance and pivotal role that school administrators have facing music programs. Some principals value music, but, in practice, it is not given the required priority, yet much value is placed on after-school music groups led by music teachers in particular [34]. There are instances where school administrators are clear that budgetary constraints have influenced their decision to eliminate the specialist music teacher position in their schools, as reflected in studies developed in Australia [34], [41], [47].

3.4. Teachers' perceptions of music teaching

According to the findings of the literature review, music teaching in elementary school is a difficult discipline to perform, even for those who are specialists in the area. There is a controversy regarding teachers' feelings, as some believe that it is necessary to feel "musicians" to be able to perform the subject [36]. Teachers with competencies in music teaching include a large amount of content and activities compared to teachers with less training, and consequently, according to the national curriculum, these

teachers are more capable of teaching [35]. Another perception on the part of teachers is that they do not feel prepared for the constant changes in educational policies, such as including certain contents in the programs, for example, topics specific to the country's culture, since these are very complex issues whose solutions cannot always be reproduced from one country to another [32]. Regarding teachers and their concept of assessment, regardless of the different meanings, they have been able to respond to the several demands of the assessment. Having a more "mature" and "balanced" approach in daily practice in the classroom [44].

From another perspective, multicultural music teaching is essential according to music teachers' narratives. In today's society, there is a critical need to create a support network for problems that may arise during music teaching and to improve and integrate multicultural elements into initial teacher training programs [29], [37], [43]. For example, there are over 250 indigenous language groups in Australia and, therefore, developing policy on what knowledge should be included in each state, let alone in schools, is not a simple task, furthermore, Indigenous knowledge has long been left on the periphery [29].

Regarding education for students with special needs, a concern also arises about teaching this subject, as the integration of students with special needs brings difficulty with teaching and assessing music for students because of the lack of protocols, information, and resources [40], [43], [47]. The workshops help develop their knowledge and skills, but the teachers admit that they could deepen their learning of the different genres to increase their confidence. Teachers feel that they do not have the competencies for specific skills such as singing, so they limit the type of activities they develop within the classroom [43]. Along these lines, most music teachers consider listening to music, singing, and music activities to be the most successful methods for everybody. Consequently, more research is needed on the curricular requirements for multicultural music education in all music teacher education programs [37].

From the teachers' perspective, inclusive education is not a prioritization and has little support for special educational needs (SEN). This situation leaves music teachers uninformed and their school administrators complicated by allocating resources to disciplines that are "core" and non-core. Music is a non-core subject that has no SEN support. This is confusing in political terms with situations such as "Learning to Learn" and budget savings [38].

4. CONCLUSION

From the literature review, it is clear that the field of empirical studies on teachers' classroom music teaching, in general, is limited. Throughout 10 years of research on this topic, only 21 studies on music teaching and teachers' perceptions were identified; most of them were in English-speaking countries, none in Latin America, and only one in Spanish (from Spain). On the other hand, there is enough evidence showing that teachers' musical interventions in the classroom depend on several factors (context, educational policies, initial teacher training, and lack of support for this discipline). It can be affirmed that these factors have a great influence not only at the local level but also as a representation of the reality at the international level. It is important to point out that according to the studies analyzed, teachers are willing to learn better music teaching strategies to apply it effectively and meaningfully with their students. The challenge for the community of music education teachers and researchers is to record and search for better teaching methods through contextually appropriate strategies so that students can successfully live meaningful musical experiences in schools, but more importantly, throughout their lives.

This study could constitute a brief guide that allows the reader to gain insight into the strategies and techniques used by music teachers in the practice of music teaching. As for the limitations of this article, only publications in English and Spanish have been included, so other languages could be approached to provide more details. It is proposed for future studies in the field of music education and teachers to conduct longitudinal studies for an evaluation of music teaching not only in generalist or specialist teachers, but also over time after having attended some training and/or help from a professional musician.

REFERENCES





- [1] M. A. Oliva, "Architecture of Chilean Educational Policy (1990-2014): The Curriculum. A Place of Metaphors," *Revista Brasileira de Educação*, vol. 22, no. 69, pp. 405–428, 2017, doi: 10.1590/S1413-24782017226921.
- [2] J. Assaél, N. Albornoz, and M. Caro, "Estandarización educativa en Chile: tensiones y consecuencias para el trabajo docente," *Educação Unisinos*, vol. 22, no. 1, 2018, doi: 10.4013/edu.2018.221.09.
- [3] D. R. Grieser and K. S. Hendricks, "Review of Literature: Pedagogical Content Knowledge and String Teacher Preparation," *Update: Applications of Research in Music Education*, vol. 37, no. 1, pp. 13–19, 2018, doi: 10.1177/8755123318760970.
- [4] J. S. Millican, "Describing Preservice Instrumental Music Educators' Pedagogical Content Knowledge," *Update: Applications of Research in Music Education*, vol. 34, no. 2, pp. 61–68, 2016, doi: 10.1177/8755123314552664.
- [5] M. Bremmer, "Where's the body? Reconsidering the concept of pedagogical content knowledge through research in music education with Dutch specialist preschool music teachers," *British Journal of Music Education*, vol. 38, no. 2, pp. 119–130, 2021, doi: 10.1017/S0265051720000285.

- [6] M. Andreu Duran, P. Godall Castell, M. Amador Guillem, and M. Castro Morera, "Study of the results in the acquisition of core competencies in schools that integrate primary education and music," *International Journal of Music Education*, vol. 35, no. 4, pp. 554–564, 2017, doi: 10.1177/0255761416689845.
- [7] K. E. Williams, M. S. Barrett, G. F. Welch, V. Abad, and M. Broughton, "Associations between early shared music activities in the home and later child outcomes: Findings from the Longitudinal Study of Australian Children," *Early Childhood Research Quarterly*, vol. 31, pp. 113–124, 2015, doi: 10.1016/j.ecresq.2015.01.004.
- [8] N. Barnes, H. Fives, and C. M. Dacey, "U.S. teachers' conceptions of the purposes of assessment," *Teaching and Teacher Education*, vol. 65, pp. 107–116, 2017, doi: 10.1016/j.tate.2017.02.017.
- [9] P. Goodyear, "Teaching as design," *HERDSA Review of Higher Education*, vol. 2, pp. 27–50, 2015.
- [10] A. W. L. Koh, S. C. Lee, and S. W. H. Lim, "The learning benefits of teaching: A retrieval practice hypothesis," *Applied Cognitive Psychology*, vol. 32, no. 3, pp. 401–410, 2018, doi: 10.1002/acp.3410.
- [11] S. Borg, *Teachers' beliefs and classroom practices*, 1st Ed. Routledge, 2017.
- [12] L. J. Zachary, "The Role of Teacher as Mentor," *New Directions for Adult and Continuing Education*, vol. 2002, no. 93, pp. 27–38, 2002, doi: 10.1002/ace.47.
- [13] S. Kissau, L. C. Hart, and B. Algozzine, "Investigating the Impact of edTPA Professional Development on Classroom Practice and Student Teaching Experience," *Journal of Teacher Education*, vol. 70, no. 2, pp. 102–114, 2019, doi: 10.1177/0022487117721706.
- [14] L. Shulman, "Knowledge and Teaching: Foundations of the New Reform," *Harvard Educational Review*, vol. 57, no. 1, pp. 1–22, 1987, doi: 10.17763/haer.57.1.j463w79r56455411.
- [15] L. S. Shulman, "Those Who Understand: A Conception of Teacher Knowledge," *American Educator*, vol. 10, no. 1, pp. 4–14, 1986.
- [16] C. L. Shing, R. Mohd Saat, and S. H. Loke, "The Knowledge of Teaching-Pedagogical Content Knowledge (PCK)," *Malaysian Online Journal of Educational Sciences*, vol. 3, no. 3, pp. 40–55, 2018.
- [17] K. K. H. Chan and B. H. W. Yung, "Developing Pedagogical Content Knowledge for Teaching a New Topic: More Than Teaching Experience and Subject Matter Knowledge," *Research in Science Education*, vol. 48, no. 2, pp. 233–265, 2018, doi: 10.1007/s11165-016-9567-1.
- [18] V. Kind and K. K. H. Chan, "Resolving the amalgam: connecting pedagogical content knowledge, content knowledge and pedagogical knowledge," *International Journal of Science Education*, vol. 41, no. 7, pp. 964–978, 2019, doi: 10.1080/09500693.2019.1584931.
- [19] J. König and C. Kramer, "Teacher professional knowledge and classroom management: on the relation of general pedagogical knowledge (GPK) and classroom management expertise (CME)," *ZDM - Mathematics Education*, vol. 48, no. 1–2, pp. 139–151, 2016, doi: 10.1007/s11858-015-0705-4.
- [20] S. Gudmundsdottir and L. Shulman, "Pedagogical Content Knowledge in Social Studies," *Scandinavian Journal of Educational Research*, vol. 31, no. 2, pp. 59–70, 1987, doi: 10.1080/0031383870310201.
- [21] M. A. Zakaria and M. F. Ahmad, "Teaching as Performance Studies: Exploring the Pedagogical Content Knowledge (PCK) of Theater Arts," *International Journal of Academic Research in Business and Social Sciences*, vol. 11, no. 2, pp. 1213–1226, 2021, doi: 10.6007/ijarbs/v11-i2/9197.
- [22] G. F. Welch, "The challenge of ensuring effective early years music education by non-specialists," *Early Child Development and Care*, vol. 191, no. 12, pp. 1972–1984, 2020, doi: 10.1080/03004430.2020.1792895.
- [23] M. Guhn, S. D. Emerson, and P. Gouzouasis, "A Population-Level Analysis of Associations Between School Music Participation and Academic Achievement," *Journal of Educational Psychology*, vol. 112, no. 2, pp. 308–328, 2019, doi: 10.1037/edu0000376.
- [24] E. Mitchell, "Community Music Therapy and Participatory Performance," *Voices: A World Forum for Music Therapy*, vol. 19, no. 1, pp. 1–18, 2019, doi: 10.15845/voices.v19i1.2701.
- [25] O. Zawacki-Richter, M. Kerres, S. Bedenlier, M. Bond, and K. Buntins, *Systematic Reviews in Education Research: Methodology, Perspectives and Application*. Springer VS Wiesbaden, 2019, doi: 10.1007/978-3-658-27602-7.
- [26] P. Torres-Carrión, S. Aciar, C. González-González, and G. Rodríguez-Morales, "Methodology for systematic literature review applied to engineering and education," *2018 IEEE Global Engineering Education Conference (EDUCON)*, 2018, pp. 1364–1373, doi: 10.1109/EDUCON.2018.8363388.
- [27] Y. Xiao and M. Watson, "Guidance on Conducting a Systematic Literature Review," *Journal of Planning Education and Research*, vol. 39, no. 1, pp. 93–112, 2019, doi: 10.1177/0739456X17723971.
- [28] M. L. Arróniz-Pérez and R. Bencomo-Pérez, "Alternativas de tratamiento en los trastornos del espectro autista: una revisión bibliográfica entre 2000 y 2016," *Revista de psicología clínica con Niños y Adolescentes*, vol. 5, no. 1, pp. 23–31, 2018, doi: 10.21134/rpcna.2018.05.1.3.
- [29] M. Susino, "Promising practices in music teaching and learning: practical recommendations and policies across cultures," *Arts Education Policy Review*, vol. 123, no. 4, pp. 194–204, 2020, doi: 10.1080/10632913.2020.1844831.
- [30] J. Hanson, "Effectual thinking and music education: One view of creative adaptation in an underserved urban middle school," *International Journal of Music Education*, vol. 38, no. 4, pp. 625–643, 2020, doi: 10.1177/0255761420944034.
- [31] M. Golding and S. Hannigan, "Juxtaposing Teacher Voices to Explore Upper Primary School Music Teaching and Learning," *Australian Journal of Music Education*, vol. 53, no. 1, pp. 17–27, 2020.
- [32] I. M. M. Guerrero and E. B. Ruiz, "El aprendizaje basado en proyectos y su implementación en las clases de música de los centros de Educación Primaria," *Revista Electrónica Complutense de Investigación en Educación Musical - RECIEM*, pp. 21–41, 2019, doi: 10.5209/reciem.64106.
- [33] J. Wong and A. Bautista, "How do teachers define the notion of professional development? The case of primary music teachers," *Professional Development in Education*, vol. 44, no. 4, pp. 539–556, 2018, doi: 10.1080/19415257.2017.1369450.
- [34] P. de Vries, "Teaching primary school music: coping with changing work conditions," *Music Education Research*, vol. 20, no. 2, pp. 201–212, 2018, doi: 10.1080/14613808.2016.1269734.
- [35] J. H. Saetre, "Why school music teachers teach the way they do: a search for statistical regularities," *Music Education Research*, vol. 20, no. 5, pp. 546–559, 2018, doi: 10.1080/14613808.2018.1433149.
- [36] R. Atkinson, "The pedagogy of primary music teaching: talking about not talking," *Music Education Research*, vol. 20, no. 3, pp. 267–276, 2018, doi: 10.1080/14613808.2017.1327946.
- [37] W. K. Yie and C. M. Ying, "Issues and challenges in teaching multicultural music amongst primary music teachers in Malaysia," *Malaysian Music Journal*, vol. 6, no. 1, pp. 98–110, 2017, doi: 10.37134/mjm.vol6.1.6.2017.
- [38] M. W. yee Wong and M. P. yuk Chik, "Inclusive education policy in the Hong Kong primary music classroom," *Arts Education Policy Review*, vol. 117, no. 2, pp. 130–140, 2016, doi: 10.1080/10632913.2014.966286.





- [39] M. W. yee Wong, M. P. yuk Chik, and E. S. S. Chan, "Measuring concerns of inclusive music teaching in Hong Kong: scale development," *Music Education Research*, vol. 18, no. 3, pp. 317–330, 2016, doi: 10.1080/14613808.2015.1049259.
- [40] F. King, "Lost and Found: Music Activities Delivered by Primary Classroom Generalists," *Victorian Journal of Music Education*, vol. 1, pp. 3–8, 2015.
- [41] P. A. De Vries, "Music without a music specialist: A primary school story," *International Journal of Music Education*, vol. 33, no. 2, pp. 210–221, 2015, doi: 10.1177/0255761413515818.
- [42] I. Özgül, "Changing paradigms in general music education," *Educational Research and Reviews*, vol. 10, no. 8, pp. 1293–1299, 2015, doi: 10.5897/ERR2015.2103.
- [43] B. W. Leung, "Teachers' transformation as learning: Teaching Cantonese opera in Hong Kong schools with a teacher-artist partnership," *International Journal of Music Education*, vol. 32, no. 1, pp. 119–131, 2014, doi: 10.1177/0255761413491174.
- [44] W. S. Leong, "Understanding classroom assessment in dilemmatic spaces: Case studies of Singaporean music teachers' conceptions of classroom assessment," *Music Education Research*, vol. 16, no. 4, pp. 454–470, 2014, doi: 10.1080/14613808.2013.878325.
- [45] B. Muscat, S. Tindall-Ford, and S. J. Capaldo, "Examining Pre-service Generalist Primary Teachers' Pedagogical Content Knowledge for Teaching Music in the K-6 Classroom," *The International Journal of Early Childhood Learning*, vol. 20, no. 1, pp. 19–32, 2014, doi: 10.18848/2327-7939/cgp/v21i01/48430.
- [46] L. Baldwin and G. Beauchamp, "A study of teacher confidence in teaching music within the context of the introduction of the Foundation Phase (3-7 years) statutory Education Programme in Wales," *British Journal of Music Education*, vol. 31, no. 2, pp. 195–208, 2014, doi: 10.1017/S0265051714000060.
- [47] P. De Vries, "Generalist teachers' self-efficacy in primary school music teaching," *Music Education Research*, vol. 15, no. 4, pp. 375–391, 2013, doi: 10.1080/14613808.2013.829427.
- [48] P. De Vries, "Melinda: De Facto Primary School Music Teacher," *Victorian Journal of Music Education*, no. 1, pp. 3–9, 2011.
- [49] G. Stunell, "Not Musical? Identity Perceptions of Generalist Primary School Teachers in Relation to Classroom Music Teaching in England Gillian Stunell Institute of Education, University of London," *Action, Criticism, and Theory for Music Education*, vol. 9, no. 2, pp. 79–107, 2010.
- [50] A. S. Nahmias, M. Pellecchia, A. C. Stahmer, and D. S. Mandell, "Effectiveness of community-based early intervention for children with autism spectrum disorder: a meta-analysis," *Journal of Child Psychology and Psychiatry and Allied Disciplines*, vol. 60, no. 11, pp. 1200–1209, 2019, doi: 10.1111/jcpp.13073.

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