



ARTÍCULOS

Music activities in Hong Kong kindergartens: A content analysis of the Quality Review reports

Actividades musicales en escuelas infantiles de Hong Kong: Análisis de contenido de los informes de Revisión de Calidad

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Abstract

In Hong Kong, the Education Bureau (EDB) assesses the quality of services provided to children in local kindergartens. Quality Review (QR) reports of kindergartens that pass the assessment are published on EDB's website. We conducted a content analysis of 164 QR reports to examine the alignment between the music activities alluded to and the curriculum objectives established for music in official policies. A coding scheme was developed using both inductive and deductive approaches. High inter-reliability was obtained. MAXQDA was used to conduct word frequency, descriptive, and co-occurrence analyses. The most common terms identified in the music-related segments focused on children's development of sensory abilities through music experiences, in relation to singing, rhythm, beat, movement, and instrumental music. However, activities intended to foster musical creativity and self-expression were seldom mentioned. We conclude that the QR reports reveal important discrepancies between official curriculum policies and actual classroom practices, which EDB assessors seemed to ignore or overlook. Implications focus on the need for kindergarten stakeholders to address curriculum/practice gaps and further prepare teachers to foster children's musical creativity.

Key words: Early Childhood Education; Music Activities; Preschool Curriculum; Creativity.

Resumen

En Hong Kong, el *Education Bureau* (EDB) examina la calidad de los servicios ofrecidos a niños en escuelas infantiles locales. Los informes de Revisión de Calidad (RC) de aquellas escuelas que superan el examen se publican en la web del EDB. Realizamos un análisis de contenido de 164 informes RC. El objetivo era investigar la correspondencia entre las actividades musicales mencionadas en dichos informes y los objetivos musicales recogidos en el currículo oficial. Desarrollamos un sistema de categorización utilizando enfoques inductivos y deductivos. Se obtuvo alta fiabilidad inter-jueces. Utilizamos MAXQDA para realizar análisis de frecuencias léxicas, descriptivos y de co-ocurrencias. Los términos más comúnmente identificados en los segmentos relativos a la música se centraban en el desarrollo de habilidades sensoriales infantiles a través de experiencias de canto, ritmo, pulso, movimiento y música instrumental. Sin embargo, encontramos escasas referencias a actividades centradas en el fomento de la creatividad y la auto expresión del niño y de la niña. Concluimos que los informes RC revelan importantes discrepancias entre el currículo oficial y las prácticas reales de aula, que los asesores de EDB parecen ignorar o desestimar. Las implicaciones se centran en la necesidad de resolver contradicciones entre currículo/práctica y de preparar mejor a los docentes para fomentar la creatividad musical infantil.

Palabras claves: Educación Infantil; Actividades Musicales; Currículo de Infantil; Creatividad.

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1. Introduction: Kindergarten education in Hong Kong

In Hong Kong, the term *kindergarten* is used in reference to preschools for 3- to 6-year-old children. Kindergarten education is not compulsory, yet most children attend center-based programs, either half-day (around 63%) or full-day (37%). Unlike most Western countries but similar to other Asian societies (Kagan, 2019), kindergartens in Hong Kong are operated by private providers and non-profit organizations. A government agency, the Education Bureau (EDB), regulates and subsidizes the local kindergarten sector (Education Bureau, 2021a). In fact, the Kindergarten Education Scheme (2017a) was recently implemented to enhance the quality of kindergarten education across the territory and to provide government subsidies to a large mass of local kindergartens—currently 73% of the total (EDB, 2021b).

All kindergartens under this Scheme are subject to the Quality Review (QR), an assessment mechanism that determines whether (or not) kindergartens will obtain government subsidies. Teams of EDB assessors visit kindergartens for 2.5 to 3.5 days to conduct lesson observations, examine children's work, revise curriculum materials, and interview the kindergarten staff. QR reports are written based on these on-site observations. Those kindergartens that meet the performance indicators (EDB, 2017b) will pass the assessment. Their QR reports are published on the EDB website³ for public information, aiming to strengthen the transparency of the QR mechanism and disseminate high-quality pedagogical practices across the city (EDB, 2017a).

This study analyzes the feedback pertaining to music education in the QR reports. We believe these reports constitute a large-scale and highly interesting database. Other than providing an excellent window into pedagogical practices within local kindergartens, they reveal the types of pedagogical practices regarded as high-quality practices by the EDB, given that these kindergartens passed the QR assessment. Systematic analyses of these reports are therefore of great interest to various stakeholders (e.g., researchers, teacher educators, curriculum designers, principals, teachers). The Literature Review is structured into two sub-sections. The first one elaborates on the official kindergarten music curriculum in Hong Kong. The second one reviews the international literature on music activities within kindergarten settings.

2. Literature review

2.1. Kindergarten music curriculum: The case of Hong Kong

Music is a key learning area in kindergarten education, given its multiple benefits to children's holistic development and learning (Cremades *et al.*, 2017; Sullivan, 2016; Young & Ilari, 2019). Western scholars have defined kindergarten music education as the provision of diversified musical experiences for children to learn about musical elements, develop musical skills and dispositions, express emotions and feelings, and stimulate children's imagination (Essa & Burnham, 2019; Moravcik *et al.*, 2013). There is evidence that different types of music activities contribute to fostering specific outcomes in young children. For instance, singing promotes language development (Chen-Hafteck & Mang, 2012); music appreciation can enhance intellectual and creative development (Campbell, 2000); singing action songs, playing musical games, clapping rhythms, and rhythmic movement in groups can generate positive social

³ Please visit: <https://www.edb.gov.hk/en/edu-system/preprimary-kindergarten/>

behaviors (Moravcik *et al.*, 2013); and moving to the beat develops self-regulation and executive functions (Williams, 2018). Well-known Western pedagogical approaches such as Reggio Emilia and Montessori emphasize the importance of music within the early childhood curriculum, highlighting its power to cultivate children’s divergent thinking, creativity, and self-expression (Watts, 2018).

Within the Hong Kong context, government-subsidized kindergartens are required to follow the Kindergarten Education Curriculum Guide—hereafter the *Guide* (Curriculum Development Council [CDC], 2017). The Guide includes music as a subdomain of ‘Arts and Creativity’. The three main learning objectives of this learning area comprise: (1) “to develop sensory abilities and accumulate art experiences” (e.g., body movements, singing, music appreciation, rhythm and beats), (2) “to express feelings and unleash creativity through presenting and creating the arts” (e.g., using imagination and expressing feelings through singing and movements), and (3) “to develop creativity through active exploration in art activities” (e.g., improvising and creating on musical elements) (CDC, 2017, p.47). Half-day and full-day kindergartens are expected to allocate 45-60 minutes and 90-105 minutes per day, respectively, for children to participate in arts and physical activities. Teachers are advised to implement sufficient, diversified, and enjoyable music activities on a daily basis.

The EDB published the performance indicators (EDB, 2017b) to assess the quality of teaching and learning in the Guide’s various learning areas. The performance indicators pertaining to music involve two domains (Table 1).

Table 1. Music performance indicators

Domain II	Learning and Teaching – Curriculum Structure
	Focuses on the provision of sufficient daily music activities for children to gain music learning experiences
Domain IV	Child Development – Aesthetic and Cultural Development
	Sub-domain: Creativity and Appreciation
	Focuses on arts and music with specific expectations for children
	a) develop a different sense to recognize sound, rhythms, clapping, and imitating the sound of nature
	b) sing songs with movements and play musical instruments
	c) enjoy the music activities
	d) experience and express musical elements
	e) enjoy music performance, dancing, creating, and composing
	f) create music and self-expression
	g) appreciate music and express feelings in relation to personal experiences

These performance indicators reflect the EDB’s perspective of high-quality music pedagogical practices. Note that performance indicators (a) to (d) relate to the first objective of the Arts and Creativity learning area (develop sensory abilities), while performance indicators (e) to (g) put the emphasis on the second objective (express feelings) and third objective (develop creativity through active exploration). This means that local curriculum policies require teachers not only to implement reproductive or routine music activities in the classroom; rather, teachers are also expected to utilize music as a tool to develop an array of skills and foster children’s creativity and self-expression (EDB, 2017b). The abovementioned learning objectives and performance indicators are consistent with contemporary curriculum standards and early childhood education frameworks around the world (Campbell & Scott-Kassner, 2019; Cremades *et al.*, 2017). In the next section, we review recent empirical studies that have investigated music teaching practices at kindergartens around the globe.

2.2. Music activities in kindergartens: Classroom practices around the world

Research studies conducted in various countries and jurisdictions, including Hong Kong (Lau & Grieshaber, 2018), have reported that kindergarten teachers primarily focus on providing children with music experiences to develop their sensory abilities, including singing, movements, instrumental and integrated activities (Ehrlin & Tivenius, 2017; Stolić, 2015). Singing is the most typical music activity (Pérez-Moreno & Folch, 2019). For example, in the United States, Rajan (2017) found that teachers spend long periods of time singing songs related to shapes, letters, numbers, seasons, and counting, in order to build academic connections between music and other learning areas (i.e., language and numeracy acquisition). In an observational study conducted in Singapore by Bautista *et al.* (2018), singing and moving to music was the most common combination of activities among various art forms. In particular, teachers were frequently observed instructing children to perform specific movements while singing traditional children's songs. Other prior studies conducted in Sweden and Spain indicated that teachers frequently let children play musical instruments, typically melodic, percussion, and Orff instruments (Ehrlin & Tivenius, 2017; Rodríguez & Álvarez, 2015). However, in Turkey, Ersoy and Dere (2012) found that around half of the teachers did not provide children opportunities to explore instruments due to the lack of instruments in the classroom.

In contrast, activities that involve sound exploration, improvisation, creation, and self-expression through music are less frequently identified in kindergartens around the world (Bautista *et al.*, 2018; Garvis, 2012; González & Tarrés, 2019). Denac (2008) found that kindergarten teachers in Slovenia spent less than 15% of music education time engaging children in experimentation with sound. In Singapore, Bautista *et al.* (2018) reported that music activities were primarily reproductive in nature, lacking creative elements and exposure to diversified music genres. A similar issue was reported in Hong Kong a decade ago. Kindergarten teachers mainly emphasized teaching factual knowledge such as musical elements and concepts, rather than using sound and music to unleash children's creativity (Cheung, 2012; Lau, 2006).

Prior qualitative studies conducted in the West have demonstrated how teachers may foster children's musical creativity in kindergarten classrooms, in alignment with contemporary curriculum discourses in music education. For instance, the narrative case study conducted by Schei and Ødegaard (2020) analyzed how young children engaged in a music exploration theme-based activity. Children created a story with the teacher's instrumental accompaniment and expressed their feelings by improvising movements in response to the music's rhythm, melody, and mood. Süner and Ünlü (2013) documented how children explored sound and created different instruments by utilizing mundane materials (e.g., create a guitar using waste boxes, rubber strings, and ropes). In Italy, the observational study conducted by Ferrari and Addressi (2014) analyzed how teachers applied the *Continuator*, an interactive and creative musical system designed to elicit children's thinking on sound. Findings showed that this technological tool could further cultivate children's interest in exploring musical elements.

Our review of the international literature reveals the existence of important research gaps. First, prior studies focusing on the enactment of music curricula are mainly qualitative and conducted with relatively small samples of participants (e.g., González & Tarrés, 2019; Süner & Ünlü, 2013). Hence, large-scale quantitative studies are needed. Second, some prior studies are not specific to music but integrate other art forms such as visual arts, drama, and dance (e.g., Bautista *et al.*, 2018). More music-specific research is therefore required. Finally, existing studies

on how Hong Kong kindergarten teachers implement the music curriculum are limited and relatively outdated (e.g., Chan & Leong, 2007). Updated studies are essential to better understand how recent curriculum policies are being enacted on the ground.

3. Goals

This study presents a content analysis of the QR reports focusing on the music activities implemented by Hong Kong kindergarten teachers. We had two specific research goals. Goal 1 was to examine the presence of music in the QR reports, focusing on the most typical lexicon (nouns, verbs, and adjectives) and the frequency of key terms related to the various music objectives, as stated in local policies. Goal 2 was to analyze the types of music activities and the most common combinations of musical contents alluded to in the reports.

Our ultimate purpose was to assess the correspondence between the music activities implemented by teachers on the ground and Hong Kong local curriculum policies, as specified in the Guide's learning objectives (CDC, 2017) and the performance indicators (EDB, 2017b). Findings can inform kindergarten stakeholders (curriculum designers, principals, teacher educators, professional development providers) about the types of music activities that teachers tend to do less in class, hence revealing the areas in which teachers need the greatest support.

The significance of the study and its interest for an international audience, especially for Western countries in Europe and America, lies in its potential to illustrate the unique characteristics of childhood education systems in Asia. Most Western countries are developing public kindergarten systems, training teachers up to the degree level, and advocating for pedagogies that are child-centric, play-based, and characterized by high-quality teacher-child interactions (Kagan, 2019; Torres *et al.*, 2022). In contrast, the kindergarten sector in Hong Kong is run by private providers, with most teachers trained up to the higher diploma level (2 years of post-secondary education), and even though the curriculum Guide advocates for Western theories and practices, kindergartens continue to enact teacher-centric and content-focused teaching approaches (Bautista *et al.*, 2021). Readers in Western countries will therefore benefit from learning about music education practices in a different socio-cultural setting.

4. Methods

4.1. Data analysis and sources

Content analysis is “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh & Shannon, 2005, p.1278). A content analysis was conducted on all the QR reports available since 2017 (year in which the new curriculum Guide was launched) up to 2020 (year in which this analysis was conducted). The number of kindergartens represented was 164 (approximately, 16% of the total number of kindergartens in Hong Kong). More specifically, we included one QR report published in 2017 (0.6%), 33 in 2018 (20.1%), 122 in 2019 (74.4%), and eight in 2020 (4.9%). These reports covered kindergartens in different geographical areas of Hong Kong, thereby providing a holistic picture of the music curriculum across the territory.

4.2. Procedure

First, ethical approval was obtained from the Human Research Ethics Committee (HREC) at the authors' University. Then, a four-stage process was employed to ensure the validity and reliability of the analysis.

Stage 1: *Literature review*. A detailed review of the local and international literature was conducted to provide us with a better understanding on the trends and standards of the music curriculum and practices in kindergarten settings. This allowed us to identify relevant themes pertaining to music activity types in kindergarten classrooms.

Stage 2: *Develop the coding scheme*. The QR reports were downloaded from the EDB's website and imported into MAXQDA Analytics Pro (VERBI Software, 2019) for data analysis. The authors applied both inductive and deductive approaches (Creswell, 2018) to develop a coding scheme. We first utilized open coding, as an initial interpretive process to identify common themes that emerged in the reports. Then, we added other codes gathered from the international and local literature (e.g., Other sound producers [Refsum, 2007]). The coding scheme was presented in a table format which contained the definitions, examples, and counterexamples for each code. Key illustrative examples were extracted from the QR reports. Codes were binary (i.e., Yes vs No), capturing whether the report mentioned this type of music activity or not.

Stage 3: *Piloting of coding scheme*. The coding scheme was validated by the authors and one student helper. The scheme was first piloted by selecting 35 reports randomly. Definitions, examples, and counterexamples were refined. While we explored various conceptual frameworks of music activities (Denac, 2008; Van Vreden, 2016; Zadnik & Habe, 2017), the low number of references to certain activities in the QR reports led us to collapse related activities and/or elements under the same code. For example, activities related to music composition and improvisation were both condensed under the code Musical Creativity. Inter-rater reliability was 0.95, as measured by Cohen's (κ) kappa, which indicated that the coding scheme had sufficient reliability.

Stage 4: *Final coding*. The first author (Coder 1) trained a student helper (Coder 2) to be familiar with the coding scheme. Then, both coders analyzed all the reports independently. Disagreements were resolved through discussion until 100% agreement was reached to ensure the reliability and consistency of the coding and assessment process (Boettger & Palmer, 2011).

4.3. Data analysis

To address Goal 1, we first analyzed the amount of text (mean number of words, SD, minimum, and maximum) related to music in the QR reports. Descriptive statistics of the most common lexicon were performed to examine the 60 most typical nouns, verbs, and adjectives within the music-related segments. This was supplemented with a word cloud generated by Word Art, intended to offer a visual representation of the findings. To address Goal 2, we used descriptive statistics (frequencies and percentages) to examine the kinds of activities that appeared in the QR reports. Literal examples were used to illustrate the analytic codes. Furthermore, a code co-occurrence model was generated to examine the most common combinations of musical contents alluded to in the reports. Common phrases among the co-occurring codes were shown as examples.

5. Results

5.1. Goal 1: Overall presence of music in the QR reports

In total, the 164 QR reports included 2,225,589 words. Each report had an average of 13,571 words ($SD = 1066.49$), with a minimum of 11,185 words and a maximum of 16,679 words. Segments pertaining to music were identified in 162 reports (98.78%). Only two reports, both published in 2019, did not include any music-related content. The music segments covered 109,155 words in all reports, with an average of 665.58 words per report (4.84% of the total content, on average), ranging from 0 words (0%) to 2,422 words (17.84%) per report.

Table 2 presents the 60 most common words within the coded segments. Irrelevant words including conjunctions (e.g., and, because), prepositions (e.g., in, to), and pronouns (e.g., they, many) were excluded from the analysis. Terms in different grammatical numbers (e.g., child, children) or tenses (e.g., learn, learns, and learning) were considered the same word. Words are sequenced according to their frequency (from highest to lowest) and presented based on word types (i.e., nouns, verbs, adjectives). Moreover, the table shows the mean and maximum number of times each word appeared per report, and the number and percentage of QR reports ($n = 164$) in which each word appeared in the music segments.

Table 2. Descriptive statistics of the most common lexicon in music-related segments

Word	Overall frequency	Average frequency per report	Maximum frequency per report	Number and percentage of reports ($n = 164$) in which the word appeared
<i>Nouns</i>				
Child	645	3.93	12	160 (97.56%)
Activity	592	3.61	15	161 (98.17%)
Music	545	3.32	13	162 (98.78%)
School	276	1.68	12	118 (71.95%)
Teacher	251	1.53	7	104 (63.41%)
Choice	142	0.87	5	114 (69.51%)
Free	142	0.87	5	114 (69.51%)
Movement	115	0.70	5	68 (41.46%)
Time	113	0.69	4	83 (50.61%)
Schedule	110	0.67	4	79 (48.17%)
Art	105	0.64	3	93 (56.71%)
Opportunity	97	0.59	4	69 (42.07%)
Balance	84	0.51	3	72 (43.90%)
Development	80	0.49	3	65 (39.63%)
Instrument	77	0.47	5	53 (32.32%)
Group	56	0.34	2	51 (31.10%)
Rhythm	54	0.33	3	39 (23.78%)
Arrangement	43	0.26	3	34 (20.73%)
Song	42	0.26	3	26 (15.85%)
Melody	40	0.24	3	29 (17.68%)
Fun	39	0.24	2	36 (21.95%)
Experience	33	0.20	3	28 (17.07%)
Element	28	0.17	2	21 (12.80%)
Game	28	0.17	3	23 (14.02%)
Rhyme	27	0.16	2	21 (12.80%)
Body	26	0.16	2	20 (12.20%)
Ability	25	0.15	3	18 (10.98%)
Appreciation	25	0.15	2	20 (12.20%)
Beat	24	0.15	3	18 (10.98%)
Percussion	22	0.13	2	20 (12.20%)

Question	21	0.13	2	20 (12.20%)
<i>Verbs</i>				
Learn	156	0.95	3	91 (55.49%)
Provide	106	0.65	6	81 (49.39%)
Sing	102	0.62	4	60 (36.59%)
Design	82	0.50	4	57 (34.76%)
Engage	77	0.47	4	56 (34.15%)
Play	73	0.45	5	47 (28.66%)
Enjoy	67	0.41	4	55 (33.54%)
Facilitate	66	0.40	3	54 (32.93%)
Teach	65	0.40	6	46 (28.05%)
Participate	50	0.30	3	41 (25.00%)
Express	42	0.26	2	37 (22.56%)
Improve	40	0.24	3	35 (21.34%)
Ensure	37	0.23	2	31 (18.90%)
Conduct	35	0.21	3	30 (18.29%)
Enhance	33	0.20	3	26 (15.85%)
Interest	32	0.20	4	17 (10.37%)
Perform	31	0.19	2	23 (14.02%)
Create	27	0.16	2	21 (12.80%)
Enable	26	0.16	2	23 (14.02%)
Respect	24	0.15	2	23 (14.02%)
<i>Adjectives</i>				
Daily	165	1.01	6	106 (64.63%)
Sufficient	126	0.77	4	97 (59.15%)
Rhythmic	80	0.49	4	50 (30.49%)
Musical	61	0.37	8	34 (20.73%)
Individual	44	0.27	2	43 (26.22%)
Adequate	36	0.22	3	32 (19.51%)
Effectiveness	36	0.22	5	25 (15.24%)
Good	25	0.15	2	21 (12.80%)
Appropriate	21	0.13	2	20 (12.20%)

A word cloud (see Figure 1) was generated using Word Art⁴ to visualize the most common 60 words within the music segments. To facilitate the readers’ interpretation, the words’ size was determined by their frequency within the reports (i.e., larger represents a higher frequency). Besides, we used different colors to represent the different types of words (i.e., nouns are in blue, verbs in red, and adjectives in green).



Figure 1. Word cloud emerging from the music segments (blue = noun, red = verb, green = adjective)

⁴ Please visit: <https://wordart.com/create>

As shown in Table 2 and Figure 1, the most typical words identified in the music-related segments were nouns (31), followed by verbs (20), and then adjectives (nine). The most frequent words were generic teaching and learning terms, for example, nouns such as “child”, “activity”, “school”, “teacher”, “free”, “choice”, verbs such as “learn”, “provide”, “design”, “engage”, and adjectives such as “daily”, “sufficient”. While the word “music” was mentioned in 162 reports (98.78%), the presence of music-specific terms (e.g., “song”, “melody”, “beat”, “percussion”, “create”) was low overall, which each term only appeared in below a quarter of the reports. The most prevalent music-specific terms were in relation to sensory abilities development through music experience, such as “instrument”, “rhythmic”, “sing”, and “movement”. However, none of these terms appeared in more than half of the reports. Furthermore, terms related to musical elements (e.g., “rhythm”, “melody”, “beat”) were seldom mentioned, with less than one-fourth of the reports. Note that only two terms related to the music learning objectives—expressing feelings through music (i.e., “express”) and developing creativity through active exploration in art activities (i.e., “create”) were identified in the most common lexicon. Yet, both “express” (22.56% of the reports) and “create” (12.8%) were infrequently mentioned. Apart from the terms in the most common lexicon, we identified some even more rarely mentioned words such as “emotions” (7.32%), “expression” (1.83%), “improvise” (0.61%), and “exploration” (0.61%). Surprisingly, terms strongly linked with creativity such as “experimentation”, “improvisation”, “invention” did not even appear within the music segments.

Interestingly, we found that certain terms related to music rarely appeared within the music segments, although they did frequently appear in other parts of the reports. Some examples pertaining to the area of creativity include the words “creativity” (64.02% of the QR reports versus 7.93% within music segments), “imagination” (43.90% versus 8.54%), and “creation” (36.59% versus 1.22%). Pertaining to the area of self-expression, similar findings were identified for the words “feeling” (44.51% versus 6.71%), “expression” (43.90% versus 1.83%), and “emotions” (29.27% versus 7.32%). Overall, this word frequency analysis revealed that kindergarten teachers did not seem to emphasize creativity and self-expression while teaching music to young children.

5.2. Goal 2: Types of music activities

A coding scheme with 13 analytic codes (see Table 3) was designed to analyze the types of music activities alluded to in the reports. Note that Table 3 only presents each code’s definitions due to space restrictions, while the examples are introduced in the body text.

Table 3. Coding scheme for music activity types in teachers’ pedagogical practices, as described in the QR reports

Code	Definitions
Rhythm and beat	References to activities involving rhythm and/or beating
Melody	References to activities involving melody
Other musical elements	References to activities involving musical elements other than rhythm, beat, and/or melody, such as pitch, dynamics, lyrics, tempo, timbre, etc.
Music appreciation / listening	References to activities that involve music appreciation, listening to music, and/or any other activity that requires the understanding and/or description of the parameters of music
Singing	References to singing songs, rhymes, and/or chants
Movement	References to moving in response to music (e.g., to the beat, tempo, dynamics) and/or moving to music freely (without teacher direction)
Music games	References to playing music games
Instrumental music	References to playing conventional musical instruments, including percussion instruments

Other sounds producers	References to producing sound with resources other than conventional instruments, for example body, eco-friendly instruments, nature, and/or technology
Theme-based activities	References to theme-based activities that integrate music with other learning areas, scenarios, and/or stories
Self-expression	References to self-expression of feelings, emotions, and/or ideas through music and/or in response to music
Musical creativity	References to exploration, experimentation, improvisation, invention, and/or creativity with music and/or sound
Others	References to generic music activities or elements not captured in the above categories

Each report alluded to 2.88 codes on average (min = 0, max = 11, *SD* = 2.58). Figure 2 presents the frequencies and percentages for each code within the QR reports.

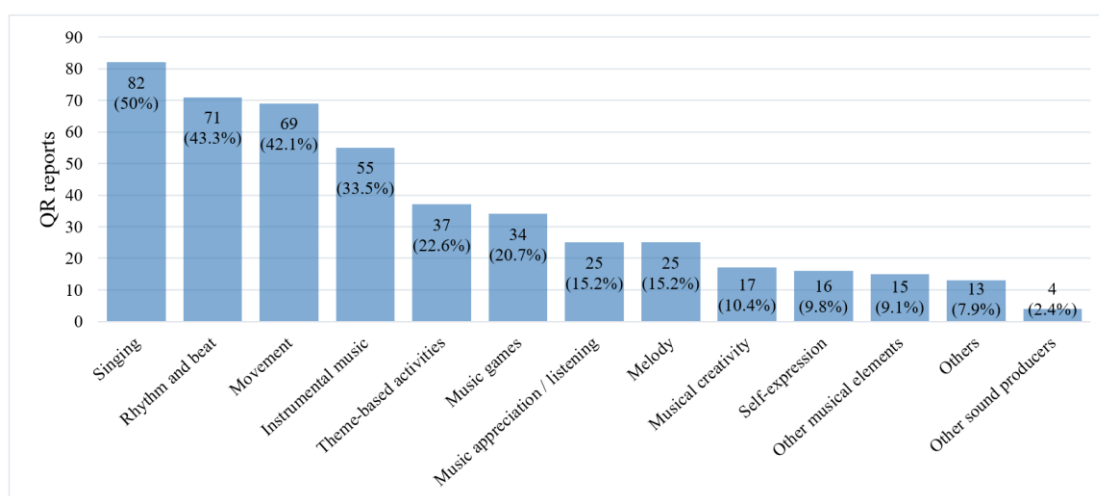


Figure 2. Music activities identified in the QR reports: frequencies and percentages of reports (*n* = 164) that alluded to each of the 13 analytic codes

The most frequently mentioned music activity was Singing (50% of total reports) (e.g., “singing”, “sing along with music”, “sing nursery rhymes”, and “sing the melody of songs”). This was followed by Rhythm and Beat (43.3%) (e.g., “beating time to the music”, “learn beats through demonstration”, and “feel the change of rhythms”), Movement (42.1%) (e.g., “make body movements”, “engage in rhythmic movements”, “perform rhythms and melodies through body movements”, and “actions songs”), and Instrumental Music (33.5%) (e.g., “instrumental playing”, “playing musical instruments”, and “playing percussion instruments”).

Certain music activities were mentioned in just a handful of the reports (between 15% to a quarter). These included Theme-based Activities (22.6%) (e.g., “design theme-related music activities and link up different music sessions with scenarios” and “the school arranges Cantonese opera activities for each class once a week as integrated music and physical play activities”), and Music Games (20.7%) (e.g., “integrate different games into music activities” and “incorporate the play elements in music activities”). This was followed by two codes that obtained the same percentage: Music Appreciation / Listening (15.2%) (e.g., “music appreciation”, “song appreciation”, and “guide children to listen to music”), and Melody (15.2%) (e.g., “identify different parts of the melodies”, “follow the melodies to perform rhythmic movements”, and “sing the melody of songs”).

The remaining categories, which mainly related to creativity and self-expression, were mentioned in a very low percentage in the reports (less than 15%). These included Musical Creativity (10.4%) (e.g., “create new words and actions to songs in order to unleash their creativity”, “improvise lyrics”, and “create simple and fluent melodies”), and Self-expression (9.8%) (e.g., “express their feelings freely through music and rhythmic movements” and “dance or move according to the rhythms of the music to express their feelings freely”). This was followed by Other Musical Elements (9.1%) (e.g., “flexibly introduce different musical elements, “pitch exercises”, and “identify when the music starts and rests as well as its high and low pitches”). The least-mentioned category was Other Sound Producers (2.4%) (e.g., “eco-friendly musical instruments”).

In Figure 3, a code co-occurrence model was produced using MAXQDA to depict the most common combinations of musical contents alluded to in the reports. This model allowed us to visualize the number of times the various codes co-occurred in the reports. The thickness of lines connecting the codes is determined by the frequency of co-occurrence. The minimum co-occurrence frequency was set as 20 reports. Because the codes Self-expression, Musical Creativity, Other Musical Elements, and Other Sound Producers did not meet the minimum co-occurrence frequency, we excluded them from the co-occurrence model. Code co-occurrence is described from the highest to the lowest frequency. Excerpts from the QR reports in which two (or more) musical contents co-occurred are presented for illustrative purposes.

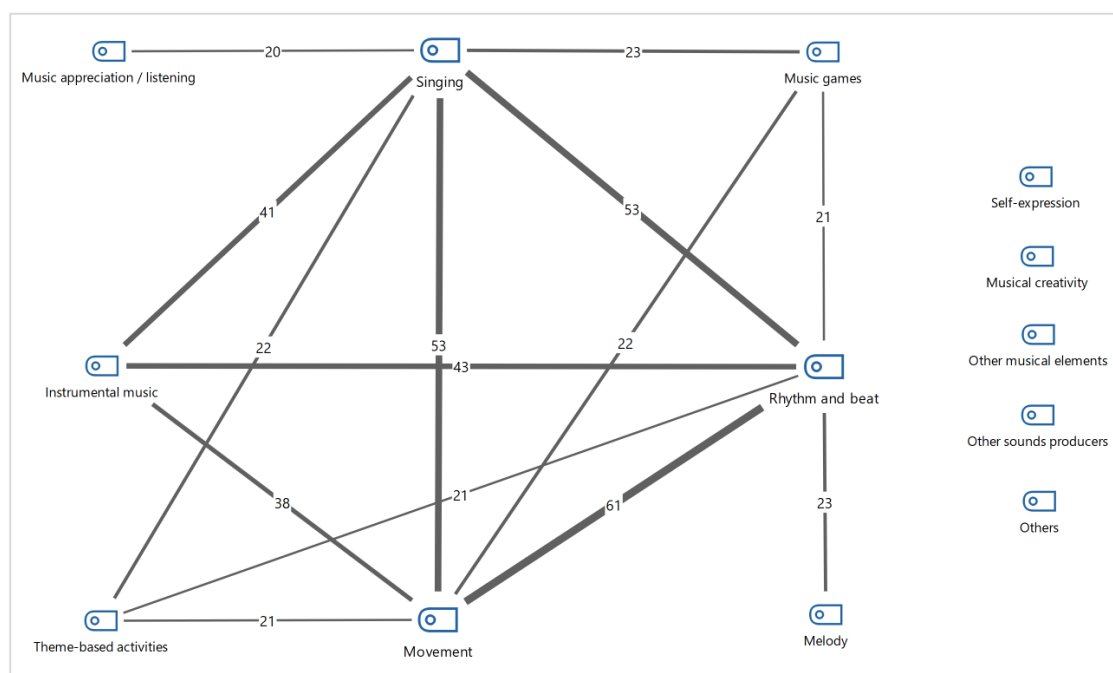


Figure 3. Code co-occurrence model regarding the musical contents in teachers’ classroom pedagogical practices emerged in the reports

As shown in Figure 3, the code Singing was strongly associated with Rhythm and Beat (53 reports), Movement (53), and Instrumental Music (41). Movement was intensely associated with Rhythm and Beat (61), as well as Instrumental Music (38). For example, “children follow melodies to perform rhythmic movements and manipulate musical instruments together”, and “teachers arrange activities such as singing, playing percussion instruments and music appreciation to guide children to move their limbs in response to the rhythms and melodies of music”. Theme-based Activities was moderately associated with Singing (22 reports), Rhythm

and Beat (21), and Movement (21). Examples involving these four musical contents were: “teachers use stories to stimulate children’s imagination, enabling children to engage in movements along with the rhythms and melodies while expressing emotions through body movements”, and “teachers create scenarios in accordance with themes to conduct music games, so as to guide children to exercise their imagination and perform rhythmic movements by following the music”. This analysis shows that many teachers tended to implement similar combinations of musical contents within the QR period, probably given their higher confidence in conducting these activities.

6. Discussion

We have provided an overall account of the types of music activities conducted in 164 kindergartens that had successfully passed the QR assessment in Hong Kong. Accordingly, our discussion below is based on the understanding that the music teaching and learning practices described in these reports had been endorsed by the EDB.

Goal 1 was to examine the presence of music in the QR reports, focusing on the most typical lexicon and the frequency of key terms related to the various music objectives, as stated in local policies. We found that the presence of music was minimal (average of 4.84% of total content). Indeed, relatively speaking, music-specific terms were rather infrequent. Furthermore, terms related to musical creativity and self-expression (e.g., “emotions”, “expression”, “improvise”, “exploration”, and “experimentation”) were either rare or completely absent. The minimal presence of music in the QR reports may be due to multiple factors. First, teachers possibly did not allocate sufficient time for music activities during the QR assessment period. Hong Kong is a competitive society, where parents often demand teachers prioritize academic learning areas to prepare children for Primary school (Chan, 2019; Gopinathan & Lee, 2018). Another possibility is that the EDB assessors could have paid more attention to other learning areas (i.e., language or mathematics) in lieu of music, which would indirectly reveal that the government also views music as a secondary or supplementary learning area. Similar findings have been reported in other Asian countries such as Singapore (Bautista *et al.*, 2016), and even in Western countries like the United States (Nardo *et al.*, 2006) and Sweden (Ehrlin & Tivenius, 2017). Finally, it could be the case that the primary purposes of using music in Hong Kong kindergartens are those of greeting children (e.g., singing welcome song, weather song), classroom management (e.g., getting children’s attention), arranging transitions and circle time, and supporting the learning of other curriculum areas (Barrett *et al.*, 2018; Rajan, 2017), and thus EDB assessors did not pay explicit attention to these uses of music in their written feedback. All these factors, independently or in combination, could help us explain the limited presence of music activities in the QR reports.

Goal 2 was to analyze the types of music activities and the most common combinations of musical contents alluded to in the reports. Teachers heavily focused on conducting activities related to the first objective of the Guide, which deals with the development of sensory abilities (CDC, 2017). Specifically, our results indicated that singing, rhythm and beat, and movement were the concepts most frequently mentioned. Nursery rhymes were the most typical song type alluded to, as found in other international studies (Ehrlin & Tivenius, 2017; Rajan, 2017). Playing instrumental music was another typical music activity, which suggests that Hong Kong teachers do not face the issue of instruments deficit in the classroom, as reported in countries like Turkey (Ersoy & Dere, 2012). Moreover, similar to trends in Singapore (Bautista *et al.*, 2018), teachers

commonly combined four music contents during the QR period, namely singing, rhythm and beat, movement, and instrumental music. In a nutshell, the music activities conducted in Hong Kong kindergartens mainly focused on providing children with experiences to learn musical skills and/or factual knowledge, which mirrors trends identified in the territory more than a decade ago (Chan & Leong, 2007; Cheung, 2012).

Our findings suggest that Hong Kong kindergarten teachers may not sufficiently implement music activities related to objectives 2 and 3 of the Guide, which relate to self-expression and creativity (CDC, 2017). The music activities described in the QR reports did not explicitly allude to children's self-expression of feelings and emotions, exploration, experimentation, improvisation, invention, or creativity with music or sound. Children seem to be hardly ever given opportunities to produce sound with resources like their own bodies, eco-friendly instruments, sounds of nature, or using technology, in contrast to prior studies that have clearly demonstrated the value of such sound exploration activities to provoke children's creative thinking (Ferrari & Addessi, 2014; Süner & Ünlü, 2013). Note that similar trends have been identified in other countries, including Slovenia (Denac, 2008), Australia (Garvis, 2012), and Singapore (Bautista *et al.*, 2018). It is therefore concerning that kindergartens might not fully utilize the power of music as a medium for communication and exploration (Moravcik *et al.*, 2013).

6.1. Conclusions

In summary, our evidence shows important discrepancies between Hong Kong local music education curriculum policies and actual practices in local kindergartens. Our first conclusion is that the EDB assessors seemed to have ignored or overlooked these important curriculum/practice discrepancies, particularly regarding the limited use of music to foster children's creativity and self-expression. Note that these 164 kindergartens had passed the QR assessment, which means that the EDB assessors endorsed the quality of their pedagogical practices. We infer that the EDB assessors could have superficial understandings of the meaning of high-quality music education practices, perhaps due to their limited training (Bautista *et al.*, 2022) or due to the lack of concrete examples provided in the Guide (CDC, 2017). The situation is concerning because this misleading feedback could result in a dangerous vicious circle: kindergarten practitioners may receive the message that their music pedagogical practices are of high-quality, when in fact they are clearly insufficient to fulfill the official curriculum objectives, thereby perpetuating poor music practices.

Our second conclusion is that Hong Kong kindergarten teachers seem to treat music as a secondary learning area, using it to manage classroom routines and transitions and to teach about other areas, but seldom implementing activities purposefully designed to foster children's musical creativity and self-expression. Indeed, we hardly identified references to music activities involving sound exploration, free vocalizations, or improvisation, as suggested in the literature (Schei & Ødegaard, 2020; Siebenaler, 2006). This might be due to two challenges that Hong Kong teachers are currently facing: they receive insufficient pre- and in-service preparation in music education and, consequently, they have low confidence and limited competencies to teach music to young children (Bautista & Ho, 2021). This reveals the need to support Hong Kong kindergarten teachers regarding musical creativity and self-expression to ensure they can design, implement, and evaluate these activities in classroom settings.

6.2. Limitations and future research

Despite the large number of kindergartens included in our content analysis, the study has certain limitations. First, the low presence of music content in the QR reports does not necessarily mean that teachers neglect music in their usual classroom practices. Indeed, perhaps teachers focused less on music during the QR observation period to satisfy other expectations or requirements. Further investigations of teachers' music pedagogical practices are therefore needed. Additional large-scale studies should be conducted based on other data sources such as classroom observations, interviews, and analysis of curriculum materials. Second, the QR reports represent the EDB assessors' perspectives on high-quality music pedagogical practices. Future research should explore the perspectives of other kindergarten stakeholders such as kindergarten teachers, principals, and teacher educators. Finally, the QR reports only focus on kindergartens that joined the Kindergarten Education Scheme (2017a) to receive government subsidies. International kindergartens were therefore excluded from the present analysis. Future research must explore whether the trends reported herein are generalizable to international kindergartens, which are not subject to the QR exercise.

6.3. Practical implications

The first implication relates to the need to raise awareness of kindergarten stakeholders (including EDB assessors) about the official expectations for high-quality music education. Being aware of the curriculum/practice discrepancies is vital for improvement. In particular, we recommend that the curriculum designers further clarify the official expectations by exposing the EDB assessors to concrete examples of internationally-recognized high-quality music pedagogies, especially regarding musical creativity and self-expression. When the assessors conduct on-site QR observations in the future, they should be more mindful of the various learning objectives and performance indicators pertaining to music teaching and learning in local policies. By increasing awareness and preparation, the EDB assessors would be able to provide relevant advice for kindergarten practitioners to improve their music practices, thereby bridging existing curriculum/practice gaps (Barrett *et al.*, 2018).

The second implication relates to the need for ongoing professional development (PD). Teacher educators and PD providers should offer kindergarten teachers additional support on musical creativity and self-expression. For instance, it is vital to engage teachers in training that enables them to conduct music activities that are open-ended (e.g., sound exploration, experimentation, improvisation, invention), while at the same time considering the constraints related to time and resources in local kindergartens. This is consistent with a previous local interview study where teachers expressed a high demand and motivation to participate in PD courses focusing on activity design, curriculum integration, and musical creativity (Bautista & Ho, 2021). By providing kindergarten teachers with responsive PD music experiences, they will be able to better plan and implement their music lessons more strategically, ultimately reinforcing the quality of music pedagogical practices that benefit children in the long run (Campbell & Scott-Kassner, 2019; Cremades *et al.*, 2017).

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References

- Barrett, M.S., Flynn, L.M. & Welch, G.F. (2018). Music value and participation: An Australian case study of music provision and support in early childhood education. *Research Studies in Music Education*, 40(2), 226-243. <https://doi.org/10.1177/1321103X18773098>
- Bautista, A., Bull, R., Ng, E.L. & Lee, K. (2021). "That's just impossible in my kindergarten." Advocating for 'glocal' early childhood curriculum frameworks. *Policy Futures in Education*, 19(2), 155-174. <https://doi.org/10.1177/1478210320956500>
- Bautista, A. & Ho, Y.-L. (2021). Music and movement teacher professional development: An interview study with Hong Kong kindergarten teachers. *Australasian Journal of Early Childhood*, 46(3), 276-290. <https://doi.org/10.1177/18369391211014759>
- Bautista, A., Moreno-Núñez, A., Bull, R., Amsah, F. & Koh, S. (2018). Arts-related pedagogies in preschool education: An Asian perspective. *Early Childhood Research Quarterly*, 45, 277-288. <https://doi.org/10.1016/j.ecresq.2017.12.005>
- Bautista, A., Ng, S.C., Muñoz, D. & Bull, R. (2016). Learning areas for holistic education: Kindergarten teachers' curriculum priorities, professional development needs, and beliefs. *International Journal of Child Care and Education Policy*, 10(8), 1-18. <https://doi.org/10.1186/s40723-016-0024-4>
- Bautista, A., Yeung, J., McLaren, M.L. & Ilari, B. (2022). Music in early childhood teacher education: Raising awareness of a worrisome reality and proposing strategies to move forward. *Arts Education Policy Review*, 1-11. <https://doi.org/10.1080/10632913.2022.2043969>
- Boettger, R. & Palmer, L. (2011). Quantitative content analysis: Its use in technical communication. *Professional Communication, IEEE Transactions on*, 53, 346-357. <https://doi.org/10.1109/TPC.2010.2077450>
- Campbell, D. (2000). *The Mozart effect*. Avon Books.
- Campbell, P. & Scott-Kassner, C. (2019). *Music in Childhood: From Preschool through the Elementary Grades*. Cengage.
- Chan, J.W.Y. (2019). *A narrative inquiry exploring Hong Kong millennial students' perspectives on parental involvements in their academic trajectories*. (Doctoral Dissertation). Northeastern University Library - Digital Repository Service. <https://repository.library.northeastern.edu/files/neu:m044c904f/fulltext.pdf>
- Chan, W. & Leong, S. (2007). Music education and the review of early childhood education in Hong Kong: Professional development needs of early childhood teachers. *Asia-Pacific Journal for Arts Education*, 5(2), 3-26.
- Chen-Hafteck, L. & Mang, E. (2012). *Music and Language in Early Childhood Development and Learning*. Oxford University Press.

<https://doi.org/10.1093/oxfordhb/9780199730810.013.0016>

- Cheung, R. (2012). Teaching for creativity: Examining the beliefs of early childhood teachers and their Influence on teaching practices. *Australasian Journal of Early Childhood*, 37(3), 45-51. <https://doi.org/10.1177/183693911203700307>
- Cremades, R., García, D., Lizaso, M.B., Morales, A., Del Olmo, M.J., Román, M. & Susaeta, I. (Eds.). (2017). *Didáctica de la música en educación infantil*. Ediciones Paraninfo.
- Creswell, J.W. (2018). *Qualitative Inquiry & Research Design: Choosing among Five Approaches*. Sage Publications.
- Curriculum Development Council (2017). *Kindergarten Education Curriculum Guide: Joyful Learning through Play, Balanced Development all the Way*. <https://www.edb.gov.hk/>
- Denac, O. (2008). A case study of preschool children's musical interests at home and at school. *Early Childhood Education Journal*, 35, 439-444. <https://doi.org/10.1007/s10643-007-0205-4>
- Education Bureau (2017a). *Handbook on Quality Review for Kindergartens*. <https://www.edb.gov.hk/attachment/en/>
- Education Bureau (2017b). *Performance Indicators: Kindergartens*. <https://www.edb.gov.hk/attachment/en/>
- Education Bureau (2021a). *EDB's Replies to LegCo Members Initial Written Questions in Examining the Estimates of Expenditure 2021-22*. <https://www.edb.gov.hk/attachment>
- Education Bureau (2021b). *Figures and Statistics: Kindergarten Education*. <https://www.edb.gov.hk/attachment/en/about-edb/publication-stat/figures/kg.xlsx>
- Ehrlin, A. & Tivenius, O. (2017). Music in preschool class: A quantitative study of factors that determine the extent of music in daily work in Swedish preschool classes. *International Journal of Music Education*, 36(1), 17-33. <https://doi.org/10.1177/0255761417689920>
- Ersoy, Ö. & Dere, Z. (2012). Examining of implementations of early childhood teachers working at preschools in Ankara in music education. *Ankara University Journal of Faculty of Educational Sciences*, 45(1), 249-268. https://doi.org/10.1501/Egifak_0000001244
- Essa, E.L. & Burnham, M.M. (2019). *Introduction to Early Childhood Education*. SAGE.
- Ferrari, L. & Addressi, A.R. (2014). A new way to play music together: The Continuator in the classroom. *International Journal of Music Education*, 32(2), 171-184. <https://doi.org/10.1177/0255761413504706>
- Garvis, S. (2012). What is going on in early years music planning? A study of early years teachers' weekly plans. *Australasian Journal of Early Childhood*, 37(2), 122-126. <https://doi.org/10.1177/183693911203700216>
- González, M.C. & Tarrés, M.A. (2019). El aula de música como ambiente sonoro de aprendizaje en Educación Infantil. *Revista Electrónica de LEEME*, 44, 42-62. <https://doi.org/10.7203/LEEME.44.15595>

- Gopinathan, S. & Lee, M. (2018). Excellence and equity in high performing education systems: policy lessons from Singapore and Hong Kong. *Infancia y Aprendizaje*, 41(2), 203-247. <https://doi.org/10.1080/02103702.2018.1434043>
- Hsieh, H.F. & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288. <https://doi.org/10.1177/1049732305276687>
- Kagan, S.L. (Ed.). (2019). *The Early Advantage: Early Childhood Systems that Lead by Example*. Teachers College Press.
- Lau, M. (2006). *Strategies kindergarten teachers use to enhance children's musical creativity : Case studies of three Hong Kong teachers*. (Doctoral Dissertation). Queensland University of Technology. <https://eprints.qut.edu.au/16357/1/>
- Lau, M. & Grieshaber, S. (2018). School-based integrated curriculum: An integrated music approach in one Hong Kong kindergarten. *British Journal of Music Education*, 35(2), 133-152. <https://doi.org/10.1017/S0265051717000250>
- Moravcik, E., Nolte, S. & Feeney, S. (2013). Music curriculum: Creating with heart and voice. In E. Moravcik & S. Nolte (Eds.), *Meaningful Curriculum for Young Children* (pp.329-361). Pearson.
- Nardo, R., Custodero, L., Persellin, D. & Fox, D. (2006). Looking back, looking forward: A report on early childhood music education in accredited American preschools. *Journal of Research in Music Education*, 54(4). <https://doi.org/10.2307/4139751>
- Pérez-Moreno, J. & Folch, L. R. (2019). Las actividades musicales preferidas de la voz de los propios niños y niñas de cuatro años. Un estudio exploratorio. *Revista Electrónica de LEEME*, 43, 19-34. <https://doi.org/10.7203/LEEME.43.13985>
- Rajan, R. (2017). Preschool teachers' use of music in the classroom: A survey of park district preschool programs. *Journal of Music Teacher Education*, 27(1), 89-102. <https://doi.org/10.1177/1057083717716687>
- Refsum, A. (2007). *Action-sound: Developing methods and tools to study music-related body movement*. (Doctoral Dissertation). University of Oslo. <https://www.duo.uio.no/handle>
- Rodríguez, J.R. & Álvarez, R.M.V. (2015). The music materials in early childhood education: A descriptive study in Galicia (Spain). *International Journal of Music Education*, 35(2), 139-153. <https://doi.org/10.1177/0255761415619423>
- Schei, T. & Ødegaard, E. (2020). Musical exploration in everyday practices – Identifying transition points in musicking. In M. Hedegaard & E. Eriksen Ødegaard (Eds.), *Children's Exploration and Cultural Formation* (pp.159-172). Springer International Publishing. https://doi.org/10.1007/978-3-030-36271-3_10
- Siebenaler, D. (2006). Training teachers with little or no music background: Too little, too late? *Update: Applications of Research in Music Education*, 24(2), 14-22. <https://doi.org/10.1177/87551233060240020102>
- Stolić, J. (2015). The development of preschool children's musical abilities through specific types of musical activities. *Research in Pedagogy*, 5(2), 31-44.

<https://doi.org/10.17810/2015.14>

- Sullivan, P.M. (2016). *The effects of music in kindergarten lessons on student engagement and student learning*. (Doctoral Dissertation). Northeastern University Library. <https://repository.library.northeastern.edu/files/neu%3Acj82ns068/fulltext.pdf>
- Süner, S. & Ünlü, C. (2013). Musical instruments made by small hands: A multifunctional activity at preschools in Turkey. *Procedia - Social and Behavioral Sciences*, 93, 1879-1884. <https://doi.org/10.1016/j.sbspro.2013.10.133>
- Torres, E., Narea, M. & Mendive, S. (2022). Cambio en la calidad de las interacciones pedagógicas en Educación Infantil tras un programa de desarrollo profesional. *Journal for the Study of Education and Development*, 45(1), 220-243. <https://doi.org/10.1080/02103702.2021.1972699>
- Van Vreden, M. (2016). Maestro for a moment: A conceptual framework for music integration in Grade R. *South African Journal of Childhood Education*, 6, 1-10. <http://www.scielo.org.za/scielo.php?script>
- VERBI Software (2019). MAXQDA 2020 [computer software]. Berlin, Germany: VERBI Software. <https://maxqda.com>
- Watts, S.H. (2018). Teaching and learning in context. In *World music pedagogy: Early Childhood Education*. Routledge.
- Williams, K.E. (2018). Moving to the beat: Using music, rhythm, and movement to enhance self-regulation in early childhood classrooms. *International Journal of Early Childhood*, 50(1), 85-100. <https://doi.org/10.1007/s13158-018-0215-y>
- Young, S. & Ilari, B. (2019). *Music in Early Childhood: Multi-disciplinary Perspectives and Inter-disciplinary Exchanges*. Springer Nature.
- Zadnik, K. & Habe, K. (2017). The developmental benefits of early music education: An evaluation study of the two Slovenian projects. In R.V. Nata (Ed.), *Progress in Education* (Vol. 46, pp.123-144). Nova Science Publishers.