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Problems in Music Pedagogy is an international refereed journal concerned with all aspects of music pedagogy. Topic areas include music teaching/learning process in a new education paradigm context, music learning outcomes, assessment in music pedagogy process, music teaching and learning activities, music teacher competence in the context of sustainable development, music education institutional responses to current trends. The journal is committed to promoting excellence in these fields by providing an international forum for the debate and evaluation of a wide range of music pedagogy issues and professional concerns.

The journal aims to publish articles which will contribute to improving theory and practice in the field of music pedagogy.

These articles may variously:

- raise and debate contemporary issues;
- report on new research;
- relate new research to theory;
- relate theory to practice;
- offer informed comment on contextual and professional matters;
- describe cases and their implications for a wider field;
- discuss a historical movement in terms of its relevance to present and future situations.

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EDITORIAL

Dear readers,

The current volume of *“Problems in Music Pedagogy”* (PMP) contains four articles reflecting the history of music pedagogy.

Katri-Helena RAUTIAINEN from University of Jyväskylä (Finland) provides an overview of the evolution of music teaching methods over the time period from 1860 to 1970. Using analytic-historical and data-driven content analysis method, the study is focused on examining the mainstream trends in the development of methods, or their manifestations, as well as discussing the causes behind them. Familiarity with the historical development lines of music teaching methods helps students and teachers to better understand the significance of music teaching methods, where cultural starting points and music education phenomena of each era are connected to the development of methods, as well as stimulates teachers to develop them further and seek new methodical practices to music teaching at schools.

Maija PUROMIES and Antti JUVONEN from University of Eastern Finland provide systematic literature overview about the social music education method (El Sistema). The weighting of the studies was evaluated based on the content in relation to the subject under study, the scientific level, Publication Forum JUFO classification, and date of publication. Authors stress the need to develop programmes that informally draw young people to freely engage in music, to explore their creative potential, and to excel.

Gerhard LOCK from Estonia introduces the New and the Old as music history categories based on the German musicologist Ballstaedt's theoretical framework of meanings of such terms as 'temporal', 'epochal' and 'imperative' in the light of the Oxford History of Western Music editor-in-chief Taruskin's understanding of the *agens* (agent, active person) as driving force of how and by whom music history has developed, has been received and interpreted through the times. The possible path of transmission of the New in music (both academic and popular) lies in an open/supporting teaching that enables cross-domain influences and doesn't forget the past (traditions). Author underlines that the teachers could support their students' skills a) to approach historiography using library sources wittingly to understand the path of transmission of the New, b) to make explicit the modes of thought to become aware of worldview/ideology-driven reasons for phenomena in history brought to the present and projected into the future, c) to reasonably apply the historiographical acts of interpretation and habits of mind in order to understand how norms appear or have been installed by agents.

Kagari SHIBAZAKI and Nigel A. MARSHALL from the United Kingdom explore the process whereby children work together in a group to create a collaborative musical composition, and seek to identify the types of learning which take place within that process. Authors suggest that a process and taxonomy of behavior explored further could give us a greater level on insight into the mechanism taking place within a group working together on a musical composition. Such an insight certainly gives us more profound understanding of the range of elements which should be assessed when taking into consideration the contribution of individuals working within a group.

On behalf of editor-in-chief of the journal, I express my appreciation to the authors, Editorial Board, Editorial Staff and Council of Science of Daugavpils University for successful teamwork, perseverance and valuable support to the continuation of this periodical.

Dear readers, I would like to invite you to participate in the 12th International Scientific Conference “Problems in Music Pedagogy”, which will be held on 24-25th September 2021 at Daugavpils University (Latvia). I wish you inspiration, perseverance and consistence on your way toward the development of music teaching/learning.

Editor-in-chief
Jelena DAVIDOVA

OVERVIEW OF DEVELOPMENT LINES OF MUSIC TEACHING METHODS IN FINLAND

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Abstract

This article provides a cross-sectional overview of the evolution of music teaching methods over a 160-year timeline. The objective of the study is limited to examining the mainstream trends in the development of methods, or their manifestations, as well as discussing the causes behind them. The objective is also to investigate the methodical state of the 21st century teaching.

The data consists of previous studies, music textbooks and learning diaries of class teacher students (N=79). The analysis of the data is based on analytic-historical and data-driven content *analysis*. The time period from 1860 to 1970 has focused on developing the methods. The participatory and functional methods have remained dominant for the longest time. As we enter the 1980s, methods are gradually being phased out and they are used only occasionally, or the main focus is not on them anymore.

As a result, teaching methods are fragmented and their implementations depend on the teacher's pedagogical skills in music teaching.

Key words: *music education, music pedagogy, music method, music teaching, music didactics*

Study design

The purpose of this article is to provide an overview of the development of music teaching methods in Finland. The framework of the study is based on studies investigating the history of music education (e.g. Rautiainen, 2003, 2009a, 2009b, 2010, 2011a, 2011b, 2012, 2013, 2014). The timespan of the study extends from the 1860s to 2020. The novel perspective of the study is the examination of causes and consequences, where the introduction of new methods and their changes during different decades are analyzed. More detailed descriptions of the methods have been left outside this study, as they have already been examined in other studies. The study focuses on music's subject-didactic and pedagogical main principles of guiding the learning. The data consists of music textbooks of grades 1-6 and sources aimed at music

teaching. The analytic-historical approach has been applied in the analysis of textbooks, where the development of methods is followed on a timeline (Rautiainen, 2003).

The objective of the study is deepened by researching the class teacher students' experiences in music teaching in the comprehensive school in the 2000s and 2010s. The data has been collected from the students' learning diaries (N=79) from 2018 to 2019. In their writings, students reflect freely on the development of their own learning. The proportion and quantity of the reflection about their experiences in comprehensive school therefore varied, depending on what each student wanted to share or considered necessary. In the analysis of the learning diaries, I have used data-driven content analysis where the writings are handled according to the phenomenological approach (Patton, 2002; Tuomi & Sarajärvi, 2009). The data raises the most typical main phenomena related to the guidance of learning in the music teaching of comprehensive school's lower grades.

Research questions:

1. What kind of methodical development lines of music teaching were there from 1860 to 2020?
2. Why were some methods used for a long time, while others were abandoned?
3. What is the methodical state from 2000 to 2020?

Background on the Initial Phases of the Method Development

A. Development lines from the interval to patterns

Music teaching methods started to develop strongly around the same time that the Finnish teacher training institution was established in the 1860s (Rautiainen, 2003). Finland's first teacher training college was founded in Jyväskylä in 1863. The first teacher of singing and instrument-playing was Erik August Hagfors, who created the first starting points for the teaching of singing in Finland on the basis of foreign influences (Pajamo, 1976). At that time, the school subject was known as teaching of singing. The subject's name was changed to music teaching only in the 1970s. Hagfors used singing by ear and the interval method in his teaching (Pajamo, 1976). This method spread especially to Finnish-language schools along with graduated elementary school teachers. In Swedish-speaking schools, Chev  's number method was used. When the teacher training institution spread to different parts in Finland, it encouraged more and more music professionals to develop the methods of teaching singing (music) and advance them. As a result, the pattern singing method was created in the early 1890s. It became the mainstream method for the next 40 years in Finland. During this period, multiple new variations and trends of the pattern singing method were created (Rautiainen, 2003).

The first trend of the pattern singing method was the Dessirier-Wegelius pattern singing method developed by Martin Wegelius. The method was greatly influenced by his visit to Brussels in 1889. In Wegelius' method each note on the scale got its own melody theme i.e. a pattern of 2-6 notes in all keys (Wegelius, 1893). Method was first introduced by Wegelius in Helsinki Music School in the early 1890s, from where it spread all around Finland via graduated music professionals – especially to Swedish-speaking schools. This method was used and further developed by e.g. Hannikainen, Nervander and Nyberg (Rautiainen, 2003).

The second major trend of pattern singing was developed by Nyberg, the teacher of singing in Sortavala teacher training college. When Swedish singing teacher Nils Emil Anjou visited Sortavala in the early 1900s, he introduced Nyberg to Dessirier-Wegelius' pattern singing method, modified by Johannes Äyräs. Inspired by the method, Nyberg developed Anjou's and Äyräs's method further. Nyberg released new patterns in 1903 (Nyberg 1903), and this is how the Anjou-Nyberg pattern method was created (Rautiainen, 2003).

A new turn in the development of the pattern singing method took place when Törnudd, teacher of Rauma teacher training college, created a method based on it. The starting points of the method were the scale and the triad. Patterns were introduced later in the teaching. Another new aspect was that Törnudd combined pedagogy trends of the 1910s in his method. For the first time, Herbart-Zillerian formal degrees and new school principles were combined in the teaching of singing. Törnudd's method represented a new turning point where patterns were gradually abandoned and teaching developed towards more learner-based and functional methods (Törnudd, 1913; Rautiainen, 2003, 2011b, 2012, 2013). At the same time Heurlin, the teacher of singing in Pukkila school, developed the "En, Toi, Ko" method that was still based on patterns. In that method, each note on the scale was named according to the first syllables of numbers ('en', 'toi', 'ko', 'ne', 'vi', 'ku' 'sei') (Heurlin, 1917). Students became more active in class, which was a new aspect.

B. Causes and consequences of the pattern singing method

When considering the causes and consequences of the development, popularity and spreading of pattern singing; several factors can be identified from the literature and other sources of the time. First of all, the developers of pattern singing were the **leading music pedagogues** of the time, who worked in esteemed positions and educational institutions affecting the development of schools and education. Another major factor was that the educational thinking of the time was based on a **teacher-centric, rote and formality approach**. Likewise, the pattern singing method was based on exercises given by the teacher. In these exercises the aim was to learn the interval patterns of different keys by heart. Furthermore, the **Herbart-Zillerian influence could be seen in Soininen's formal degrees** used in music lessons. The lesson was based on a given pattern. This thinking could be seen especially in the "scale-triad-pattern singing" method created by Törnudd, the teacher of singing in Rauma teacher training college. Furthermore, the method included Soininen's formal degrees that were applied in music teaching and widely used in music lessons of the time. This was how the method gained recognition and prestige on a broader scale. However, also the **influences of the new school** could be seen in this method. The method aimed at activating the pupils and increasing the number of illustrations used in teaching, for example by a ladder that represented the scale. At the same time, the method sought to abandon the excessive practicing of patterns. The starting points of the method were the scale and the triad. Patterns were introduced later when intervals in the song demanded them. Thus, patterns held on to their position when the pattern method **was developed according to the newest trends of the time**. Also, Heurlin developed her "En, toi, ko" method into a more functional direction by introducing e.g. the harmonium and cardboard keyboards. Pupils' participation grew, and working methods developed to a more student-centric direction than previously. Furthermore, more rhythmical variation was brought to the patterns, taking them to a more singing direction. This helped children

sing them more easily and remember them better. This new development can be considered as the third reason for why the patterns held on to their position.

The progression of the pattern singing method was further speeded up by **methodical textbooks and article publications** based on it. Wegelius released textbooks about his method in 1893, which helped the method to spread. In the same year, Hannikainen translated Wegelius' Swedish-language method books, helping them to reach more readers as well. Hannikainen was the singing teacher of Jyväskylä teacher training college, where he also put this method to use (Hannikainen, 1893). Patterns developed by Nyberg spread through a newspaper called *Kansakoulun Lehti* in 1903 (Nyberg, 1903). Törnudd's textbook on singing spread widely because of its **versatile and elaborate contents**. In addition, it remained in the teacher training colleges' booklists even until the 1950s. Paula af Heurlin, the singing teacher of Pukinmäki, also published a method book in 1917. It was only mentioned briefly in the teacher training colleges' annual reports: despite its novelties; Herlin's method was shadowed by Törnudd's method.

Another further reason for the use of pattern singing method was that students graduating from the **teacher training colleges** had received in-depth education in it **throughout their entire education**. The method was therefore very well adopted. It is rather natural that when students graduated, the method **spread to schools** along with them. The progression of pattern singing was also affected by the fact that music teachers wanted to develop **singing from notes** that was supported by the singing teaching methods. Singing was an important part of people's everyday life. The advantage of the pattern singing method was that it taught profoundly the **intervals of singing**. Singing names (do, re, mi etc.) were introduced alongside note names. Later on, many similarities were found between that and the Kodály method. Both methods were based on the ear training system that aimed at learning to sing from notes. On the other hand, the Kodály method went even further in its pedagogical thinking that differed from the starting points of the pattern singing method. Further, the method was considered rather good especially among the **Swedish-speaking** music teacher community. This method's textbooks were available in Swedish and there was **no competing literature to replace them**. At that time, Swedish- and Finnish-speaking groups functioned rather separately and held on tightly to their own principles. The pattern singing method therefore remained popular even until the 1950s.

One further probable reason for the popularity of the pattern singing method was the **competition** between music teachers on who could come up with the best method. This can be seen indirectly in the teacher training colleges' annual reports, where textbooks have often been changed whenever a new music teacher has started (Kansallisarkisto [The National Archives of Finland]). On the other hand, development of teaching has always been part of the educators' job, which was also demanded and expected in teacher training colleges.

Despite the reforms made in the content of pattern singing, the pattern singing method was considered **difficult, laborious and slow** to teach at schools. This is exactly why discussion around the method development continued, though. There was a simultaneous desire to develop the method **and** find better solutions to using it in everyday teaching. Patterns took too much **time and attention** in class. Further, classes were **teacher-centric and theory-driven**, while the **pupils' participation was**

minimal. Very little time was left for actual singing, which would have motivated students better than learning difficult patterns by heart did. The method was also based on **keys** and their patterns, and songs were chosen from the same key depending on the pattern they were learning. This brought no variation to the selection of songs. First pupils sang songs from the C major, then from G major and then from F major. Later, pupils practiced their relative keys in the minor key, and eventually proceeded to other keys. Although a lot of effort was put to patterns, **children did not learn** to sing from notes very well. Some teachers abandoned the patterns and went back to singing by ear, while others taught music theory alongside singing by ear. Variation between schools was great, which is why there was a desire to develop the method of music/singing teaching to a more functional direction. It can be stated that the **trends of the new school** had a major influence on abandoning pattern singing, as it was replaced by alternatives that worked better in practical teaching.

Towards Student-centric Methods

A. Breakage of methodical starting points

A crucial factor for abandoning the pattern singing method was the methodical transformation by Siukonen, teacher of singing and playing music in Sortavala teacher training college. Siukonen started developing his method already in the late 1910s. He created the analytic-synthetic method based on children's development-psychological factors. With this method, the whole pedagogical thinking in music teaching took a turn to a more student-centric, functional and participatory direction. Elements of music were first observed by ear, and then marked and notated (Siukonen, 1929). Teaching also involved inventing. Siukonen encouraged pupils to compose their own songs in the teacher training college (Rautiainen, 2003). In the late 1920s, Siukonen's music textbook spread widely to Finnish teacher training colleges, and it held on to its position in the teacher training colleges' textbook list even until the late 1960s (Kansallisarkisto [The National Archives of Finland]). The good thing about Siukonen's method was that it was easy to extend and apply into a broader instrument selection, new functional working methods and new singing books.

B. New trends and their applications in Finland and the discovery method

Ingman's textbook came alongside Siukonen's method book in the 1950s. Ingman developed e.g. the "toonika-do" method and a method based on Werle's hand signs and birds on a telephone wire. He also introduced the Orff method that landed in Finland at that time (Ingman, 1952). Instrument playing was taught alongside singing, which e.g. Siukonen and Heurlin had already done in their teaching. School instruments and mallet percussion instruments were now used in music lessons. They brought new working methods, such as inventing and improvising, which made the pupils more active in class. Singing lessons became more versatile and pupils got to participate more than previously.

Urho and Tenkku continued in Siukonen's path in the 1960s and 1970s during the same time that the Finnish comprehensive school system was established. The so-called Discovery method was created by Urho and Tenkku (Kankkunen, 2009). Siukonen's starting point was the rhythm, which was first observed by listening. The discovery method was based on different sounds that were observed e.g. according to their tone color. As in Siukonen's method, active listening was important in the method, but

concepts of music got more attention than before. Other concepts of music besides rhythm were introduced. The teaching started from basic concepts, which pupils first learned to observe by doing and listening, and then by drawing them with symbol signs they came up with. Later on, in the conceptual phase, children's own symbols were replaced with notes and other symbols of music. In this process of guiding the learning, Tenkku and Urho applied the four-phase taxonomy of Brun's theory: functional, iconic, symbolic and conceptual (Linnankivi, Tenkku & Urho, 1981). In the Discovery method, music-making was influenced by contemporary music, where traditional music-writing was broken (Kankkunen, 2009). Tenkku and Urho's reform brought new content to the pedagogical thinking of music teaching.

Tenkku and Urho's method spread quickly thanks to their method books released in the 1970s: *Vihreä viserryskone*, *Sininen soittorasja*, *Punainen posetiivi* and *Keltainen kelloperi*. They were meant for the elementary school's grades 1-4 (Tenkku & Urho, 1974, 1977a, 1977b, 1979), their method's pedagogical continuum therefore covering the first four grades. For the first time ever, music-making started from observing the sound environment and problem-based thinking, encouraging the learner to use concepts of music by creatively applying them in musical inventing and instrument-playing. It is important to notice similarities between this method and the 2014 syllabus of basic teaching in Finland: in both, musical activity is based on the pupils' versatile participation as well as utilizing pupils' own symbol signs in music teaching (Opetushallitus 2014 [Finnish National Board of Education]). Furthermore, creative functional working methods, improvisation and pupils' own music-making with the help of compositions and multi-artistic experiences, aimed at supporting the development of children's thinking towards actual note-writing and marking the elements of music. Therefore, in the light of the 2014 syllabus, Tenkku and Urho's methodical starting points are quite consistent with the contemporary music teaching in Finland.

At the turn of the 1960s and 1970s, the foundation of the Finnish comprehensive school system offered a perfect moment for a new way of thinking. At the same time, Urho and Tenkku's method also faced strict resistance, which increased discussion and development work around methods (Kankkunen, 2009). The Kodály method, which had landed in Finland in the 1960s, brought counterbalance to this discussion (Ilomäki 1996). The Orff method, which had arrived in Finland a little earlier in the 1950s, continued to develop alongside new trends (Dahlström, 1982). This is how different method combinations and separate trends started to develop, and teachers used them alternately. With these methods, the selection of school instruments increased crucially. Instrument use was taught in the multiple singing books that were published after the comprehensive school was established. Music textbooks applied the discovery method and the Orff and Kodály methods in different ways. They did not represent purely any particular method, but rather, they were a collection and an example of how the teaching goals could be achieved by means of different exercises.

Orff and Kodály methods have remained popular even to this day. The Orff method spread for instance via *Musisoj ry* association from 1985 onwards. Its work has been continued by *JaSeSoi ry* (Orff-Schulwerk Association on Finland) from 1993 onwards. The association organizes, for instance, level courses on Orff pedagogy. The Orff method is not handled in its purest form in any music textbook: it has blended into applications handling different instrument complexes and instrument introductions, such as mallet

percussion instruments, rhythm instruments and the recorder (e.g. Jokinen, Kiiski, Polas & Sonninen, 1977; Heino, Johansson & Sikander 1986; Alanne, Perkiö, Rihu, Rätty & Törmälä, 1987; Kiiski, Pohjola & Sariola, 1988; Mikkola & Sikander, 1989; Linnankivi, Perkiö & Salovaara, 1998; Tynnenen & Sikander, 1999; Kangasniemi, Pinola & Viitaila-Pulkkinen, 2000; Kerola, Perkiö & Salovaara, 2000). By contrast, the Kodály method has been mentioned in music textbooks for a rather long time. Of the school singing books *Musikantti 3-4* is the last textbook based on Kodály's methodical starting points. Kodály's method has been applied rather systematically throughout this book released in 1996 (see Hynnenen, Kuisma-Sorjonen, Pinola & Viitaila-Pulkkinen, 1996). At the same time, it represents the last attempts to provide a unified pedagogical approach to understanding pitch and melody. Practicing the recorder is also part of the method. Singing names based on the Kodály method are introduced briefly in the 1998 singing book *Musiikin aika* and the 2004 book *Musiikin mestarit*. In the music theory sections of these books, singing names have been placed on the major scale (Linnankivi, Perkiö & Salovaara, 1998; Haapaniemi, Kivelä, Mali & Romppanen, 2002). As previously noted, the discovery method has blended in other methods or it has been abandoned in music teaching. This method's practicing principles are introduced especially in textbooks of lower grades, but they often give only single exercising examples (e.g. Kiiski, Polas & Sonninen, 1977; Annala, Pohjola & Sallinen, 1983; Helasvuo, Laitinen & Vilén, 1986; Lindeberg-Piironen & Tynnenen, 1995; Kangasniemi, Pinola & Viitaila-Pulkkinen, 2000; Jokinen, Kaisto, Muhonen & Peltola, 2004). It seems that the starting points of the discovery method have no longer been systematically introduced in music textbooks after Tenkku and Urho's textbooks.

Phasing out Methodical Starting Points

A. Band instruments and methods on instrument teaching

In the 1980s and 1990s, the so-called band instruments (guitar, bass, and drums) were gradually taken into use alongside school instruments and rhythm instruments (see e.g. Alho, Perkiö & Rautanen, 1987; Ala-Pöllänen, Hovi & Partanen, 1990; Hynnenen, Mali, Tuovinen & Viitaila-Pulkkinen, 1997). This was not anything new, as already in the 1970s there had been material suitable for guitar teaching; for instance, chord forms of the guitar and piano had been introduced in connection with different songs (Sonninen, Räisänen & Jarvola, 1977). In the 1980s and 1990s the pedagogic development focused increasingly on developing functional working methods for the new instruments. At the same time, the whole conception of music skills and assessment started to comprise other skills besides mere singing skills. Development of music education was emphasized, but in practical teaching there was great variation in pedagogical solutions of guiding the learning. Pupils mostly learned from notes with the help of models. Inventing and creative activity were partly included. Mastering the concepts of music and learning processes leading to it received less attention.

In the 1980s and 1990s the first experiments on music education technology evolved, and their final breakthrough was seen 20 years later. New figure notes were developed by Uusitalo and Kaikkonen in the 1990s. Originally, they were meant for instrumental teaching with people living with a disability (Kaikkonen & Uusitalo, 1999). The goal was that even an unskilled student could quickly learn to play correctly. In this method pupils follow figure notes, and then play the equivalent figure on the instrument. Instead of processing the pupil's own thinking on conceptual level, the method focuses

on imitating on the basis of the given figures. The aim is that the pupil gets experiences in instrument playing very quickly. Annala has also developed tools for mallet percussion instruments and keyboard instruments (Latva-Teikari, 2018). Mallet percussion instruments are played with a so-called 'sound rake', where the triad glockenspiel is struck with a mallet that is three keys in width. Mallet looks like the letter T that has three knobs in its horizontal wooden part. In addition, each chord glockenspiel has its own color in the glockenspiel's frame. A similar technique works also with keyboard instruments, where the triad is created with wooden chord buttons attached to the keyboards. With this color chord method, children learn to accompany music songs easily. Annala (2019) has also developed a method based on animal picture notes. In that method, animal stickers are attached to keyboards or under the instrument strings to facilitate learning of pitches or chords. However, these figure or animal picture notes are not mentioned at all in music textbooks used in schools.

At the dawn of the 21st century, music textbooks handle different music genres in a versatile manner. Band instruments have an even bigger role than before in textbooks for grades 3-6, which also emphasize distribution of band material (see e.g. Mali, Puhakka, Rantaruiikka & Sainomaa, 2005; Ruodemäki, Ruoho, Räsänen & Salminen, 2008; Ruodemäki, Ruoho & Salminen, 2009; Arola, Honkanen, Huttunen, Jokelainen, Koskela & Marttila, 2011). Textbooks for grades 1-4 give good examples on creative activity, whereas in higher grades creative activity gets less attention. The rise of new stars and bands in the entertainment industry can be considered a special characteristic of this millennium, as well as their increased valuation even on international level. Furthermore, the results from the brain research have elevated the significance of music to areas such as people's welfare and learning. (see e.g. Erickson, Voss, Prakash, Basak, Szabo, Chaddock, Kim, Heo, Alves, White, Wojcicki, Mailey, Vieira, Martin, Pence, Woods, McAuley & Kramer 2011; Kattenstroth, Kalisch, Holt, Tegenthoff & Dinse, 2013).

Music textbooks have one thing in common: their pedagogy is still limited to single example exercises. While they are functional and good, they do miss a unified methodical viewpoint. Examples of guiding the learning focus on the playing technique of melody, harmony and rhythm instruments as well as their demonstration, or they give advice on instrument teaching (e.g. recorder, guitar, bass and drums). While inventing and creative expression are part of the working methods, they are emphasized more in the lower grades, as was the case also in the 2000s.

B. New possibilities brought by music education technology and new rise of singing

As previously stated, there were some experiments on music education technology in the 1980s and 1990s. Music-themed games were part of this development, of which noteworthy is Rock Band, released in 2007. It was only after the 2010s that music teaching started to utilize technology, such as tablets, on a broader scale. This development provides a new dimension to the development of music teaching. For instance, applications designed for independent studying of singing and playing music can be used in teaching. Licenses can be bought to these applications, such as Yousician (e.g. Yousician). Some applications are even interactive: students can get feedback by different means such as sounds, colors or percents when they play correctly. Furthermore, these exercises can progress according to the learner's own development,

i.e. pupils get to move on to the next level when they have achieved a certain level of skills.

One representation of a new kind of learning environment is Myllykoski's Music tower (Musatorni), which enables 4-8 students to play music simultaneously or do independent exercises and recording. New opportunities brought by tablets, as well as combining instruments and singing, can also be utilized. While there are still major differences in the use of music education technology between different educational institutions, it is clearly a trend that is also supported by the current syllabus (Opetushallitus, 2014 [Finnish National Board of Education]).

Singing and voice usage are becoming part of music-playing together, which has also been considered in the syllabus (Opetushallitus, 2014). This development has partly been affected by a new understanding of what is meant by singing. Today, it is understood as any sort of sound or speech combined with different forms of expressions. The so-called pure signing is no longer the only right way to perform a song (Tarvainen, 2018). Furthermore, enthusiasm on making and sharing one's own music for instance in open web communities can also be seen (Myllykoski, 2009). People no longer want to just perform readymade songs. In these areas, too, there can be major differences between different schools and educational institutions.

C. Methodical state in the 21st century

The closer we approach this day, the thinner the methodical content of music textbooks becomes. Music textbooks do offer good example materials and exercises that can be utilized in music lessons, but they demand musical content skills from teachers in order to pedagogically create a clear lesson structure that guides the learning. When textbooks no longer clearly direct teachers to a specific methodical starting point, teachers must choose it themselves. This requires good basic skills in music, so that teachers can pick the most suitable exercises and approaches to their teaching. At the same time, the amount of music teaching in class teacher education programs has decreased significantly. For instance, in 1992-1993 there were 120 hours (6 credits) of contact classes in music teaching in the Jyväskylä University's teacher training department, while in 2007-2009 the amount was only about 60 hours (4 ECTS) (Kasvatustieteiden tiedekunnan opinto-opas, 1992, 143-144; 2007, 166-167 [Faculty of Education's Study Guide]). Therefore, there is less and less time to acquire content skills in pedagogical aspects of music.

The trend in the textbook development seems to be connected to practices carried out in music teaching, which have been implemented in a rather variant manner in the 21st century. In the students' learning diaries, it came up how weak and one-sided music teaching can be in schools. Sometimes pupils might just watch karaoke videos or listen to records they bring from home. The teacher might even leave the class. In some examples in the data, only pupils who can play an instrument get to participate in music-playing. Other pupils maybe get a rhythm instrument or they just sing or listen to the other pupils playing. In some cases, pupils just played *something*. The actual content of the lesson remains superficial and meaningless. The whole music teaching may have been given to anyone who can just play the piano, while pedagogical skills have become a secondary issue. In the saddest cases music lessons have been traumatic

experiences that have crushed the pupil's self-esteem and self-confidence. Even the experience of participation and communality has been limited.

Another aspect rising from the data was that even if students had gained substance skills through a music hobby outside the school, their skills were limited to solo use of a certain instrument. Only students who had studied in music class for several years, or students whose music teacher had been an expert in music teaching, had a solid ground on which to build their pedagogical teachership. There were major differences in this, too, because pedagogical methods were mentioned variedly. Furthermore, students were in the pupil's role at that time, and had maybe not paid attention to pedagogical issues. A more analytic reflection on pedagogical arrangements has therefore not been a learning goal during their school times. This is how understanding of the guidance of learning etc. does not get much attention. It is important to remember that this data only gives a picture of the students' experiences. On the other hand, teachers have also experienced shortcomings in their own knowhow regarding their teaching and ability (Suomi, 2019). Suomi's (2019) research results are similar to those of this study, therefore also supporting the results gained from the students' reflection data.

The content of activities within a class or a learning environment depends highly on the class teacher's musical ability and pedagogical skills. Therefore, also the realization of the pupils' participation and the content yield of the class varied greatly between different classes, depending on the teacher's substance skills and pedagogical knowhow.

Discussion

When discussing the methodical development of music textbooks all the way from the 1860s to 2020, it can be perceived that the methodical starting points of guiding the learning were important in the development of teaching up until the foundation of the Finnish comprehensive school, i.e. the 1970s (see Figure 1). After that, methodical starting points were mixed into different combinations of methods or divided into different manifestations, or completely abandoned. Furthermore, textbooks no longer advised on methodical questions of guiding the learning as consistently as previously. Methodical and content-pedagogical practices therefore depend on the teacher's own expertise and how well they can apply their knowhow in music. In the 1980s, a textbook on music didactics by Linnankivi, Tenkku and Urho (1981) aspired for a methodical consistency, providing detailed guidance to music teaching in comprehensive school. Its content was based on scientific research from versatile sources. Likewise, a book on music didactics was released in the field of early childhood education in the 2010s (e.g. Ruokonen & Koskelin, 2016). The question therefore is why have the problems related to music methods failed to generate the same levels of interest as they did between 1860 and the 1970s. Only methods related to pitch and harmony, developed by some single developers, have spread (e.g. Kaikkonen & Uusitalo, 1999; Annala, 2019). In scholarly discussion the subject is covered, but the discussion is very focused and limited from the methodical point of view. Rather, music's subject-didactic and pedagogic questions are raised from the viewpoint of e.g. single working methods, composing or developing the class teachers' knowhow and skills.

In the development of music textbooks, it can be noted that methods supporting the pupil's functionality and participation and pupil-based working methods persisted and

developed for the longest time. New methodical openings were also seen beside them, such as the method based on scale-triad and patterns, the analytic-synthetic method, Kodály method, Orff method and the discovery method (see Figure 1).

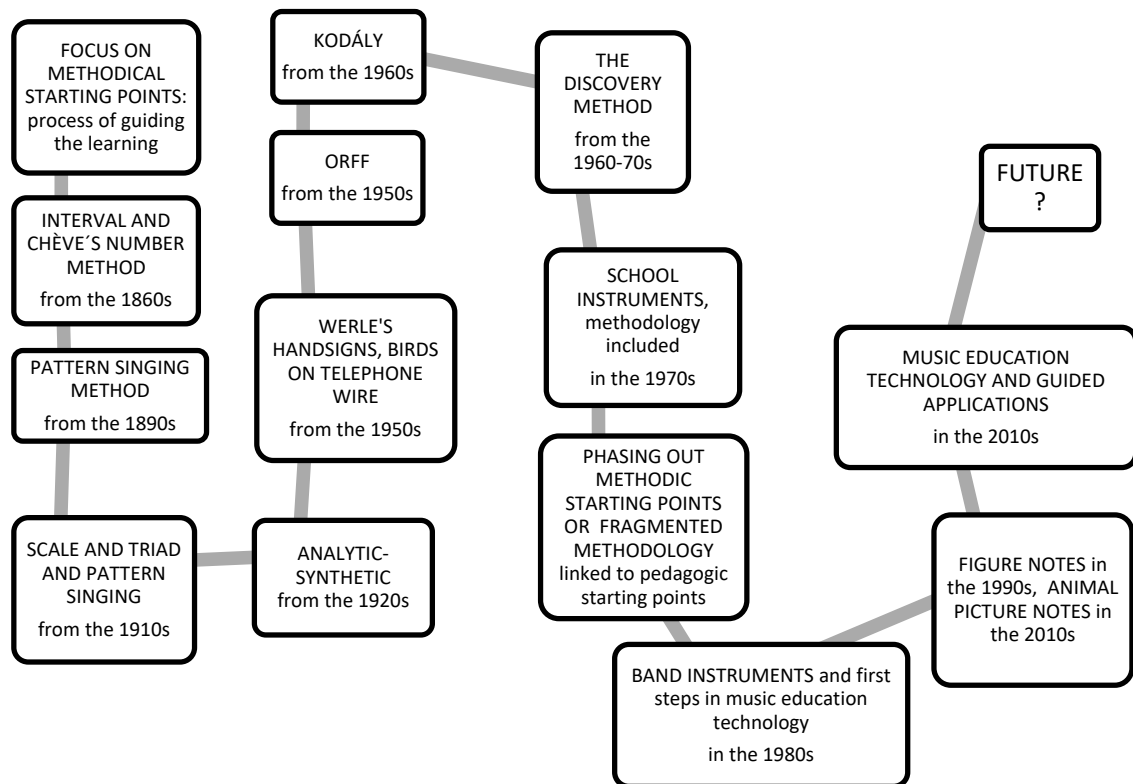


Figure 1. Development lines of music teaching methods in Finland 1860-2020

Methodical disunity or lack of methods can also be seen in the data collected from class teacher students. It looks like in the 2000s, the process of guiding the learning is carried out with rather different pedagogic starting points in music teaching of lower grades. Content yield of teaching varies greatly according to the teacher's competence. It seems that pedagogical and methodical development of music teaching and its scholarly examination are rather fragmented today and highly dependent on each pedagogue's own starting points.

Familiarity with the historical development lines of music teaching methods (see Figure 1) helps students and teachers to better understand the significance of music teaching methods, where cultural starting points and music education phenomena of each era are connected to the development of methods. Moreover, it leads to consider the content and use of different methods, and with its continuum, helps to develop them further and seek new methodical practices to music teaching at schools. With textbooks with no methods, teacher struggle to make their teaching pedagogically coherent in the 21st century. Providers of education must pay special attention to this in order to ensure that students are sufficiently prepared to construct methods as well as use and develop them.

It remains to be seen which guidelines will be emphasized in the future. Openings on music education technology in the 2010s provide some indication on what's to come: pupils produce more of their own music by e.g. composing and improvising. Likewise, new possibilities are offered by different interactive applications designed for teaching singing and playing, which enable independent practicing. In music textbooks, these opportunities provided by technology have not yet been introduced. Today, it also remains to be seen what kind of method would combine pedagogic thinking and its implementation, but also enable teachers to freely apply the implementation of goals defined in the syllabus.

Conclusion

1. The study of the development of methods in Finland's music teaching (1860-2020) can be divided into two parts. The first period covers the first 120 years, during which time methods were emphasized. The second turn in the method development is at the turn of the 1970s and 1980s, when methodical starting points are gradually phased out or mixed. The focus shifts to playing songs, for which different notations facilitating the playing are developed. Music education technology is introduced.
2. The most long-lasting methods in the schools' music teaching were methods that emphasized the children's functionality, participation and development, were elaborately and consistently constructed, and utilized different working methods.
3. Today, there is a void of methods where clear and consistent instructions for the didactic-pedagogic practices of guiding the learning are needed, as well as for increasing musical knowhow and skills. This need becomes evident from the class teacher students' experiences in their own elementary school' music teaching.
4. During the past decades, the amount of learning materials for music teaching has increased. Teachers are free to choose the most suitable material for their use. Textbooks no longer direct to a certain method, which is why methodical starting points are no longer emphasized. It seems that teachers work and build the music teaching from the starting points they have achieved and act within these resources. The content spectrum of music lessons is therefore enormous, and methodical solutions also vary greatly.

References

- Alanne, P., Perkiö, S., Rihu, L. Rätty, E. & Törmälä, J. (1987). *Musiikin aika 3-4* [Time of Music 3-4]. Porvoo: WSOY (in Finnish).
- Ala-Pöllänen, K., Hovi, S. & Partanen, P. (1990) *Musica 5-6*. Oppilaan kirja. Jyväskylä: WSOY (in Finnish).
- Alho, L-M., Perkiö, S. & Rautanen, O. (1987). *Musiikin aika 5-6* [Time of Music 5-6]. Porvoo: Gummerus (in Finnish).
- Annala, H. (2019). *Eläinkuvanuotit* [Animal Picture Notes]. Opetushallitus [Finnish National Board of Education] (in Finnish). Retrieved April 8, 2020 from <https://www.ubiikki.fi/kuvanuotit/app/#1/0>

- Annala, S., Pohjola, E. & Sallinen, A. (1983). Tie musiikkiin [The road to music]. *Musica 3-4*. Oppilaan kirja. Helsinki: KK laakapaino (in Finnish).
- Arola, A., Honkanen, R., Huttunen, T., Jokelainen, H., Koskela, I. & Marttila, N. (2011). *Saa laulaa 3* [Allowed to Sing 3]. Keuruu: Otava (in Finnish).
- Dahlström, F. (1982). *Sibelius-Akatemia 1882-1982*. Suomentaja Rauno Ekholm. Helsinki: Valtion painatuskeskus (in Finnish).
- Erickson, K., Voss, M., Prakash, R., Basak, C., Szabo, A., Chaddock, L., Kim, J., Heo, S., Alves, H., White, S., Wojcicki, T., Mailey, E., Vieira, E., Martin, S., Pence, B., Woods, J., McAuley, E. & Kramer, A. (2011). Exercise training increases size of hippocampus and improves memory. *Proceedings of the National Academy of Sciences*, 108(7), 3017-3022.
- Haapaniemi, J., Kivelä, E., Mali, M. & Romppanen, V. (2002). *Musiikin mestarit 3-4* [Masters of Music 3-4]. Keuruu: Otava (in Finnish).
- Hannikainen, P.J. (1893). *Jyväskylän maakunta-arkisto* [Provincial Archives of Jyväskylä] (in Finnish).
- Heino, T., Johansson, T. & Sikander, J. (1986). *Koulun musiikki 3-4* [Music at School 3-4]. Keuruu: Otava (in Finnish).
- Helasvuo, P., Laitinen, M. & Vilén, M. (1986). *Koulun musiikki 1-2* [Music at School 1-2]. Keuruu: Otava (in Finnish).
- Heurlin, P. af. (1917). *Kansakoulun uusi laulukirja en-, toi, ko- järjestelmän mukaan* [New Songbook for Elementary Schools: Scale from 1 to 7]. Opettajan kirja. Helsinki: Otava (in Finnish).
- Hynynen, A., Kuisma-Sorjonen, P., Pinola, S. & Viitaila-Pulkkinen, E. (1996). *Musikantti 3-4* [Musician 3-4]. Keuruu: Otava (in Finnish).
- Hynynen, A., Mali, M., Tuovinen, M-L. & Viitaila-Pulkkinen, E. (1997). *Musikantti 5-6* [Musician 5-6]. Keuruu: Otava (in Finnish).
- Ilomäki, L. (1996). *Lukuvuosi Kecskemétin Kodály-instituutissa* [Academic Year at the Kodály Institute in Kecskemét]. Sävellys ja musiikinteoria 1/96 (in Finnish). <http://www2.siba.fi/Yksikot/Sate/SMT/SMT961/196Ilomaki.html>
- Ingman, O. (1952). *Laulun opetus* [Teaching of Singing]. Porvoo: WSOY (in Finnish).
- Jokinen, U., Kiiski, P., Polas., E. & Sonninen, A. (1977). *Musiikki 3-4* [Music 3-4]. Keuruu: Otava (in Finnish).
- Kaikkonen, M. & Uusitalo, K. (1999). *Kuvionuotit* [Figure Notes]. Kehitysvammaliitto ry (in Finnish).
- Kaisto, L., Muhonen, S. & Peltola, S. (2004). *Musiikin mestarit 1-2* [Masters of Music 1-2]. Keuruu: Otava (in Finnish).
- Kangasniemi, H., Pinola, S. & Viitaila-Pulkkinen, E. (2000). *Musikantti 1-2* [Musician 1-2]. Keuruu: Otava.
- Kankkunen, O-T. (2009). Vihreä Viserryskone-uusi ääni 1970-luvun suomalaisessa musiikkikasvatuksessa [The Green Twitter achine – the new voice in 1970s Finnish music education]. *The Finnish Journal of Music Education*, 12(1), 36-59 (in Finnish).
- Kansallisarkisto [The National Archives of Finland]. Kansanopetusosasto: *Seminaarien vuosikertomukset 1896-1948* [Annual Reports of Teachers Training Colleges 1896-1948]. Helsinki (in Finnish).

- Kasvatustieteiden tiedekunnan opinto-opas* (1992). [Faculty of Education's Study Guide. Department of Teacher Education. University of Jyväskylä]. Opettajankoulutuslaitos. University of Jyväskylä (in Finnish).
- Kasvatustieteiden tiedekunnan opinto-opas* (2007). [Faculty of Education's Study Guide. Department of Teacher Education]. Opettajankoulutuslaitos. University of Jyväskylä (in Finnish).
- Kattenstroth, J., Kalisch, T., Holt, S., Tegenthoff, M. & Dinse, H. (2013). Six months of dance intervention enhances postural, sensorimotor, and cognitive performance in elderly without affecting cardio-respiratory functions. *Frontiers in Aging Neuroscience*, 5(5), 1-15.
- Kerola, P., Perkiö, S. & Salovaara, I. (2000). *Musiikin aika 5-6* [Time of Music 5-6]. Porvoo: WSOY (in Finnish).
- Kiiski, P., Pohjola, E. & Sariola, E-L. (1988). *Musica 3-4*. Oppilaan kirja. Espoo: Fazer Musiikki (in Finnish).
- Latva-Teikari, K. (2018). *Voiko säestäminen olla näin helppoa? Kokkolaismuusikko rakensi välineet, joilla kuka vain saa soitettua sointuja* [Can accompaniment be so easy? The musician from Kokkola built instruments with which anyone can play chords] (in Finnish). Retrieved April 8, 2018 from <https://yle.fi/uutiset/3-10451550>
- Lindeberg-Piironen, A. & Tynnenen, J. (1995). *Musica 1-2*. Porvoo: WSOY (in Finnish).
- Linnankivi, M., Perkiö, S. & Salovaara, I. (1998). *Musiikin aika 3-4* [Time of Music 3-4]. Porvoo: WSOY (in Finnish).
- Linnankivi, M., Tenkku, L. & Urho, L. (1981). *Musiikin didaktiikka* [Didactics of Music]. Jyväskylä: Gummerus (in Finnish).
- Mali, M., Puhakka, T., Rantaruikka, T. & Sainomaa, K. (2005). *Musiikin mestarit 5-6* [Masters of Music 5-6]. Keuruu: Otava (in Finnish).
- Mikkola, V-H. & Sikander, J. (1989). *Koulun musiikki 5-6* [Music at School 5-6]. Keuruu: Otava (in Finnish).
- Musatorni* [Music Towel] (in Finnish). Retrieved March 29, 2018 from <http://musatorni.blogspot.com/2016/05/keita-niita-perunoita.html>
- Myllykoski, M. (2009). Musiikin verkkoyhteisöt - Epämuodollisen musiikin oppimisen uusi tutkimuskenttä [Online communities of music - a new field of research for informal music learning]. In J. Louhivuori, P. Paananen, & L. Väkevä (Eds.), *Musiikkikasvatus. Näkökulmia kasvatukseen, opetukseen ja tutkimukseen* [Music Education: Perspectives for education, teaching and research] (pp. 299-309). Vaasa: Suomen Musiikkikasvatusseura FiSME r.y. (in Finnish).
- Nyberg, M. (1903). Merkillinen helpoitus laulunopetuksessa [A significant relief in the teaching of singing]. *Kansakoulun lehti*, 1903, 639-644 (in Finnish).
- Opetushallitus [Finnish National Board of Education] (2014). *Perusopetuksen opetussuunnitelman perusteet* [National Core Curriculum for Basic Education]. Helsinki: Opetushallitus (in Finnish).
- Orff-Schulwerk Association on Finland*. Retrieved March 9, 2018 from <http://www.jasesoi.org/>
- Pajamo, R. (1976). *Suomen koulujen laulunopetus vuosina 1843-1881* [Teaching of Singing in Finnish Schools 1843-1881]. Suomen musiikkiteollinen seura. Acta musicologica fennica 7. Diss. Helsinki (in Finnish).

- Patton, M. (2002). *Qualitative Research & Evaluation Methods*. 3th ed. Thousand Oaks: Sage Publications.
- Rautiainen, K-H. (2011a). Changes of methods and their developers in Finnish music education 1863-1969. *Problems in Music Pedagogy*, 8, 15-24.
- Rautiainen, K-H. (2012). Comparing A. Törnudd's and V. Siukonen's music lesson structures from the perspective of educational trends. *The Changing Face of Music and Art Education. Creativity, Musicality Well-Being*, 4(1), 7-15.
- Rautiainen, K-H. (2009a). Development of methods of teaching singing and songbooks in Finland and in the Jyväskylä Teacher Training College and Elementary School 1863-1969. In M.G. Argyriou, & P.G. Kampylis (Eds.), *Teaching Material and Its Contribution to Educational Practice: From theory to application in music education* (pp. 103-109). Athens, Greece.
- Rautiainen, K-H. (2010). Development of methods of teaching singing in Finland 1863-1969. In L. William, Y. Bao, & Q. Chen (Eds.), *Proceedings of The 29th ISME World Conference of the International Society for Music Education* 1-6 August (pp. 190-193). Retrieved April 1, 2020 from http://issuu.com/official_isme/docs/isme29?viewMode=magazine&mode=embed
- Rautiainen, K-H. (2011b). Influence of pedagogical trends on Aksel Törnudd's and Vilho Siukonen's music pedagogy. *Problems in Music Pedagogy*, 9, 27-41.
- Rautiainen, K-H. (2003). *Laulutunnin ulkoinen ja sisäinen rakenne. Aksel Törnudd (1874-1923) ja Wilho Siukonen (1885-1941) seminaarien ja kansakoulun laulunopetusmenetelmien kehittäjinä 1893-1941* [External and Internal Structure of Singing Lessons: Aksel Törnudd (1874-1923) and Wilho Siukonen (1885-1941) as developers of methods of teaching singing at teacher training colleges and elementary schools 1893-1941]. Sibelius-Akatemia. Musiikkikasvatuksen osasto. Studia Musica 19. Diss. Joensuu: Joensuun yliopistopaino (in Finnish).
- Rautiainen, K-H. (2009b). Laulunopetusmetodien kehityslinjoja [Development trends of singing Teaching methods]. In J. Louhivuori, P. Paananen, & L. Väkevä (Eds.), *Musiikkikasvatus. Näkökulmia kasvatukseen, opetukseen ja tutkimukseen* [Music Education: Perspectives for education, teaching and research] (pp. 51-65). Vaasa: Suomen Musiikkikasvatusseura – FiSME r.y. (in Finnish).
- Rautiainen, K-H. (2014). Method books of teaching of singing on Finnish Teacher Training College. *The Changing Face of Music and Art Education*, 6(2), 21-42.
- Rautiainen, K-H. (2013). Törnudd's and Siukonen's methodological starting points of music pedagogy in the field of educational trends. *Journal of Literature and Art Studies*, 3(8), 501-511.
- Ruodemäki, R-J., Ruoho, E., Räsänen, T. & Salminen, S. (2008). *Soi 3-4* [Rings 3-4]. Helsinki: WSOY (in Finnish).
- Ruodemäki, R-J., Ruoho, E. & Salminen, S. (2009). *Soi 5-6* [Rings 5-6]. Helsinki: WSOY (in Finnish).
- Ruokonen, I. & Koskelin, K. (2016). *Esi - ja alkuopetuksen musiikin didaktiikka* [Didactics of Music in Pre-school and the First Grades of Primary School Education]. Helsinki: Finn Lectura (in Finnish).
- Siukonen, V. (1929). *Laulun opetusoppi* [Theory of Teaching Singing]. Helsinki: Otava (in Finnish).
- Sonninen, A., Räisänen, M. & Jarvola, J. (1977). *Musiikki 5-6* [Music 5-6]. Keuruu: Otava (in Finnish).

- Suomi, H. (2019). *Pätevä musiikin opettamiseen? Luokanopettajaksi valmistuvan musiikillinen kompetenssi perusopetuksen opetussuunnitelman perusteiden toteuttamisen näkökulmasta* [Competent to Teach Music? The musical competence of graduating primary teacher in terms of the implementation of National Core Curriculum for Basic Education]. Jyväskylän yliopisto. Humanistis-yhteiskuntatieteellinen tiedekunta, musiikkikasvatus. Diss. Jyväskylä: Jyväskylän yliopisto (in Finnish).
- Tarvainen, A. (2018). *Laulamisen tuntu: esteettinen kehotietoisuus kuurojen, laulutaidottomien ja ääniongelmaisten vokaalisissa kokemuksissa* [The Feeling of Singing: Aesthetic body awareness in the vocal experiences of the deaf, the unskilled singing and the voice problem] (in Finnish). Retrieved May 15, 2020 from <http://www.annetarvainen.fi/tutkimus.html>
- Tenkku, L. & Urho, E. (1974). *Sininen soittorasia. Peruskoulun musiikki 2* [The Blue Music Box. Music in elementary school 2]. Opettajan opas. Jyväskylä: Gummerus.
- Tenkku, L. & Urho, E. (1977a). *Keltainen kellopele. Peruskoulun musiikki 4* [The Yellow Chimes. Music at elementary school 4]. Oppilaan kirja. Jyväskylä: Gummerus (in Finnish).
- Tenkku, L. & Urho, E. (1977b). *Punainen posetiivi. Peruskoulun musiikki 3* [The Red Positive. Music at elementary school 3]. Oppilaan kirja. Jyväskylä: Gummerus (in Finnish).
- Tenkku, L. & Urho, E. (1979). *Sinivihreä soittorasia. Peruskoulun musiikki 1-2* [The Peacock Blue Music Box. Music at elementary school 1-2]. Oppilaan kirja. Jyväskylä: Gummerus (in Finnish).
- Törnudd, A. (1913). *Kansakoulun lauluoppi* [Theory of Teaching Singing in Elementary Schools]. Porvoo: WSOY (in Finnish).
- Tuomi, J. & Sarajarvi, A. (2009). *Laadullinen tutkimus ja sisällönanalyysi* [Qualitative Research and Content Analysis]. 6th ed. Helsinki: Tammi (in Finnish).
- Tynninen, J. & Sikander, J. (1999). *Musica 3-4*. Oppilaan kirja. Jyväskylä: Gummerus (in Finnish).
- Wegelus, M. (1893). *Kurs I tonträffning 1. Lärobok 1:sta Häftet* [A Course in Ear Training: Textbook. First note book]. Helsingfors: K.E. Holm (in Swedish).
- Yousician. <https://yousician.com/>

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THE NEW AND THE OLD AS MUSIC HISTORY CATEGORIES – SOME EDUCATIONAL IMPLICATIONS

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Abstract

The New and the Old (e.g. Latin ars nova and ars antiqua) is a widely used juxtaposition. Through music history many arguments have been fought concerning which of these directions are better suiting, more correct, more preferred or vital. The contents of New and Old emerge in interpretations and (often ideological) attitudes towards the phenomenon from the position of the musicians, composers, music critics or musicologists. This theoretical article introduces the New and the Old as music history categories. The outcome visualizes and enlarges Ballstaedt's (2003) framework of meanings of terms as temporal, epochal and imperative into a more concrete system including Taruskin's (2009) agents (agent) principles as driving force of how and by whom music history has been developed, received and interpreted through the times.

The aim is to enhance the understanding of why and by whom adjectives like 'new' and 'old' may be used to comprehend phenomena of music in history and nowadays. Departing from Schoenberg's (1950) pedagogical criticism of 'pseudo-historians' and 'New Music', the author of this article wants to support music teachers in making their students aware of the skill to approach historiography using library sources (Conor, 2019, 34), how to make explicit the modes of thought (Burkholder, 2011), acknowledging the historiographical acts of interpretation and habits of mind (Cochran, 2019). The possible path of transmission of the New in music (both academic and popular) lies in an open/supporting teaching that enables cross-domain influences and doesn't forget the past (traditions). This means accepting alongside with the academic avantgarde viewpoint in Schoenberg's idealistic sense of the "now for the first time; not existing before" of "New Music" also the principles of imitatio, aemulatio and transformation as valuable both at the local-temporal and the individual developmental level of each young composer and at the global-temporal epochal level without getting stuck in norm-driven and worldview/ideology dependent imperative meanings that enchain creativity and doesn't allow the Possible (no matter if New or Old) to evolve as necessary individually or more widely in society.

This article is a short version of an Estonian article under review "New and Old as music history categories" to be issued in the collection "Estonian Scientific Language in a Multilingual World" at Tallinn University.

Introduction

In order to comprehend music, its phenomena, structures, composers' choices, listeners' expectations and ideologies in the course of history, historians use among other terms the juxtaposing categories of the New and the Old in several languages, including Latin *ars nova* vs *ars antiqua*; *stile moderno*, *seconda pratica* vs *stile antico*, *prima pratica*. Sometimes the term 'new' appears in the name of composers' groups, e.g. *Neudeutsche Schule* (New German School) in the 19th century; it is often part of the names of new music festivals or ensembles in the 20th and 21st centuries.

The most challenging rediscovered understanding of music appeared during the 20th century as anything caused by oscillating waves in the form of sound and noise in the environment: Russolo's manifesto "*The Art of Noises*" in 1913 (Russolo, 1986), Varèse's "*Liberation of Sound*" in 1917 (2004), Cage's "*The Future of Music: Credo*" (1937–1940) (Cage, 2004) as well as the idea of 'silence' that is physically impossible: "[...] *There is no such thing as silence. What they thought was silence, because they didn't know how to listen, was full of accidental sounds [...]*" (Kobler, 1968, 92). With the concepts of 'acoustic ecology' and 'soundscape' developed by the Canadian composer Schafer (b. 1933) and further developed in the context of Green's Model of Informal Learning (Green, 2008) these concepts were brought also to music education. The American composer Cage's (1912–1992) famous sentence "Everything we do is music" (see Kobler, 1968) is the culmination of an understanding of music that goes far beyond tones produced by humans, natural/electronic instruments and notes written in traditional scores (Fischman, 2015).

As the New is often understood that music is contemporary, modern (also meaning the Future); as the Old the understanding includes parallel meanings of music as being traditional, established, regressive (also meaning the Past) (most prominently advocated by Adorno, 1949). Often the adjectives new or old complement other terms, but if it comes to their concrete meanings, they appear to be rather meaningless: the meaning lurks in different interpretations or ideology defined phenomena, structures, attitudes etc.

Through history many arguments have been fought concerning which of these directions are better suiting, more correct, more preferred or vital. The content of the New and the Old emerges in interpretations and (often ideological) attitudes towards the phenomenon from the position of the musicians, composers, music critics or musicologists. The use of the New and the Old as music history categories is complicated and depends on the historical context, contemporary and modernized understandings, goals and how to interpret tools of music creation in this context. This is also the concern of the *Journal of Music History Pedagogy* (JMHP since 2010), e.g. in the article of Burkholder (2011), who has applied Pace's and Middendorf's Model of Decoding the Disciplines, that makes explicit the modes of thinking we use and giving students the opportunity to practice using them so that they learn how to participate in the discipline by doing it.

An important pedagogical aspect is the way students approach historiography using library sources, because, as the librarian Conor (2019) explains: *"...historiography is a logical entry point into critical information literacy for music history. Our information sources are a window into our disciplinary discourses. They reveal how we have defined music history over time, as well as the ongoing debates and discussions that have shaped our de definitions"* (p. 34). Conor (2019) underlines that with the development of an understanding of historiography the students see *"that information does not consist of absolute sets of facts; it constantly shifts in relation to ongoing debates"* (p. 34).

The author of this article fully agrees with the American music history educator Cochran (2019) who teaches his students "to become historians not only through the acquisition of discipline-specific knowledge, but also through historiographical acts of interpretation and habits of mind" (p. 67).

This article introduces the New and the Old as music history categories based on the German musicologist Ballstaedt's (2003) theoretical framework of meanings of terms as 'temporal', 'epochal' and 'imperative' in the light of the Oxford History of Western Music editor-in-chief Taruskin's (2009) understanding of the *agens* (agent, active person) as driving force of how and by whom music history has developed, has been received and interpreted through the times. The latter sheds light on a basic problem in school music history textbooks: in order to generalize and generate short overviews of the development of music either 1) the *agens* (agent) has been taken out of the narrative (leaving the impression that music develops on its own) or 2) the narrative evolves in simplified manner around some single, canonized agent leaving out important surrounding aspects (including other agents) that have influenced and shaped these (without doubt) outstanding agents, but they cannot be understood without their context.

The outcome of this theoretical article visualizes and enlarges Ballstaedt's framework into a more concrete system including also Taruskin's (2009) *agens* (agent) principles. The aim is to enhance the understanding of why and by whom adjectives like 'new' and 'old' may be used to comprehend phenomena of music in history and nowadays. The author of this article wants to support music teachers in making their students aware of this topic.

The thoughts presented here have been developed over around ten years during the music history courses taught by the author at Tallinn University. They have been applied by the author in the Tallinn University Institute of Digital Technologies led Estonian state (EU funded) project *"Digital Learning Resources for High Schools"* (DÕV, 2017–2018) (Vihterpal, Lock, Kallastu, Getman, Selke, Konsap, Ulvik, Mihkelson & Palu, 2018). The introduction and chapter 1 of this digital book described important terms, directions and processes of the whole western music history.

The author would like to stress that this article opens the New and the Old rather as general categories. It will not deal especially with 20th century music that embodies the most mutual relationship and pluralistic-synchronic existence of the New and the Old.

Despite of the constantly growing recognition of 'noise' and 'silence', 'electronic music' and 'soundscape' as the before mentioned most challenging new concepts of music that have nowadays found its way also into music education (via electronic instruments like synthesizers as well as computers and audio workstations), the following subsection

takes into account that the traditional note-based practice of music in (choir) singing and instrumental teaching is still actual in music education in many countries around the world – not to mention informal approaches via internet (e.g.) *YouTube* tutorials how to learn the guitar or mediated through audio workstations' MIDI standard to compose melodies or harmonies.

The Austrian composer and music theorist, Arnold Schoenberg (1874–1951) hereby represents the score note-based composing tradition as well as is a conjoining link to future developments in music. He is an outstandingly influential historical *agens* as composer and teacher till today: as head of the Second Viennese School as well as author of traditional fundamentals of composition and harmony textbooks. He is either misunderstood or highly appreciated with his expressionistic and atonal music, and dodecaphonic composing principle. The following subsection offers some of Schoenberg's (in the author's view still today relevant) pedagogical thoughts. The aim is to open with some direct quotations the historical meaning of Schoenberg's attitude concerning the ubiquitous phrase 'New Music'.

Schoenberg's Criticism of 'Pseudo-Historians'

Schoenberg has himself become a subject of history either through contemporary criticism by Cocteau (1921, 4) who treated him as master to whom all contemporary composers, also Stravinsky, owe something, but who remains a blackboard musician, or via the one-directed praise by Adorno's historical misjudging juxtaposition of Schoenberg the progressive vs Stravinsky the regressive in *"Philosophie der neuen Musik"* (Adorno, 1949).

Schoenberg (1950) complains in the essay *"New and Outmoded Music"* that *„unfortunately, methods in music teaching, instead of making students thoroughly acquainted with the music itself, furnish a conglomerate of more or less true historical facts, sugarcoated with a great number of more or less false anecdotes about the composer, his performers, his audiences, and his critics, plus a strong dose of popularized esthetics“* (p. 37).

Schoenberg's (1950) criticism goes against 'pseudo-historians' as well as the slogan 'New Music' propagated by 'pseudo-historians' after WW I: *„The popularity acquired by this slogan, "New Music," immediately arouses suspicion and forces one to question its meaning“* (pp. 38-39).

Schoenberg (1950) defines New Music as follows: 1) must differ in all essentials from previous music; 2) must express something *„which has not yet been expressed in music“*:

- *"In higher art, only that is worth being presented which has never before been presented"* (p. 39);
- *"There is no great work of art which does not convey a new message to humanity; there is no great artist who fails in this respect"* (p. 39);
- *"This is the code of honor of all the great in art, and consequently in all great works of the great we will find that newness which never perishes, whether it be of Josquin des Pres, of Bach or Haydn, or of any other great master. Because: Art means New Art"* (p. 39).

According to Schoenberg (1950), *“the idea that this slogan “New Music” might change the course of musical production was probably based on the belief that history repeats itself... If history really repeated itself, the assumption that one needs only demand the creation of new music would also suffice in our time, and at once the ready-made product would be served”* (p. 39). In his view, this is mistaking symptoms for causes. The real causes of changes in the style of musical composition are others. For Schoenberg and his Second Viennese School these other causes of changes are structural aspects of music, e.g. the development and filling of the vertical (chords, harmony) and the horizontal (melody) musical space (see also Webern’s lectures from 1932–33, printed in Webern, 1960).

Schoenberg describes the role of so-called pseudo-historians (Ballstaedt’s imperative use of the adjective ‘new’, *agens* in Taruskin’s means – see terms and concepts in next subsection) as unnecessary for understanding turns in musical styles:

„If music abandoned its former direction and turned towards new goals in this manner, I doubt that the men who produced this change needed the exhortation of pseudo-historians. We know that they – the Telemanns, the Couperins, the Rameaus, the Keyzers, the Ph.E. Bachs and others – created something new which led only later to the period of the Viennese Classicists. Yes, a new style in music was created, but did this have the consequence of making the music of the preceding period outmoded?” (Schoenberg, 1950, 41).

He introduces the evaluative (pejorative) term ‘outmoded’ instead of the rather neutral term ‘old’ for non-modern music. This way of thinking was alive through the whole 20th century in academic contemporary (new) music, but has given way to a more liberal pluralistic comprehension till today. In popular music, however, the evaluative pair of the terms ‘modern’ and ‘outmoded’ is still alive even today.

Schoenberg’s above presented historical pedagogical criticism raises for today’s reader the question of whether this is still actual in our days: teachers should ask themselves how they have learnt, understood and apply music history teaching. This can be the subject of a consecutive empirical study among music teachers, but is not the goal of this article.

Ballstaedt’s Methodological Concept-View at the History of ‘New Music’

The history of ‘New Music’ (German *Neue Musik*) from a methodological aspect has been researched by Ballstaedt (2003) being inspired by Webern’s book’s title *“The Path’s to the New Music”*. The first part of the book introduces such important terms like ‘new’, ‘modern’, ‘avant-garde’. It describes historical trends of the terms till the 19th century, their historical, epochal and imperative meanings and usage, leading concepts and hierarchy of the terms, and missing accuracy as chance. The second part deals with historiography: how the musical ‘New’ can be detected and traced in the 20th century. It also includes the description of features of the New, and what to take as beginning, what are models of history, and about chronological order as historical side-by-side. The third part introduces the way how two 20th century first half composers – the American Ives (1874–1954) and Austrian Webern (1883–1945) have constructed the ‘beginning’. One finds the descriptions of the positions of the composers in history, their historical treatment, their poetics, what the term ‘musical piece’ means, and thoughts

about the comparison of the incommensurable. The summary title is "*Outlook: New music as pluralistic category*". Ballstaedt (2003, 199) offers that the 'New' as the 20th century pluralistic category appears at several levels simultaneously.

Ballstaedt (2003, 14) approaches the term 'new' from terminological perspective defining, firstly, the meaning of the term and, later, detecting more closely the musical content and layers of meanings. He derives the meaning 'new' from two Greek language roots: temporal and genuine aspect as well as particular meanings. He further uses the term at both levels of understanding and treats as its synonyms the terms 'modern', 'avantgard', 'contemporary'. In the *Oxford Dictionaries* the adjective 'new' (New OD, 2020) has the following layers of meaning: (1) Produced, introduced, or discovered recently or now for the first time; not existing before; (2) Already existing but seen, experienced, or acquired recently or now for the first time; (3) Beginning anew and in a transformed way.

As the parallel term of Latin *nova* (new), Ballstaedt (2003, 17-18) discovers the 5th century term *modernus* (Latin *modo* means now, just). Zayaruznaya (2020) explains that "*colloquially but not inaccurately, we might translate "moderni" as "folks nowadays"*" (p. 96). She refers to Tanay (1999) who points out that "*moderni need not be practitioners of explicitly innovative doctrine saying that in medieval times the term modernus expressed only a contemporaneous mode of thought, rather than a necessarily radical or innovative one*" (p. 148). According to Ballstaedt (2003, 17-18), people started to ask if something in the now-moment holds well as actual. Everything that was not new in the meaning of *modernus* was called in Latin *antiquus* (ancient) or *vetus* (old). When in renaissance times the 'New' became a particular focus, also the post-antique understanding of the cyclical nature of history was reestablished. In the humanistic philosophy of history, the progress idea enables two different aspects: the Latin *imitatio* (imitation) and *aemulatio* (emulation) in the meaning of imitating and overcoming the antique example. The comparison with antique examples are further developed in the discourse about classicist music, when Mozart's (1756–1791) biographer Niemetschek (1766-1849) ascribed to his music a 'classical value' (1797, 1808) that is based on repeated and taste developing listening – as it was the practice with Greek classical literature. Also, Mozart's widow Constanze called Mozart's compositions comparable to classical authors' fragments (1800) (Hartz & Brown, 2001). On the other hand, the German poet and composer Hoffmann (1776–1822) wrote in 1814 that Haydn, Mozart and Beethoven developed a new art, whose germs can be found in the mid-18th century (see Rosen, 1997). The antique-related view prefers a rather universal understanding somehow in the *imitatio* sense, the 18th century-related view prefers a rather developmental understanding somehow in the *aemulatio* sense with the claim of developing a 'new art'.

Taking music simply as art in the earlier meaning of *ars* as craft Zayaruznaya's (2020) following statement binds together its practice and theory as well as the Old and the New: "*Ars is about doing something and then theorizing the doing. Ars is activity. Old and new activities can and do coexist, in part because people of different generations co-exist, doing the activities and theorizing them as they go*" (p. 138).

Different Meanings/Usage of the New Enlarged with the Concept of *Agens*

Ballstaedt's (2003, 25) temporal meaning/usage concerns only the contemporaneous or immediate temporal neighborhood aspects of events. Different from that is his notion of the imperative meaning/usage that concerns the essential content of the term pending on which it must be in accord with norms of a particular style, aesthetics, poetics or worldview. Ballstaedt adds that these norms may be unspoken, but they can still be derived from the type of describing or the narrative. The epochal meaning/usage concerns, however, longer (stylistically assumingly and/or generalized as stable) time periods due to the choice of criteria. In this article the enlarged system embraces the following concretizations (see Figure 1): the temporal meaning functions at the local-temporal or micro level (narrated often through synchronic events and their immediate local-temporal neighborhood), the epochal meaning functions at the global-temporal or macro level (narrated often through diachronic events in decades or centuries including reason-consequence logics). The imperative meaning adds to the phenomena under observation certain essential features both at the local- and global-temporal levels posing content norms that are more or less binding. This creates the juxtaposition of the New and the Old.

According to Taruskin (2009), the *agens* (agent) (p.4) is a person (composer, musician, listener, critic, musicologist) who

1. has caused a phenomenon in the moment it appears at the local-temporal level (Ballstaedt's temporal meaning), being aware or not of one's attitudes;
2. is the contemporary recipient and creates in this contemporary moment the first narrative (temporal meaning), being aware or not of one's attitudes, acting based on the popular beliefs (principles or ideas) of one's time;
3. is a later recipient and shapes the music reception narrative in a longer temporal period at the global-temporal or macro level (Ballstaedt's epochal meaning), being aware of the popular beliefs (principles or ideas) in music history of one's time or earlier times.

A scientific agent (musicologist) decides the imperative use of terms and concepts consciously; a music critic, also composers and musicians use them either consciously or based on their ideological worldview. All authors (also referred in this article) are more or less agents. The principles of thought and worldviews of the author of this article are influenced by the structural and musical material of German compositions (Gieseler, 1975) as well as music history methodological concepts (Dahlhaus, 1983; Eggebrecht, 1996) and history of the New in music (Blumenröder, 1980; Danuser, 1997).

A listener is often influenced by the worldviews and popular beliefs without being aware of them. However, he/she still participates in the shaping of music history as agent, e.g. supporting the visibility or recognition (fame) of a composer or musician. Nowadays it works the way the listener pays for a concert or a recording on disc (20th century), or as user in streaming portals (21st century): being part in big data statistics that generate awards, fame and money.

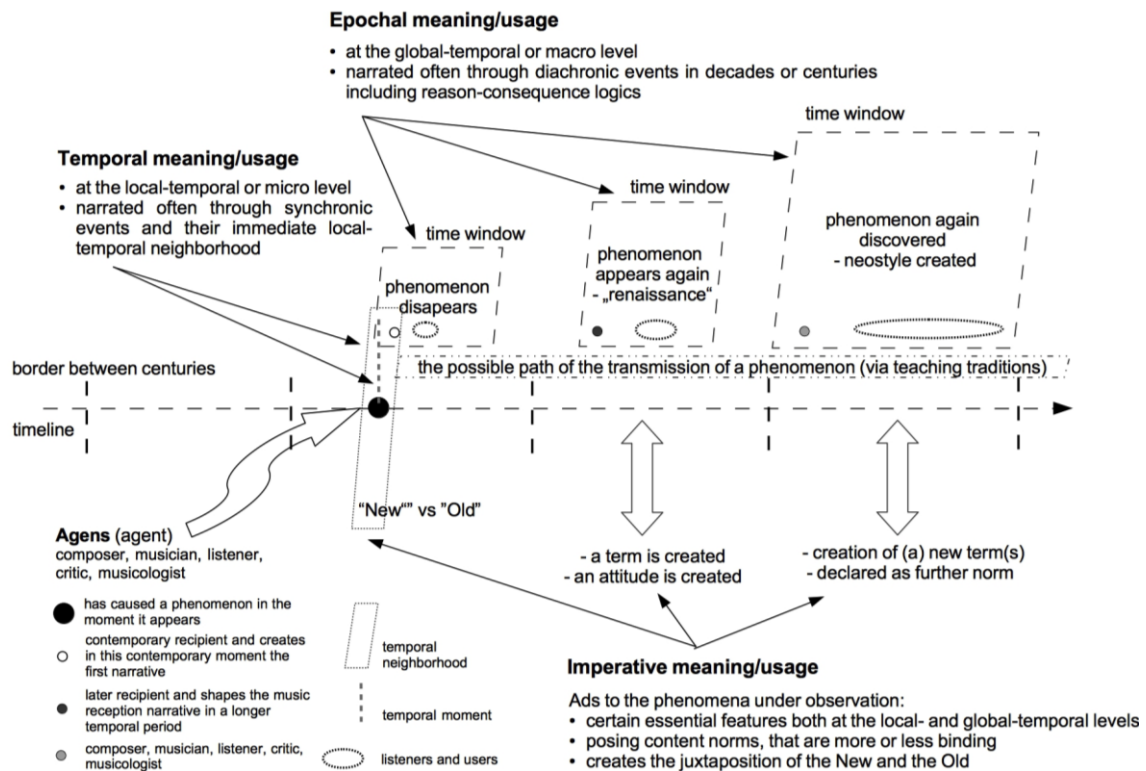


Figure 1. The usage of temporal, epochal and imperative meaning of the term ‘new’ after Ballstaedt (2003) enlarged with Taruskin’s (2009) agents

In Figure 1, one finds visualized the different layers of meaning of the New as given in the *Oxford Dictionaries* before (New OD, 2020): (1) phenomena/music produced, introduced, or discovered recently or now for the first time; not existing before – idealistic view, because it depends on what one actually knows of the past; (2) phenomena/music already existing (e.g. those of point 1), but listened, experienced, or acquired recently or now for the first time (re-discovered renaissance); (3) can apply also to point 2 as music in the meaning of renaissance – beginning a new and in a transformed way, see *aemulation* as overcoming of the antique, or classicist development of antique-based classical principles.

These layers of meaning depend on the chronological position of the *agens* in one’s own time (local-temporal usage) as causing person or first narrative creator – contemporary recipient; or as later recipient or composer/musician who shapes the music reception narrative or further direction in a longer temporal period (global-temporal usage) – either re-discovering as renaissance or classicism (*imitatio* or *aemulatio*) or starting over again as neo-style as in the 20th century. In turn, the 1970ies postmodern thinking has brought back rather the *imitatio* principle. The 21st century synthesizing approaches rather use the transforming way of understanding the New that is more conformable to the modern, avantgarde way of thinking in contemporary music. Something actually New in the “not existing before” meaning like Schoenberg defined it, seems to be impossible, because in the 20th century almost every possibility in the dodecaphonic vertical-horizontal musical space (in the Schoenbergian and Webernian sense) has been done already – from single note to sound field (sonoristic) and computer generated music.

The author claims that only the systematic microtonal compositional way of thinking and its listening experience – intervallic steps mostly smaller than a half-tone – offer something that might fit in categories 1) not existing before; and 2) experienced, or acquired recently or now for the first time. Even if artificial intelligent (AI) computer algorithm creators (systems like AIVA – Artificial Intelligence Virtual Artist, and others) claim to create something new, it still doesn't fit the first meaning (discovering the "previously non-existent"), because they still take fragments or music compositional/theoretical rules from earlier music recombining them either in the *imitatio* or re-create (re-discover) them in the *aemulatio* way of thinking. The really New in the third meaning (beginning anew) can be developed in rather chosen aspects, if transforming cross-domain analogies from other arts, mathematics, biology, technology etc. into music. Such interdisciplinary concepts have been already in use since the 20th century.

The possible path of transmission of the New and the Old in music and pedagogy is influenced by „*perspectives that are dominant, hegemonic, and overpowering – views that 'hide' their ontological existence as one perspective among many and, based on the rhetoric of truth, objectivity or sanctity, impose themselves as singular and legitimate*“ (Glaveanu, 2018, p.527).

Music teachers should focus the awareness of their students towards these three layers of the meaning of the New, especially in the field of popular music, because much of the activity of such young EDM (Electronic Dance Music) composers (music producers that unconsciously correctly don't claim to call themselves composers in the classical meaning) is just *ars* (craft) with the aim to enjoy what they love, collaborate with friends or make money. They indeed rather recombine same elements used by their example stars (treated as norm, using presets of computer programs, nothing new, *imitatio*) or re-discover by using same form, melodic and rhythmic principles (imitating and overcoming their examples, *aemulatio*) by developing also own features and using computer programs at least creatively. But these young composers are mostly rather unaware of the classical and avantgarde music traditions (e.g. form and structure, motivic work, harmony, algorithms etc.); they actually emulate something and claim it for themselves as New – this often results in a strict conservative (less creative) attitude towards music composing (Tikerpuu, 2019). They think mostly on the local-temporal or micro level, sometimes in a shorter durational 'epochal' (quasi global-temporal or macro level) as pop music develops only since the 1950ies in decades, not over centuries. Their imperative understanding (in norms) is based on those short-term chosen aspects that introduce, maybe, something technologically New (e.g. the synthesizer or the vocoder), but the musical structure remains rather conservative or is based on ancient pentatonic scales or church modes etc. avantgard principles like the Beatles' rhythmic and harmonic experiments or Progressive Rock or Bebop/experimental free jazz approaches are influential in a lesser extent to specialists and not foremost usable to make money (as pop music generally do). Also, the avantgarde field of improvisational music has a rather exclusive audience similar to that of academic contemporary music. The constant quasi-progressive self-declaration of doing something New in the pop music field has other aims (e.g. money, similarly to the clothing fashion domain) than in the academic avantgarde tradition and often doesn't leave the local-temporal level, even if it is a global (whole world) embracing phenomenon.

Conclusions

1. Innovations in music history are treated as either qualitatively positive or negative phenomena in the process of simplifying and complexifying. This has been most prominent in the musical modernism. The transition from tonality to modernism took place with late romanticism while composers extended the elements of tonality with chromaticism (complexifying). At the end of the 19th century and beginning of the 20th century modernism started with impressionism and expressionism. In the second half of the 20th century avantgarde and experimental music (complexifying), later also American minimalism (simplifying) changed the way of composing and listening. The latter brought back also tonal elements, third-based harmonic triads. This has been called restauration of earlier century compositional traditions (their re-discovering) in neoclassicism/neobarock/neoromantism or postmodernism (including poly-stylistic approaches). But this Adorno (1949) based dualism between modernism (progress – positive attitude) and restauration (regress – negative attitude) needs to be treated as relative to its context (back and forth in the timeline of styles) and their agents.
2. The possible path of transmission of the New in music (both academic and popular) lies in an open/supporting teaching that enables cross-domain influences and doesn't forget the past (traditions). It doesn't label the use of previous music/the Old as regressive (Adorno, 1949) but merges it in the understanding of the New in the three possible ways described above. This means accepting alongside with the academic avantgarde viewpoint in Schoenberg's idealistic sense of the "now for the first time; not existing before" of "New Music" also the principles of *imitatio*, *aemulatio* and transformation as valuable both at the local-temporal and individual developmental level of each young composer and at the global-temporal epochal level without getting stuck in norm-driven and worldview/ideology depend imperative meanings that enchain creativity and doesn't allow the possible (New or Old) to evolve as necessary individually or more widely.
3. Based on Conor (2019), Burkholder (2011) and Cochran (2019), the teachers could support their students' skills (1) to approach historiography using library sources wittingly to understand the path of transmission of the New, (2) to make explicit the modes of thought to become aware of worldview-/ideology-driven reasons for phenomena in history brought to the present and projected into the future, (3) to reasonably apply the historiographical acts of interpretation and habits of mind in order to understand, how norms appear or have been installed by agents.
4. Everybody listening and making music today is an agent for its future history either for oneself (individual), in a small subculture (with friends or a group that appreciates certain styles), or at a more universal level (as music specialist). In school context these influences meet and cross each other: the teacher and the students bring their own music to the classroom and learn from each other as explained in the Critical Pedagogy for Music Education (CPME) concept (Abrahams, 2005). If both understand that they are mutual agents and where the music of the past and present is located at the timeline, as worldview or ideology, they will become aware of the local-temporal and the global-temporal levels as well as imperative meanings/usage of the New and the Old in music.

References

- Abrahams, F. (2005). The application of critical pedagogy to music teaching and learning. *Visions of Research in Music Education*, 6, 1-16. Retrieved 01.06.2020 from <http://www-usr.rider.edu/~vrme/v6n1/index.htm>
- Adorno, T.W. (1949). *Philosophie der neuen Musik* [Philosophy of New Music]. Tübingen: J.C.B. Mohr.
- Ballstaedt, A. (2003). *Wege zur Neuen Musik. Über einige Grundlagen der Musikgeschichtsschreibung des 20. Jahrhunderts*. Mainz: Schott Musik International.
- Blumenröder, C.v. (1980). Neue Musik [New Music]. H.-H. Eggebrecht, A. Riethmüller (Hrsg.), *Handwörterbuch der musikalischen Terminologie (HmT, 1972-2006)*. Wiesbaden: Steiner Verlag.
- Burkholder, P. (2011). Decoding the discipline of music history for our students. *Journal of Music History Pedagogy*, 1(2). Retrieved 12.04.2020 from <http://ams-net.org/ojs/index.php/jmhp/article/view/22>
- Cage, J. (2004). The future of music: Credo. In C. Cox, & D. Warner (Eds.), *Audio Culture. Readings in modern music* (pp. 25-28). New York: Continuum.
- Cocteau, J. (1921). *Cock and Harlequin: Notes concerning music (Le Coq et l'Arlequin: Notes auteur de la musique)*, translated by R.H. Myers. London: Egoist Press.
- Cochran, T. (2019). Roundtable introduction: Rethinking primary sources for the music history classroom. *Journal of Music History Pedagogy*, 9(1), 67-69. Retrieved 12.04.2020 from <http://ams-net.org/ojs/index.php/jmhp/article/view/284>
- Conor, E. (2019). Re-envisioning information literacy: Critical information literacy, disciplinary discourses, and music history. *Journal of Music History Pedagogy*, 9(1), 28-43. Retrieved 12.04.2020 from <http://ams-net.org/ojs/index.php/jmhp/article/view/293>
- Dahlhaus, C. (1983). *Foundations of Music History (Grundlagen der Musikgeschichte)*, translated by J.B. Robinson. Cambridge: Cambridge University Press.
- Danuser, H. (1997). Neue Musik [New music]. F. Blume, L. Finscher (Hrsg.), *Die Musik in Geschichte und Gegenwart* [Music in History and the Present]. Kassel: Bärenreiter-Verlag, Karl Vötterle GmbH, Verlag J. B. Metzler.
- Eggebrecht, H.H. (1996). *Musik im Abendland. Prozesse und Stationen vom Mittelalter bis zur Gegenwart*. München: Piper.
- Fischman, R. (2015). What do we know that Varèse didn't? *Organised Sound*, 20(1), 23-29. Retrieved 12.04.2020 from <https://www.cambridge.org/core/journals/organised-sound/article/what-do-we-know-that-varese-didnt/ECD7F8EE85E6A805529A8E4F3C9DB1F4>
- Gieseler, W. (1975). *Komposition im 20. Jahrhundert. Details, Zusammenhänge*. Celle: Moeck.
- Glaveanu, V.P. (2018). The possible as a field of inquiry. *Europe's Journal of Psychology*, 31, August, 519-530. <https://doi.org/10.5964/ejop.v14i3.1725>
- Green, L. (2008). *Music, Informal Learning and the School: A new classroom pedagogy*. Ashgate Publishing, Ltd.

- Heartz, D. & Brown, B. (2001). Classical. *Grove Music Online*. Retrieved 12.04.2020 from <https://doi.org/10.1093/gmo/9781561592630.article.05889>
- Heckel, S. (2017). Soundscapes: Using informal learning pedagogy to create a Canadian strand of musical futures. *Canadian Music Educator*, 58, 12-16. Retrieved 12.04.2020 from <https://www.researchgate.net/publication/315730040>
- Kobler, J. (1968). Everything we do is music. *Saturday Evening Post*, October 19th, 46-47, 92, 94.
- Mariguddi, A. (2019). *Perceptions of the Informal Learning Branch of Musical Futures: PhD Thesis*. Edge Hill: Edge Hill University.
- New OD (2020). New. In *Oxford Dictionaries. Lexico*. Retrieved 12.04.2020 from <https://www.lexico.com/definition/new>
- Rosen, C. (1997). *The Classical Style. Haydn, Mozart, Beethoven*. New York: W. W. Norton.
- Russolo, L. (1986). *The Art of Noises*, translated by B. Brown. New York: Pendragon Press.
- Schoenberg, A. (1950). *Style and Idea*, translated by D. Newlin. New York: Philosophical Library.
- Tanay, D. (1999). *Noting Music, Marking Culture: The intellectual context of rhythmic notation, 1250-1400*. Holzgerlingen: American Institute of Musicology.
- Taruskin, R. (2009). *Oxford History of Western Music*. Oxford: Oxford University Press.
- Tikerpuu, F. (2019). *Elektroonilise tantsumuusika loomine videomängude visuaalile* [The Creation of Electronic Dance Music for Video Game Visuals: Bachelor thesis]. Tallinn: BFM, Tallinn University (in Estonian).
- Vihterpal, L.K., Lock, G., Kallastu, A., Getman, O., Selke, T., Konsap, S., Ulvik, A., Mihkelson, P. & Palu, I. (2018). *20. ja 21. sajandi muusika* [20th and 21st Century Music]. <https://e-koolikott.ee/kogumik/18748-20-ja-21-sajandi-muusika> (in Estonian).
- Varèse, E. (2004). The liberation of sound. In C. Cox, & D. Warner (Eds.), *Audio Culture: Readings in modern music* (pp. 17-28). New York: The Continuum International Publishing Group Inc.
- Webern, A. (1960). *Der Weg zur Neuen Musik. Der Weg zur Komposition in 12 Tönen* (Hrsg. W. Reich) [The Path to the New Music: The path to the composition with 12 notes]. Wien: Universal Edition.
- Zayaruznaya, A. (2020). Old, new, and newer still in book 7 of the *Speculum musicae*. *Journal of the American Musicological Society*, 73(1), 95-148. Retrieved 12.04.2020 from <https://online.ucpress.edu/jams/article/73/1/95/107182/Old-New-and-Newer-Still-in-Book-7-of-the-Speculum>

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SYSTEMATIZED LITERATURE REVIEW OF EL SISTEMA, THE VENEZUELAN SOCIAL MUSIC EDUCATION METHOD

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Abstract

This article presents a cross-sectional examination of El Sistema, a social music education method, its educational background, philosophy, history and contemporary practices based on a systematic literature review.

First, we describe the background and key principles of the El Sistema method, and then examine each of the identified studies and present a synthesis of their results. The El Sistema method has spread widely around the world and a range of modelling approaches and educational programmes have been inspired by its ideas. Research and constructive critique are needed to help ensure high-quality dissemination and application of the method.

This article addresses the following research questions:

1) What music educational starting points does the international El Sistema social music education method include?

2) What has been researched about El Sistema?

3) What are the main results of the research conducted on El Sistema?

The method used in this article is systematic literature overview. Using three search words, the database of the University of Eastern Finland found 223 hits from which 37 were selected to be analysed. In addition, searches were carried out in the following databases: UEF Primo Central Index, Social Science Premium Collection (Pro Quest), Uniarts Finna Arsca, and the Education Resources Information Center (ERIC), and nine more hits were found (N=46).

The publications were classified into five groups: 1) history of El Sistema, 2) brain research, 3) academic impacts, 4) psychosocial impacts, and 5) El Sistema programme activities. The weighting of the studies was evaluated based on the content in relation to the subject under study, the scientific level, Publication Forum JUFO classification, and date of publication.

Synthesis: Historically, the birth of El Sistema in Caracas in 1975 was preceded by a versatile positive cause-consequence relationship. It is beneficial for the brain to engage

in music more than is typically offered in schools. In addition, psychosocial abilities are improved through participation in an orchestra or a choir. El Sistema and its ways of operating always differ depending on the local culture and needs of different countries and communities.

Music education needs to be more than merely practising compositions for performance in an orchestra or a choir. Music itself does not do anything life-changing – the people involved in it do.

Keywords: *El Sistema, research, literature overview, synthesis*

El Sistema Venezuela

The El Sistema method was founded in Caracas in 1975 by José Antonio Abreu (Dr.h.c., economist, teacher, musician and politician). Officially named The Venezuelan National System of Youth and Children's Orchestras (Fundación del Estado para el Sistema Nacional de las Orquestas Juveniles e Infantiles de Venezuela – FESNOJIV), the method has become widely known simply as El Sistema (Nowakowski, 2012; Tunstall, 2013).

The aims of the method are first of all social and communal. The child comes first, and the music is the content of the method (Tunstall, 2013). The most important concepts consist of democratizing music and developing and changing society through the use of orchestras and choirs to achieve social order and sociological development (Pedroza, 2015). At the beginning of the development of El Sistema the concepts 'poor' or 'social' were not used in the rhetoric (Baker, 2018, 170; Storther, 2017, 8) as the aims were more specifically focussed on musical development.

While a considerable amount has been written about the method, which has spread intercontinentally across 55 countries (Majno et al., 2012; Gustavsson & Ehrlin, 2018, 188), scientific critical studies of the approach are scarce (Shoemaker, 2012, 27; Uy, 2012, 6; Baker, 2014; Bergman et al., 2016, 366; Krupp, Schleußner, Lehmann & Wermser, 2018, 758). Peer reviewed research has also been complicated by the tightly guarded statistics and information, which are held by the administration of El Sistema and not open to independent researchers (Shoemaker, 2012, 27; Baker & Frega, 2018, 502).

The first critical studies were conducted in the 2010s (Baker, 2018). The findings of the method concerning individuals as well as the community have been promising (Majno 2012; Nowakowski, 2012; Harkins et al., 2016; Osborne et al. 2016; Hedemann & Frazier, 2017). Poor and even negative impacts of the method on the life of participants have also been shown (Baker, 2018). There has also been critique of the old-fashioned music educational methods of El Sistema (Baker, 2014, 136; Bergman & Lindgren, 2014; Baker, 2016). The basic thesis - the child comes first and the music is just the content - has also been criticized for fostering children as citizens who are loyal to the authorities instead of educating them to become individuals actively participating in democratic actions and processes. Storther (2017, 11) compares the situation of a musician to a soldier from the point of view of spontaneity and identity. One cause of this critique was the change of the name of the El Sistema Youth Orchestra in the year 2011 to the patriotic Fundación Musical Simón Bolívar (Strother, 2017). The change of name can be seen as moving from the original individual centred thinking to the supervision of the state authorities (Majno, 2012). The colours of the uniforms can

also be seen as intended to show the performers' loyalty and thankfulness to Venezuela (Shoemaker, 2012, 88).

Wide critique has also been raised about the silence of the leaders of El Sistema considering the political situation in Venezuela (Baker, 2016). As researchers, we observe a situation where a free music education is offered to children; but does this mean buying loyalty to the government?

Every child in Venezuela has a right to participate in El Sistema (Driscoll, 2013). Of the 28 million citizens in Venezuela an estimated 400 000 children and youngsters participate in El Sistema, with over 200 orchestras offering free premises, teachers, instruments and uniforms to the participants (Nowakowski, 2013; Slevin & Slevin, 2013). The core idea of El Sistema is to remove the boundaries to participating in music and being an active member of society (Lesniak, 2013).

El Sistema as a social music education method has also been compared to popular enlightenment where a large group of people are attempted to be made to behave according to a certain model, as done in Sweden during the recent period of mass immigration (Bergman & Lindgren, 2014) or the *Éducation Populaire* movement in France after World War II, when the population was collectively depressed (Kurki, 2000).

In addition to the critique towards the philosophical or educational approach of El Sistema, we must also remember that the method as it is cannot work in the same way in different countries (Lesniak, 2012; Sæther, 2017). Quinn (2013) also asks in his article: Limits of the system – is it too much expected of El Sistema, if any music education method can be called social music education? El Sistema was founded in a certain society in a certain political and sociological situation which was totally different compared to the new solutions that have been later founded on it in different countries. Quinn (2013) also considers if it would be better to target only musical education, as the other social impacts of it can be questioned, for example, because delinquency has been strongly rising in Venezuela since 1975.

On the other hand, all formal music education in Western countries includes wider aims than just transferring musical content from the teacher to the pupil (Elliot & Silverman, 2015, 18; Susić, 2017). Also, Lesniak (2013) notes that it is not unique to aim for an emotionally harmonized humanity through the means of arts education. Booth (2011) sees El Sistema as a unique system where the theory of music pedagogy is built on four basic pillars: 1) Sustaining the dynamic tension between polarities; 2) Continuing following of the development; 3) Embodying the mission – 80 % of what you teach is who you are; and 4) The power of beauty, craft and community.

El Sistema Finland

The Finnish El Sistema achievement started in 2009 in Vantaa as a part of the *"Kokonainen maailma lähiössä"* (*"A Whole World in a Suburb"*) programme. Originally called the Tempo-orchestra, it aimed at increasing meaningful social intercourse and interaction in areas with a large immigrant population. The target group included both the original population and immigrants. A core goal of the programme was to promote

friendship between children from different backgrounds, prevent racism, and promote immigrants' integration into society.

Target of this Article and its Research Question

This article aims to review the existing research on El Sistema and show its main findings. We also examine the history, music educational background, and critical research of El Sistema. Based on our preliminary searches we identified a lack of scientific research on El Sistema. General descriptions and commendations of El Sistema are, in contrast, very common and are usually written by people with close connections to the method (Baker, 2014, 9).

We use the systematic literature review method to explore the activity of El Sistema (Glass, McGaw & Smith, 1981; Thomas, 2009, 30-59; Cohen, Manion & Morrison, 2011; Metsämuuronen, 2011, 22-24). We provide syntheses of the problems and challenges presented in earlier studies, including the suitability of the method for different countries, times, or music education methods. We also consider the originality of the method as social music education.

Systematic Literature Review

Our method is a systematic literature overview; however, our aim was to present our article as a narrative, not only a list of literature. Through our systematic analysis we try to see the larger picture of reality, the forest, not only the trees (Thomas, 2009, 34, 36, 58). A systematic way of working requires that the research process is designed and described as is usually the case in scientific work. It must be possible to repeat the study on the basis of the description (Mäkelä et al., 1999).

Data Collection

Data collection was carried out using the University of Eastern Finland's FINNA database in February 2018. We also performed the same search in following databases in December 2019: UEF Primo Central Index, Social Science Premium Collection (Pro Quest), Uniarts Finna Arsca, and the Education Resources Information Center (ERIC).

The search terms used were 'El Sistema' AND 'music education' AND 'research dissertation'. The search offered 223 hits. We did not search for peer review sources (Thomas, 2009, 34). The search terms were selected so that they would not guide the research in any specific direction. The search soon revealed scientific studies of El Sistema to be few in number.

Examination of the results showed that the search was sufficiently wide; some critical studies as well as numerous descriptive articles that followed a general research approach, but were not proper scientific studies, were found. Our record of hits includes numerous types of results: electronic articles, newspaper articles, concert critiques, conference paper publications, book chapters and reports.

The results were read through to determine how El Sistema was approached in the text. We categorized the records during several examinations of the records. While doing the quantitative distillation of the metadata an additional record was found.

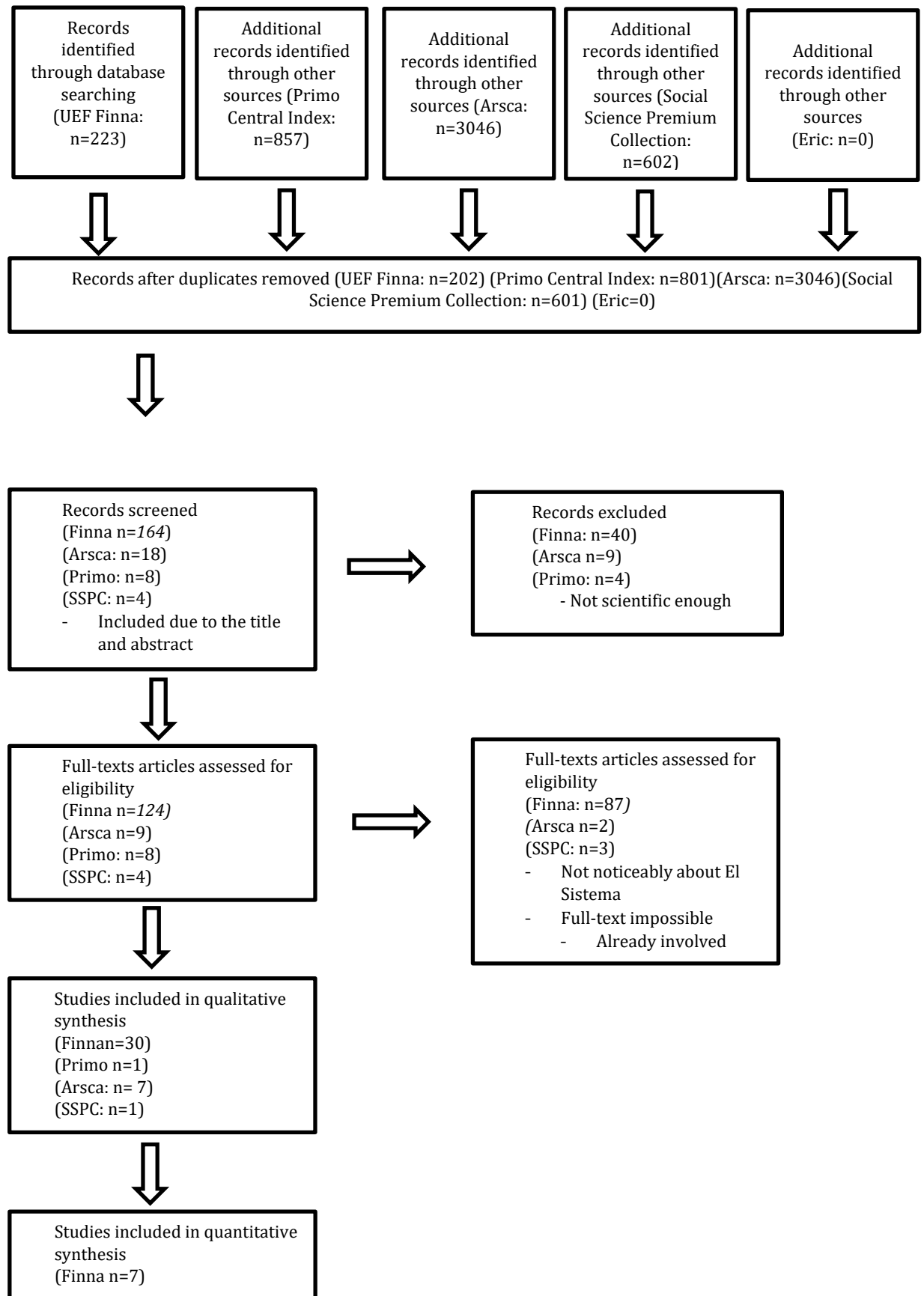


Figure 1. According to PRISMA Flow Table

Categorizing According to the Value and Contents of the Record

In our qualitative analysis the content of the record was considered the most important data, but also the impact of the publication was taken into consideration when exploring the results (Metsämuuronen, 2011, 23).

Assessing the methodological quality of the original studies ensured that each individual study was given the weight it deserves (Mäkelä et al., 1999). Extensive measures were taken to obtain the texts. Library informatics was used and two authors were personally contacted to obtain their articles. Most of the records that could not be reached were not peer reviewed and, according to their titles, were not suitable for this research.

Results

Publications by topic:

Historical: 1-6

Brain research: 7-10

Academic and psychosocial studies: 11-18

El Sistema activity research: 19-46

The results include a large amount of information but only small details can be presented in an article. The most important information is presented in the Appendix. Please refer also to the reference list.

Next, we will explore each of the above studies and their results in more detail.

Category 1. History

1. Pedroza, L. 2015. Of orchestras, mythos, and the idealization of symphonic practice: The Orquesta Sinfonica de Venezuela in the (collateral) history of El Sistema

The article offers a critical point of view of El Sistema research (Baker & Frega, 2018, 1). The starting point of the article is that the method is spreading and thriving, but its idealistic rhetoric in contrast to real life and the similarities with organized religion have gained increasing interest in the last few years. The narratives that emerge from within the system are to be considered as figurative, not factual accounts, similar to biblical stories.

Musical life in Venezuela was not dead prior to Abreu, contrary to his own narrative (Pedroza, 2015, 70, 73). The liveliness of Venezuelan musical life before 1975 is also referred to in the following article by Carlson. Artistic education in Abreu's rhetoric principally means the use of orchestras and choirs as a means for the democratization of music (Pedroza, 2015, 74-75). Music schools and conservatoires represent solo education and music democratization was needed (Pedroza, 2015, 76). Also, Baker and Frega (2018) refer to this.

2. Carlson, A. 2016. *The Story of Carora: The origins of El Sistema*

Like Pedroza, this article also confirms the liveliness of Venezuelan musical life prior to 1975 (Carlson, 2016, 66). The article also discusses the roots of Venezuela's youth symphony programme. Although the traditional account begins with Abreu starting the first rehearsal in his garage in 1975, the origins of El Sistema belong equally to another similar children's orchestra (Carlson, 2016, 72) founded by Juan Martinez in the city of Carora. It had the same philosophy and pedagogical methods: pedagogy of love and musical communality aiming to enhance pupils' ability to concentrate on their schoolwork and to benefit their life holistically (Carlson, 2016, 70). Today, this orchestra has integrated with El Sistema, but allows more autonomy compared to other units of El Sistema (Carlson, 2016, 71).

3. Baker, G. & Frega, A.L. 2018. *'Producing musicians like sausages': New perspectives on the history and historiography of Venezuela's El Sistema*

The heading of the article refers to El Sistema's focus on filling the country with orchestras as opposed to educating musicians (Baker & Frega, 2018, 507). It also refers to the research on El Sistema and its history: reports from the year 1966 are idealized, clichéd and mainly use the same texts as published on El Sistema's own website (Baker & Frega, 2018, 502). In 1997 Estrada and Frega presented an extensive critical evaluation of El Sistema, but their work was largely disregarded. Now, 20 years later, similar research results are again being brought to light. Thousands of children have gone through the system which has not been renewed in any way, even though renewal would have been important from the social music educational point of view. The writers demand responsibility from the system for its actions, in light of the immense importance of its work (Baker & Frega, 2018, 503).

El Sistema does not use the principle of open information in its conference activities, and no open invitation or opportunities to present different opinions or join the discussion are offered (Baker & Frega, 2018, 512).

4. Strother, E. 2017. *Political economy and global arts for social change: A comparative analysis of youth orchestras in Venezuela and Chile*

Studies often assume that arts engagement creates social change through universal mechanisms - this study examines the influence of political economy on the implementation of public arts programmes (Strother, 2017, 1). The conclusion is: political-economic context matters (Strother, 2017, 4).

The original social aims of El Sistema seem to point to the professional music world and primarily to changing the demographics of the orchestras in Venezuela. They do not mention the other advantages which have become the trademark of the El Sistema organization, or its sources of funding during the Chavez period (Strother, 2017, 8-9).

5. Lorenzino, L. 2015. *El Sistema in Canada: A recent history, Part 1*

The article shortly presents 23 of the Canadian El Sistema applications, 14 of them very briefly. The operational culture, funding and targets are addressed. The article also presents the processes that make the El Sistema activities according to f.e. Booth listing. El Sistema is viewed by Lorenzino to be well implemented in Canada, where its values are founded more on social aims.

6. Lorenzino, L. & Smith, G. 2016. *El Sistema in Canada: A recent history: Part 2 of 2*

The Ontarian umbrella organization supports its members by sharing best practices in developing collaboration, supporting networks, creating and executing new programmes, securing funding, and assisting teacher education and curriculum work. Collaboration with research groups combines research and practical work.

Category 2. Brain research

Orchestral work and choir singing teach participants how to behave in society; they serve as guiding behavioural models. What, then, are their affects at the brain level? El Sistema in connection with brain research had four hits in our data search.

7. Sachs, M., Kaplan, J., Der Sarkissian, A. & Habibi, A. 2017. *Increased engagement of the cognitive control network associated with music training in children during an fMRI Stroop task*

The participating children studied in the El Sistema-inspired Youth Orchestra of Los Angeles (YOLA) which ran sessions seven hours per week over five days for two years. A second comparison group focussed on sports (football and swimming) for the same period of time. A third comparison group did not commit to any special activity after schoolwork. The music group did not do sports and the sport group did not practice music. Socio-economic background factors were equalized and taken into account as much as possible to avoid their impact on the results. The results of this comparative research suggest (supporting the hypothesis) that systematic extracurricular training, both in music as well in sports, but particularly music-based training, is associated with changes in the cognitive control network in the brain (even in the absence of changes in behavioural performance.) Extracurricular training, in music or sports, was shown to have beneficial effects. The research is still ongoing, so more results will become available.

8. Hille, A. & Schupp, J. 2015. *How learning a musical instrument affects the development of skills*

This research showed similar results to the previous study. Although all possible background factors were eliminated from the analysis, the results showed that adolescents with music training have better school grades and are more conscientious, open and ambitious. Moreover, the researchers found that the effects of their treatment were stronger among adolescents with lower cultural capital and socio-economic status (Hille & Schupp, 2015, 58, 67). The comparison group participated in sports for similar amounts of time per week, which also had a positive effect, but not as strong as extracurricular music activities. The researchers found that the effect of music was much stronger than that of sports (Hille & Schupp, 2015, 58). The research was done based on the extensive German Socio-Economic Panel Study (SOEP) data. The German Federal Ministry of Education has invested considerable funding in Germany's El Sistema-inspired programmes, and therefore the actual enforcing impacts of music on cognitive and non-cognitive abilities require thorough scientific research.

9. Habibi, A., Rael Cahn, B., Damasio, A. & Damasio, H. 2016. *Neural correlates of accelerated auditory processing in children engaged in music training*

The research design included three comparison groups: music hobbyists, sports hobbyists and a group with no specific hobby. The music group consisted of children from YOLA (Youth Orchestra of Los Angeles). All background factors were eliminated from the analysis. The music group children had clearly better developed auditive definition abilities than the other groups. Such enhanced maturation may also favour faster and more efficient development of language skills, which is important for success in social and academic life. It is important to target these opportunities for development especially for children who live in disadvantaged circumstances (Habibi et al., 2016, 24). This research supports all kinds of social music education methods for children.

10. Hudziak, J., J., Albaugh, M.D., Ducharme, S., Karama, S., Spottswood, M., Crehan, E., Evans, A.C. & Botteron, K.N. 2016. *Cortical thickness maturation and duration of music training: Health-promoting activities shape brain development*

This research compared cortical thickness to child age and engagement in music as a hobby (Hudziak et al., 2016, 1155). According to the report, playing a musical instrument was associated with more rapid cortical thickness maturation within areas implicated in motor planning and coordination, visual-spatial ability, and emotion and impulse regulation. Although the results are clinically weak, the research presents El Sistema and supports it as an example of effective music education for the disadvantaged (Hudziak et al., 2016, 1159).

Category 3. Academic and psychosocial impact

11. Heagy, L. 2018. *Instrumental Music and Reading Achievement of First Graders*

This study carried out in Alaska investigates the relationship between instrumental music and academic achievement measures of academic progress (MAP) using Vygotsky's socio-cultural theory as a framework (Heagy, 2018, 1). The results considering literacy skills (in MAP testing) were rather weak, but the writer still supports stringed instrument learning programmes as social benefits were noticeable in the causal relationship between music as a hobby and literacy skills, although hard clinical testing cannot show all the advances (Heagy, 2018, 107).

12. Osborne, M.S., McPherson, G.E., Faulkner, R. & Davidson, J.W. 2016. *Exploring the academic and psychosocial impact of El Sistema-inspired music programmes within two low socio-economic schools*

The research focused on two El Sistema-inspired extra-curricular programmes situated in socio-economically disadvantaged areas in Melbourne, Australia. The research measured, among the first studies, psychosocial non-musical benefits. Many of the children attending these schools face significant challenges due to generational poverty or being first-generation immigrants or refugees, including significant linguistic problems (Osborne et al., 2016, 157). The results show that participating in the school

programmes for 12 months offers better non-verbal visual-spatial reasoning, verbal and mathematical skills and psychosocial well-being among the pupils. The results were clear, even though the programmes were short term.

13. Harkins, C., Garnham, L. Campel, A. & Tannahill, C. 2016. *Hitting the right note for child and adolescent mental and emotional wellbeing: a formative qualitative evaluation of Sistema Scotland's 'Big Noise' orchestral programme*

The research focussed on mental and emotional well-being over the mid and long term. The design included interesting mixed methods: participant drawing and filmmaking (Harkins et. al., 2016, 28). The qualitative results show that participating in the Big Noise programme increased the participants' mental and emotional well-being in three ways. Firstly, happiness and enjoyment from participating in the programme and the orchestra, especially making music. Secondly, participating creates safety, feelings of belonging, and human relationships. The quality of participant relationships was found to be important as well as planning of the activities, which enables support, routines and structure. Thirdly, increased pride, confidence and self-esteem arising from the ability to learn challenging musical skills, being praised on a regular basis, and being able to present learned skills through regular orchestral performances (Harkins et al., 2016, 25). The research shows that the nature of the effects is dependent on many factors, such as participant circumstances, programme design, and the qualities of the staff (Harkins et al., 2016, 35).

14. Hedemann, E.R. & Frazier, S.L. 2017. *Leveraging after-school programmes to minimize risks for internalizing symptoms among urban youth: Weaving together music education and social development*

The research uses mixed methods to explore an El Sistema-inspired after-school programme called the Miami Music Programme, started in 2010. Participation was offered for free to families whose child was supported with a free school meal and for a small fee to other families. Students were also offered donated musical instruments (Hedemann et al., 2017, 759). The framework of the measures used was mental health problems, social functioning, and emotion regulation strategies (Hedemann et al., 2017, 760). The research focus was on: (a) supporting staff around student engagement and behaviour management; (b) integrating social-emotional activities into the curriculum. The cautious preliminary results indicate that the programme represents a good approach to supporting pupils living in economically vulnerable circumstances or immigrant communities. Needs are identified for promoting mental health and offering opportunities for extracurricular activities (Hedemann et al., 2017, 767).

15. Roy, M.M., Devroop, K. & Getz, L. 2014. *Improvement in South African students' outlook due to music involvement*

The focus of the study was a concert band programme based upon the Venezuelan El Sistema model at a disadvantaged high school in KwaZulu-Natal (Roy et al., 2014, 465, 480). Participation in the music programme seemed to improve participants' motivation to reach for better life goals and to be more optimistic (Roy et al., 2014, 474). The report supports the implementation of music programmes at schools.

16. Krupp-Schleußner, V. & Lehmann-Wermser, A. 2018. *An instrument for every child: A study on long-term effects of extended music education in German primary schools*

The programme was partly arranged by schools and closely resembles the Sistema Finland music education programme. The programme was provided for grade 1-4 pupils (age 7-11) (Krupp-Schleußner et al., 2018, 44). The researchers explore the long-term impacts of participating in a music programme. How many of the participating children pursue music studies after elementary school? Do they study music more often than other children in the 6th and 7th grade (age 12-14) and do they experience music activities more intensively than the others?

The results show that child's affinity to music and the significance of music to child mean more than other factors in instrument learning and commitment to music (Krupp-Schleußner et al., 2018, 55). The results show that the programme overcomes at least some of the obstacles hindering participation in instrument learning or choosing special music classes presented by the immigration or educational background of the participants (Krupp-Schleußner et al., 2018, 51). The results include a large amount of interesting data on the sociocultural and economic background of the home and their impact on children's pursuit of music as a hobby (Krupp-Schleußner et al., 2018, 49-55).

17. Morin, F. 2014. *From Caracas to the Canadian Prairies: Executive summary of the pilot evaluation of an El-Sistema-Inspired After-School Orchestral Program*

According to the report, the first-year pilot project of the long-term music education programme has achieved the targets set for the El Sistema model of after-school orchestral activity. The report shows a small number of concerns, which will be taken into account in planning further model development (Morin, 2014, 25-26).

18. Aleman, X., Duryea, S., Guerra, N.G., McEvan, P.J., Munoz, R., Stampini, M. & Williamson, A.A. 2017. *The effects of musical training on child development: A randomized trial of El Sistema in Venezuela*

The results of the research show that the programme increased the children's self-control and regulation and decreased behavioural problems. The effect was focused on subgroups of vulnerable children. Resources should be directed to children who are in most need (Aleman et al., 2017, 866).

19. Baker, G. 2014. *El Sistema, Orchestrating Venezuela's Youth*

Baker is one of the leading researchers of the El Sistema genre. Baker starts his work from an empty table with no presumptions about the El Sistema method. He discusses the traditional romanticizing myths of El Sistema. The good reputation of El Sistema is based on good PR work and short well-prepared visits to Venezuela. Baker (2014, 8) also uses the term 'cult', in which Abreu is portrayed as a saint who cannot be criticized in the narratives.

According to Baker, the piquancy of the SBOY (Simón Bolívar Youth Orchestra) derives from exotic people from an exotic country playing Shostakovich wildly and energetically. The interpretation is not, however, futuristic as it is built on strong

authority and group control and very traditional programme choices (Baker, 2014). El Sistema is a labour-intensive organization (Baker, 2014, 133). *“Abreu’s pragmatic philosophy prefers action to reflection”* (Baker, 2014, 142). Baker (2014) offers a constructive critique of El Sistema’s music educational philosophy: there is no orientation, no meta-level, only good-sounding melodies. The lack of music education: training pieces of music for performance is not the same as music education. His critique is captured in the following concepts, based on interviews (Baker, 2014): *“Not musicians but players; no learning but practising; the pupils become performers of certain musical compositions as technical masters, not artists”* (p. 145).

20. Baker, G. 2016. *Before you turn the page: Connecting the parallel worlds of El Sistema and critical research*

The title of the article calls for no further pages to be turned before the mistakes shown by critical research have been corrected. Critical research is not the same as negative research (Baker, 2016, 9). El Sistema is a trademark, a parent programme where problems should be taken into account; it should not be used merely as an idealized brand (Baker, 2016, 7, 53). The mere promotion of the programme itself is a form of social and cultural fascism, according to Baker.

21. Tunstall, T. 2012. *Changing Lives, Gustavo Dudamel, El Sistema, and the Transformative Power of Music*

Tunstall (2012) and Booth (2009) replicate the writings of the El Sistema website with no critical analysis (Baker, 2014, 14). The book is scientifically inadequate, yet as a chronicle with interviews and stories, it is one of the El Sistema field’s basic publications. Naïveté also has its own role.

22. Booth, E. 2009. *Thoughts on seeing El Sistema*

Booth is a music educator and El Sistema personality and the originator of the concept of ‘Teaching artistry’. The article is a laudatory description compiled after one weeklong visit to Venezuela. Compared to Baker, who stayed in Venezuela for a year and saw the reality quite differently, Booth’s article has no major impact. One interesting section of the article, ‘Challenges for Adapting El Sistema in the United States’, includes an educational discussion about transferring the El Sistema ideal to the USA. El Sistema USA leans strongly on the Venezuelan model, but is modern application as it is child-centred and beautiful (Booth, 2009, 82).

23. Booth, E. & Tunstall, T. 2014. *Five encounters with ‘El Sistema’ international: A Venezuelan marvel becomes a global movement*

The article provides an international comparative overview of El Sistema in 2013. The writers report encountering the wide spread of the El Sistema movement, its passionate commitment and congenial El Sistema colleagues all over the world. The article presents The White Hands Choir for hearing-impaired children (Booth et al., 2014, 7), who make music through hand movements with white gloves while another choir stands alongside singing aloud. Also, Majno (2012) mentions this choir along with other choirs with disabled performers seeing them as representing integration and inclusion at its best.

El Sistema of Japan highlights social development: They sought 'a pedagogy of joy,' and they believe they have found it in El Sistema, in Soma. This was significant especially in Fukushima where the children had lived through a natural disaster and human-made catastrophe. Japan has one of the highest rates of teenage suicide. There is considerable evidence of much higher stress among young (well-behaving) people in Japan compared to other countries worldwide. The country's problems regarding youth social skills and emotional well-being are similar to South Korea, where El Sistema is referred to as 'the talkative programme' (Booth et al., 2014, 76-79).

24. Majno, M. 2012. *From the model of El Sistema in Venezuela to current applications: Learning and integration through collective music education*

The article presents the continuities and contrasts of El Sistema across the decades and sketches its future directions and visions. The article presents a categorization of the system's different modulations. The models can be categorized as in-school and after-school programmes. The South American models are all close to the Venezuelan model (Manio, 2010, 58-59). The systematic categorization of European El Sistema models is: 1) pilot projects with close kinship to El Sistema, e.g. Big Noise and In Harmony. 2) National initiatives inspired by similar ideas, e.g. the German Jedem Kind. 3) Attempts at more concerted efforts to replicate the model on a systematic basis, e.g. Italian Sistema (Majno, 2012, 58-60).

25. Nemoy, L. & Gerry, D. 2015. *Adapting the El Sistema program to Canadian communities*

The research is descriptive and is based on four structured interviews of Canadian El Sistema programmes. The description is made on a general level. The results highlight the positive impact of the programme for the surrounding environment as a whole.

26. Allan, J., Moran, N., Duffy, C. & Loening, G. 2010. *Knowledge exchange with Sistema Scotland*

The article represents meta-level research of Scotland's El Sistema programme. It explores the interactions between researchers, the project itself and politics, and efforts to improve information exchange between these elements. The study consists of a series of four Learning Space meetings (Allan et al., 2010, 337).

Regarding knowledge exchange, some groups and individuals have more decision making power than others. All groups are motivated by different factors, which produce many different information contexts regarding Big Noise. Some groups' knowledge contexts have more impact in decision making than others (Allan et al., 2010, 325).

27. Rimmer, M. 2018. *Harmony or Discord? Understanding children's valuations of a Sistema-inspired initiative*

The article criticizes earlier El Sistema studies which do not address the children's own experiences. The previously presented Big Noise psychosocial research, in contrast, succeed in this rather well, according to Rimmer. The child-based point of view is not represented in the articles under study. The voices of the children are not heard except in two non-relevant contexts (Rimmer, 2018, 44). The article calls for change.

Considerable amounts of research about school music education have been published that do not respect children's interests; this raises the need to explore children's experiences in this field.

28. Hsu, T. 2017. *El Sistema USA: An exploratory study of the pedagogical approaches in beginning violin classes*

This dissertation explores the incoherence of El Sistema USA's violin pedagogy, especially concerning beginners. The author proposes peer teaching as a solution, as it already belongs to the toolkit of El Sistema. This requires good preparation by a professional teacher. The CATS-in method would also be useful (Hsu, 2017, 1, 12).

29. Uy, M.S. 2012. *Venezuela's National Music Education Program El Sistema: It's interactions with society and its participants' engagement in praxis*

The article contains a lot of practical descriptions. The writer spent five months in Venezuela, and his notions are quite similar to those described by Baker (2014). The method is based on the amount of work and repetition without any sense of individuality. You are a part of a machine and the programme does not target low-income students or families (Uy, 2012, 18-19). According to the research, the sociological research of El Sistema should concern questions of social inclusion and questions of how music could work in changing class, cultural, political and geographical differences towards greater social harmony and action (Uy, 2012, 20).

30. Lopez, J.T., Boia, P.S., Veloso, A.L. & Caldas, M. 2018. *Orchestra and life: Youth paths in the 'Orquestra Geração'*

This Portuguese article is based on a chapter in an English language book. El Sistema programmes are extensively implemented in Portugal. The authors aim to equally address both negative and positive experiences and reasons for satisfaction or criticism (Lopez et al., 2018, 167). As in earlier articles presented in this overview (Uy, 2012; Baker, 2014), Lopez and his colleagues also refer to the large amount of work involved in El Sistema actions, but in a slightly different light. They do not believe in miracles through playing music, rather that the transformations that take place come through socio-musical practices, instrument lessons, practice and concerts, which are organized through hard work and explicitly verbalized. The dominant discourse also plays a dominant role in setting the targets for the programme as a whole. When they are clearly defined, it is easier to head towards them (Lopez et al., 2018, 230).

31. Edwards, J. 2011. *A music and health perspective on music's perceived "goodness"*

This article focuses on the social and professional use of music from the perspective of music's health impacts. Examples of communal music projects include, in addition to El Sistema, the Choir of Hard Knocks (Australia) and the Montreal Homeless Choir (Edwards, 2011, 96). These are examples of how practical music making joins people together and creates possibilities that are not necessarily as easily achievable through other collective aims or traditional ways of helping people (Edwards, 2011, 96).

It is also interesting to note the versatile changes that these kinds of projects can bring about in participants (also audience's) who can use the experience in many ways as

entertainment, distraction or as a way of promoting and experiencing hope and new possibilities (Edwards, 2011, 96). It is not clear what spiritual poorness means or if it is caused by social poorness, or how Western classical music might work as an antidote to this kind of shortfall (Edwards, 2011, 96).

32. Ramnarine, T. 2011. *The orchestration of civil society: Community and conscience in symphony orchestras*

This article calls for the same concrete impacts as the previous study. It includes in depth exploration of the social and sociological tasks and achievements of symphony orchestras. According to Ramnarine, orchestras nowadays recognize more than ever the opportunities they have to work as communal, consciously active members of society. El Sistema and El Sistema Big Noise are mentioned as examples of this. How can orchestras combat poverty? How can a musical experience change social conditions? The key factors affecting in this are the state, market and civil society activism. (Ramnarine, 2011).

33. Spruce, G. 2017. *The power of discourse: Reclaiming social justice from and for music education*

The article analyses the paradigms of rightness – the state of being morally correct - in music education in connection with El Sistema. It discusses the relation between material and immaterial poverty. The author states that in its own discourse El Sistema tends to view economic deprivation and cultural deprivation as synonymous (Spruce, 2017, 726). An interesting comparison is drawn with religious salvationism: the teacher is like a missionary. Through music, life changes (Spruce, 2017, 725). El Sistema offers the solution through feelings of superiority and the El Sistemas of the UK standardize their participants as a condition for participation (Spruce, 2017, 727).

34. Nomi, D. 2015. *Music and the myth of universality: Sounding human rights and capabilities*

Nomi listed three opportunities to use music in support of human rights: Music therapy for traumas caused by war and being a refugee. Proper prioritizing would easily free funds for this end (Nomi, 2015, 178). Music may also have significance in human rights work as a non-judicial mechanism fostering justice and public morale (Nomi, 2015, 179). The third use of music in support of human rights is through achieving certain community and societal objectives, such as those of El Sistema.

The article also mentions El Sistema in Baker's (2014) research and the general critique against the method: El Sistema has been criticized for its narrow top-down benefits and tight discipline instead of helping people living in poverty by building creative and critical thinking skills.

35. Dyck, R. 2015. *Youth education for social responsibility*

The essay speculates about the forms of social responsibility and their impacts. The developmental right approach is considered more realistic than typical help in the form of food or money, as charity seldom causes structural change (Dyck, 2015, 6). The article lists a number of long-standing models, and sees the publicly funded Venezuelan El Sistema method as the best of these (Dyck, 2015, 6).

36. Susić, B.B. 2017. *Music education for every child – ideal or reality?*

The positive effects of music on child development have been known since at least the 15th century. Despite this knowledge, music education has been long neglected in many countries such as the USA. Today the situation is improving slightly (Susić, 2017, 85-86). El Sistema is described in brief along with some other music educational systems. The support of the Venezuelan Ministry of Health offers an advantage compared to other systems (Susić, 2017, 85).

37. Lesniak, M. 2013. *Things to remember about El Sistema: A response to “El Sistema – a perspective for North American music educators” by Tricia Tunstall*

The writer sees the significance of El Sistema USA as a part of a bigger debate. There is a clear growing need for communal young people’s orchestra programmes across the USA, especially in underserved low socioeconomic communities. With proper strategic planning, programmes inspired by El Sistema could easily help meet the needs of these many communities. Collaboration and planning will help current music organizations and programmes achieve this aim in a productive and united manner (Lesniak, 2012, 74).

38. Cortese, P.A. 2019. *Changing social perspectives teaching artists and transformative learning in an El Sistema-inspired after-school music program*

This case study observes the efficacy of the programme in its task of preventing poverty and social inequality. Education is an essential tool, or weapon, in the fight for social equality, and music education can be a highly effective part of that toolkit (Cortese, 2019, 25). Music programmes inspired by El Sistema have spread worldwide, but the quality of education that they offer is often lacking, as mentioned by Majnok (2012). This research focused on three teacher-artists’ experiences to determine whether they see changes in social perspectives in the El Sistema-inspired learning environment and how they are changing. The research revealed that the teachers did experience such changes. All three teacher-artists were conscious of broadening societal perspectives and described cognitive, affective and behavioural experiences that increased their goal-orientation in the classroom. The results can be used in educating current and future teacher-artists in the El Sistema field.

39. Hollinger, D.M. 2006. *Instrument of social reform: A case study of the Venezuelan system of youth orchestras*

The main finding of this dissertation was that in orchestras where the musicians came from the lowest socio-economic groups, improved self-efficacy was brought about by the orchestral work. This is an interesting finding regarding quality measurement of the El Sistema system, although the author also found significant shortcomings.

40. Shoemaker, A.H. 2012. *The pedagogy of becoming: Identity formation through the Baltimore Symphony Orchestra's OrchKids and Venezuela's El Sistema*

This research focused on the social music education programmes OrchKids and El Sistema, which both aim at improving their participants’ and their families’ life

circumstances by offering them a strong sense of identity and belonging to the community. Whereas El Sistema focusses exclusively on classical music, OrchKids more widely explores other musical styles. Both programmes teach children responsibility for surrounding communities, such as neighbouring countries, and for their orchestra, and they also develop a feeling of belonging to a wide international music community. The writer raises an interesting point: in the USA the teachers often represent a different social class to the pupils as they come from a higher socio-economic background. In the Venezuelan El Sistema, teachers and pupils represent the same social class (Shoemaker, 2012, 86).

41. Powell, B., Smith, G.D. & D'Amore, A. 2017. *Challenging symbolic violence and hegemony in music education through contemporary pedagogical approaches*

According to Powell and colleagues, El Sistema and its various applications (in the UK) can be understood as a middleclass educational instrument for developing the working class as the system uses as its primary tool classical music, which is normally associated with upper social classes. El Sistema can be seen as a system that underlines social class differences. In Baker's (2014) view, Venezuelan parents see classical music as a route out of poverty. In Europe, the reasons for choosing classical music in El Sistema are quite different.

42. Bergman, Å., Lindgren, M. & Saether, E. 2016. *Struggling for integration: Universalist and separatist discourses within El Sistema Sweden*

The central concepts of this discourse analysis are social class differences, as in the earlier articles. Its perspectives are, however, different: integration, separation and post colonialism. The central question of the article is: How are ideas about integration socially constructed within the Swedish El Sistema programme? The Swedish El Sistema does not target only the poor, marginalized or immigrants, but is instead aimed at everyone in order to achieve genuine integration (Bergman et al., 2017, 365).

When researching El Sistema, it is important to explore power relations and how pupil identity is defined and reproduced culturally in the Swedish school environment (Bergman et al. 2017, 367). Does the ethnic background define similarity or dissimilarity? If the principle of equal respect is understood to require that we treat people equally without taking into account their differences, this can blind us to existing hegemonies. (Bergman et al., 2017, 370-373).

43. Gustavsson, H.O. & Ehrlin, A. 2018. *Music pedagogy as an aid to integration? El Sistema-inspired music activity in two Swedish preschools*

The research explores the conceptions and consciousness of workers of two preschool-level Swedish El Sistema programmes. The research reveals the workers' relatively limited knowledge of El Sistema's origins and content (Gustavsson et al., 2018, 195). El Sistema was introduced in Sweden in 2010 in Gothenburg and is currently promoted as an inspirational model in several municipalities. El Sistema is seen in Sweden as a tool for integration of immigrant parents and children into Swedish society. El Sistema Sweden uses music education to combat alienation (Gustavsson et al., 2018, 184-187).

According to the authors, it is difficult to avoid ethnocentric attitudes due to the norms of Swedish society and the focus of El Sistema on Swedish folk music (Gustavsson et al., 2018, 200). The interviews show that the teachers have noticed linguistic development among the El Sistema participants. The authors also explore the differences between the concepts of assimilation and integration, and conclude that Swedish El Sistema fosters inclusion (Gustavsson et al., 2016, 197-202).

44. Kuuse, A-K. 2018. *'We will fight Goliath': Negotiation of space for musical agency in children's music education*

The research explores El Sistema's dualistic task as a qualitative musical product aimed at various social goals. Kuuse views the programme teachers as acting also as social workers, with the provision of structural space, opportunities to influence, and discipline clearly associated with carrying out the musical task. According to Kuuse, the tasks of music teaching and social work do not self-evidently correlate with each other (Kuuse, 2018, 152-153).

45. Simpson Steele, J. 2017. *El Sistema fundamentals in practice: An examination of one public elementary school partnership in the US*

The study examined the Hawaiian El Sistema after-school programme, held two hours a day, four days a week.

The study found that teacher-artists were frustrated by the school teachers' attitudes toward pursuing music as a hobby. Academic subjects always came first when allocating school premises. Music was also seen as taking other resources away from the pupils and from academic subjects, even though the benefits of social music education were evident (Simpson Steele, 2017, 363-365).

46. Levitas, R. 2010. *In eine bess're Welt entrückt: Reflections on music and utopia*

The article sees music as offering its participants a path to a 'better world'. According to Levitas, music has potential for enormous individual and social impact; the key lies in exploring how this power can be used. El Sistema and especially its applications in the UK are a concrete example of this (Levitas, 2010, 227-228).

Summary

The history of the Venezuelan El Sistema programme shows that orchestral activities did not originate with Abreu or emerge from a void. Abreu's rhetoric seems to irritate some researchers. The origins of El Sistema are also revealed by the vocabulary used when its activities began. The original terms used to describe its aims relate more to musical than social goals. Finally, El Sistema formed a large international network of social music education. Compared, for example, to communism, El Sistema is a positive socialistic idea that does not work only for human matters. Programmes since innovated based on El Sistema can be even more beneficial than replications of the original programme (Baker, 2014, 320). Some international El Sistema applications replicate the model exactly, and do not explore the children's reactions (Rimmer, 2018). The critique against Venezuelan El Sistema cannot be applied to all applications in other countries. El Sistema was not originally unchangeable (Baker, 2014, 138; Tunstall,

2012). For example, whereas the Venezuelan El Sistema aims generally at preventing poverty, the Swedish programme focuses on solving segregation problems in the capital area of Sweden (Bergman et al., 2017, 365).

According to brain research, El Sistema activities, especially orchestral work, provide optimal training for brain development. According to the research, the differences do not show in behavioural stage. Clinical evidence for this is only minimal. (Sachs et al., 2017). In addition, while orchestral musicians typically play from written music sheets, learning by heart is suggested to be even more beneficial for brain health and performance

Causal connections have not been well established regarding, for example, academic or psychosocial effects. Some researchers have explored children's achievements between those pursuing music as a hobby and those not, but have not been able to find a causal dependence (Aleman et al., 2017, 865). In measurements of cortical thickness, the results have been weak; nevertheless, in interview, brain researchers often raised the importance of after-school music programmes for brain health. They also wished for more El Sistema programmes to be founded in the USA (f.e. Aleman et al., 2017, 1159).

José Antonio Abreu wrote: "From the minute a child is taught how to play an instrument, he is no longer poor. He becomes a child in progress, who will become a citizen" (Tunstall, 2012, XII). A strong personal identity and sense of belonging to a community are important aspects of what Abreu refers to as mental richness (Shoemaker, 2012).

The benefits of music education derive from a range of factors, such as the physical circumstances, the planning of the programme's contents, the qualities of the working staff, the quality of the participants' relationships, and the performances and their organization (Harkins et al., 2016, 35; Steele, 2017, 363-365). Baker (2014, 135) highlights the intense level of practice required by the SBYO. The school cultures of different countries might also be mirrored in the ways El Sistema orchestras and choirs operate. How is it done in Venezuela? How much do children practise in other contexts compared to El Sistema? (Steele, 2017, 363-365). How much do children practise in countries where classical music does not have as high status as in Venezuela?

The role of the teacher is, naturally, also crucial. If the teacher is good, everything else follows. However, being a talented musician does not necessarily mean you are a talented teacher. Support for less experienced teachers can help children achieve better outcomes, not only in music education, but also in other disciplines (Hedemann & Frazier, 2017, 758). Introducing teachers to the goals of the programme is essential; otherwise they will follow their own vision. Our analysis of the research results shows that preschool teachers and music teachers, for example in Sweden, have a rather low level of knowledge about the origins of El Sistema and its contents (Gustavsson & Ehrlin, 2018, 195).

Teacher awareness of a pupil's musical hobby outside school can result in higher student evaluation (Hille & Schupp, 2015, 57-58). Similarly, several studies have shown that good social skills can also result in better student evaluation.

Hsu (2017, 12) has suggested in his exploration of good pedagogical practices that peer teaching should be introduced as standard practice. In the light of novel brain research, the mirror cell theory could explain the efficiency of this method: a child learns best

from someone similar to themselves, because the brain's mirror cells mirror the activities of the other, resulting in imitative learning.

There is a need to move away from Western musical aesthetics. Given that study after study shows that school music education is not synchronized with children's interests, we should ask why the children's experiences and reactions are not raising interest in the research community (Rimmer, 2017, 45).

As Baker underlines, to achieve all of the benefits of music education, well-organized machinery is needed together with high quality objective research to develop it in the right direction. Qualitative as well as quantitative research is needed in order to understand the phenomenon and open it up to decision makers.

Music in itself does not do anything; what matters is how it is used. We should also ask whether all music genres, including folk music, are available to all. Pedroza (2015, 86) challenges local El Sistema programmes to use local musical instruments and popular musical styles. This is already often done in different countries and different programmes. Bergman and his colleagues (2017) explore in their article the relationship between programme selection and dominance. Gustavsson and Ehrling (2018) consider the effect of the use of Swedish folk songs in Swedish El Sistema applications. Programme planning is an interesting area of future research, including the context and educational philosophies behind the planning.

El Sistema and its applications enable hidden talents to be brought to light that would never be discovered if formal music institutions had sole precedence. There is a clear and profound need to develop programmes that informally draw young people to freely engage in music, to explore their creative potential, and to excel.

References

- Aleman, X., Duryea, S., Guerra N.G., McEvan P.J., Munoz, R., Stampini, M. & Williamson, A.A. (2017). The effects of musical training on child development: A Randomized Trial of El Sistema in Venezuela. *Prevention Science*, 18(7), 865-878.
- Allan, J., Moran, N., Duffy, C. & Loening, G. (2010). Knowledge exchange with Sistema Scotland. *Journal of Education Policy*, 25(3), 335-347.
- Baker, G. (2014). *El Sistema, Orchestrating Venezuela's Youth*. Oxford: University Press.
- Baker, G. (2016). Before you turn the page: Connecting the parallel worlds of El Sistema and critical research. *Revista Internacional de Educación Musical*, 4, 51-56.
- Baker, G. (2016). Citizens or subjects? El Sistema in critical perspective. In D.J. Elliott, M. Silverman, & W. Bowman (Eds.), *Artistic Citizenship. Artistry, Social Responsibility, and Ethical Praxis* (pp. 318-325). Oxford: University Press.
- Baker, G. (2018). El Sistema, 'The Venezuelan Music Miracle': The construction of a global myth. *Latin American Music Review*, 39(2), 160-193.
- Baker, G. & Frega, A.L. (2018). 'Producing musicians like sausages': New perspectives on the history and historiography of Venezuela's El Sistema. *Music Education Research*, 20(4), 502-516.

- Bergman, Å. & Lindgren, M. (2014). Social change through Babumba and Beethoven - musical educational ideals of El Sistema. *Swedish Journal of Music Research*, 96(2), 43-58.
- Bergman, Å., Lindgren, M. & Sæther, E. (2016). Struggling for integration: Universalist and separatist discourses within El Sistema Sweden. *Music Education Research*, 18(4), 364-375.
- Booth, E. (2009). Thoughts on seeing El Sistema. *Teaching Artist Journal*, 7(2), 75-84.
- Booth, E. (2011). El Sistema's open secrets. *Teaching Artist Journal*, 9(1), 16-25.
- Booth, E. & Tunstall, T. (2014). Five encounters with 'El Sistema' international: A Venezuelan marvel becomes a global movement. *Teaching Artist Journal*, 12(2), 69-81.
- Carlson, A. (2016). The story of Carora: The origins of El Sistema. *International Journal of Music Education*, 34(1), 64-73.
- Cohen, L., Manion, L. & Morison, K. (2011). *Research Methods in Education*. 7th edition. New York-London: Routledge.
- Cortese, P.A. (2019). Changing social perspectives teaching artists and transformative learning in an El Sistema-inspired after-school music program. *Texas Christian University. ProQuest Dissertations Publishing*.
- Driscoll, F.P. (2013). Every good boy deserves fun. *Opera News*, 78(2), 4.
- Dyck, R. (2015). Youth education for social responsibility. *Systems Research and Behavioral Science*, 32(2), 168-174.
- Edwards, J. (2011). A music and health perspective on music's perceived 'goodness'. *Nordic Journal of Music Therapy*, 20(1), 90-101.
- Elliott, D.J. & Silverman, M. (2015). *Music Matters. A philosophy of music education*. Oxford: University Press.
- Glass, G.V., McGaw, B. & Smith, M.L. (1981). *Meta-analysis in Social Research*. Newbury Park: Sage Publications.
- Gustavsson, H-O. & Ehrlin, A. (2018). Music pedagogy as an aid to integration? El Sistema-inspired music activity in two Swedish preschools. *Early Child Development and Care*, 188(2), 183-194.
- Habibi, A., Rael Cahn, B., Damasio, A. & Damasio, H. (2016). Neural correlates of accelerated auditory processing in children engaged in music training. *Developmental Cognitive Neuroscience*, 21, 1-14.
- Harkins, C., Garnham, L., Campbell, A. & Tannahill, C. (2016). Hitting the right note for child and adolescent mental and emotional wellbeing: A formative qualitative evaluation of Sistema Scotland's 'Big Noise' orchestral programme. *Journal of Public Mental Health*, 15(1), 25-36.
- Heagy, L. (2018). *Instrumental Music and Reading Achievement of First Graders*. Walden University, ProQuest Dissertations Publishing.
- Hedemann, E.R. & Frazier, S.L. (2017). Leveraging after-school programs to minimize risks for internalizing symptoms among urban youth: Weaving together music education

- and social development. *Administration and Policy in Mental Health and Mental Health Services Research*, 44(5), 756-770.
- Hille, A. & Schupp, J. (2015). How learning a musical instrument affects the development of skills. *Economics of Education Review*, 44(2014), 56-82.
- Hollinger, D.M. (2006). *Instrument of Social Reform: A case study of the Venezuelan system of youth orchestras*. Arizona State University. ProQuest Information and Learning Company.
- Hsu, T. (2017). *El Sistema USA: An explanatory study of the pedagogical approaches in beginning violin classes*. University of Iowa, Pro Quest Dissertation Publishing.
- Hudziak, J. J., Albaugh, M.D., Ducharme, S., Karama, S., Spottswood, M., Crehan, E., Evans, A.C. & Botteron, K.N. (2016). Cortical thickness maturation and duration of music training: Health-promoting activities shape brain development. *Journal of the American Academy of Child & Adolescent Psychiatry*, 53(11), 1153-1160.
- Krupp-Schleußner, V. & Lehmann-Wermser, A. (2018). An instrument for every child: A study on long-term effects of extended music education in German primary schools. *Music Education Research*, 20(1), 44-58.
- Kurki, L. (2000). *Sosiokulttuurinen innostaminen [Socio-cultural Encouraging]*. Tampere: Vastapaino (in Finnish).
- Kuuse, A.-K. (2018). 'We will fight Goliath': Negotiation of space for musical agency in children's music education. *Research Studies in Music Education*, 40(2), 140-156.
- Lesniak, M. (2012). El Sistema and American music education. *Music Educators Journal*, 99(2), 63-66.
- Lesniak, M. (2013). Things to remember about El Sistema: A response to "El Sistema - a perspective for North American music educators" by Tricia Tunstall. *Music Educators Journal*, 100(1), 72-74.
- Levitas, R. (2010). In eine bess're Welt entrückt: Reflections on music and utopia. *Utopian Studies*, 21(2), 215-231.
- Lopez, J.T., Boia, P.S., Veloso, A.L. & Caldas, M. (2018). Orchestra and life: Youth paths in the 'Orquestra Geração'. In G. Mota, & J.T. Lopes (Eds.), *Growing While Playing in Orquestra Geração Contributions towards Understanding the Relationship between Music and Social Inclusion* (pp. 159-233). CIPEM and ISFLUP, University of Porto.
- Lorenzino, L. (2015). El Sistema in Canada: A recent history, Part 1. *Canadian Music Educator*, 56(4), 18-25.
- Lorenzino, L. & Smith, G. (2016). El Sistema in Canada: A recent history, Part 2 of 2. *Canadian Music Educator*, 58(1), 15-23.
- Metsämuuronen, J. (2006). *Tutkimuksen tekemisen perusteet ihmistieteissä [The Ethical Basis of Research in Human Sciences]*. Jyväskylä: Gummerus (in Finnish).
- Majno, M. (2012). From the model of El Sistema in Venezuela to current applications: Learning and integration through collective music education. *Annals of the New York Academic of Sciences*, 1252(1), 56-64.

- Mäkelä, M., Varonen, H. & Teperi, J. (1999). Systemoitu kirjallisuuskatsaus tiedon tiivistäjänä. [Systematic literature overview as compressor of data]. *Duodecim*, 112(21) (in Finnish).
- Morin, F. (2014). From Caracas to the Canadian Prairies: Executive summary of the pilot evaluation of an El-Sistema-Inspired After-School Orchestral Program. *Canadian Music Education*, 20-26.
- Nemoy, L. & Gerry, D. (2015). Adapting the El Sistema program to Canadian communities. *Canadian Music Education*, 56(3), 5-8.
- Nomi, D. (2015). Music and the myth of universality: Sounding human rights and capabilities. *Journal of Human Rights Practice*, 7(1), 1-17.
- Nowakowski, C. (2012). El Sistema-Inspired: The joy and goodness of striving towards excellence. *Canadian Music Educator/Musicien Educateur au Canada*, 54(2), 14-17.
- Osborne, M., McPherson, G., Faulkner, R., Davidson, J. & Barret, S. (2016). Exploring the academic and psychosocial impact of El Sistema-inspired music programs within two low socio-economic schools. *Music Education Research*, 18(2), 156-175.
- Pedroza, L. (2015). Of orchestras, mythos, and the idealization of symphonic practice: The Orquesta Sinfónica de Venezuela in the (collateral) history of El Sistema. *Latin American Music Review*. 36(1), 68-93.
- Powell, B., Smith, G.D. & D'Amore, A. (2017). Challenging symbolic violence and hegemony in music education through contemporary pedagogical approaches. *Education 3-13*, 45(6), 734-743.
- Quinn, M. (2013). Limits of the system - is too much expected of El Sistema? *The Strad. Chloe Cutts*, 24.10.2013.
- Ramnarine, T. (2011). The orchestration of civil society: Community and conscience in symphony orchestras. *Ethnomusicology Forum*, 20(3), 327-351.
- Rimmer, M. (2018). Harmony or Discord? Understanding children's valuations of a sistema-inspired initiative. *British Journal of Music Education*, 35(1), 43-55.
- Roy, M.M., Devroop, K. & Getz, L. (2014). Improvement in South African students' outlook due to music involvement. *Music Education Research*, 17(4), 465-479.
- Sachs, M., Kaplan, J., Der Sarkissian, A. & Habibi, A. (2017). Increased engagement of the cognitive control network associated with music training in children during an fMRI Stroop task. *Plos One*, 12(10), 1-29.
- Shoemaker, A.H. (2012). *The Pedagogy of Becoming: Identity formation through the Baltimore Symphony Orchestra's OrchKids and Venezuela's El Sistema*. The University of North Carolina at Greensboro, ProQuest Dissertations Publishing.
- Simpson Steele, J. (2017). El Sistema fundamentals in practice: An examination of one public elementary school partnership in the US. *International Journal of Music Education*, 35(3), 357-368.
- Slevin, M. & Slevin, P. (2013). Psychoanalysis and El Sistema: Human development through music. *International Journal of Applied Psychoanalytic Studies*, 10(2), 132-140.

- Spruce, G. (2017). The power of discourse: Reclaiming social justice from and for music education. *Education 3-13*, 45(6), 720-733.
- Strother, E. (2017). Political economy and global arts for social change: A comparative analysis of youth orchestras in Venezuela and Chile. *Arts Education Policy Review*, 120(1), 1-25.
- Susić, B.B. (2017). Music education for every child – ideal or reality? *Journal of Elementary Education*, 10(1), 85-97.
- Sæther, E. (2017). Under the surface - reflections on the symbiosis between ethnomusicology and music education. *Puls - Journal for Ethnomusicology and Ethnochoreology*, 2(1), 11-23.
- Thomas, G. (2009). *How to Do Your Research Project: A guide for students in education and applied social sciences*. 2nd edition. Sage Publication.
- Tunstall, T. (2013). Another perspective: El Sistema - a perspective for North American music educators. *Music Educators Journal*, 100(1), 69-71.
- Tunstall, T. (2012). *Changing Lives, Gustavo Dudamel, El Sistema, and the Transformative Power of Music*. New York, London: W.W. Norton & Company Inc.
- Uy, M.S. (2012). Venezuela's National Music Education Program El Sistema: Its interactions with society and its participants' engagement in praxis. *Music and Arts in Action*, 4(1), 5-21.

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Appendix. Brief description of articles identified

Serial number	Name of publication	Research method	Research result	Publisher, JUFO classification database
1.	Of Orchestras, Mythos, and the Idealization of Symphonic Practice: The Orquesta Sinfónica de Venezuela in the (Collateral) History of El Sistema, Pedroza L., 2015.	Investigative journalism	Truths behind the rhetoric: Abreu did not create IS alone out of nowhere. The IS is not all-powerful as a method.	Revista de Música Latinoamericana 1
2.	The Story of Carora: The Origins of El Sistema, Carlson A., 2016.	Qualitative research; oral history, interviews, historiography	Abreu collaborated tightly with other similar children's orchestras in 1970s	International Journal of Music Education/ Sage Journals 2
3.	Producing musicians like sausages: new perspectives on the history and historiography of Venezuela's El Sistema Baker G. & Frega A., 2018.	Document-based evaluation, comparative analysis	The beginning of critical research of El Sistema from 1997. And the lack of music education	Music Education Research 3
4.	Political economy and global arts for social change: A comparative analysis of youth orchestras in Venezuela and Chile, Strother E., 2017.	Comparative research	Political-economic context matters for social change	Arts Education Policy Review 1
5.	El Sistema in Canada: A Recent History, Part 1, Lorenzino L., 2015.	Report / History	Canada is a strong IS country. Each of its 23 orchestras work from their own starting points to offer optimal help	Canadian Music Educator
6.	El Sistema in Canada: A Recent History: Part 2 of 2, Smith G. & Lorenzino, L., 2016.	Report / History	Like all Sistema and Sistema-inspired programmes in operation in Canada, Ontario's 11 projects have each adapted Maestro Abreu's vision in order to best suit the needs of their individual communities (Conclusion).	Canadian Music Educator
7.	Increased engagement of the cognitive control network associated with music training in children during an fMRI Stroop task, Sachs M. et al., 2017.	Quantitative, comparative, follow-up. FMRI and several behavioural tasks, N=14, age average 8.67 years	Systematic extracurricular training, particularly music-based training, is associated with changes in the cognitive control network in the brain (even in the absence of changes in behavioural performance.)	PLOS One 1
8.	How learning a musical instrument affects the development of skills, Hille A. & Schupp J., 2015.	Quantitative, comparative, follow-up, survey.	Some types of skills might be improved through participation in extracurricular activities in general, while others are influenced particularly by music.	Economics of Education Review 1
9.	Neural correlates of accelerated auditory processing in children engaged in music training, Habibi A. et al., 2016.	Quantitative, 5-year longitudinal study; target group at beginning 6-7 years old, N=50	Music training may result in stimulus- specific brain changes in school-aged children. Connection to auditive and linguistic abilities	Developmental Cognitive Neuroscience 1
10.	Cortical Thickness Maturation and Duration of Music Training: Health-Promoting Activities Shape	Quantitative research, longitudinal design, MRI, IQ, and music training data	Playing a musical instrument was associated with more rapid cortical thickness maturation within areas	Journal of the American Academy of Child

	Brain Development, Hudziak J. et al., 2014.	N= 232 youths (334 scans) age 6-18	implicated in motor planning and coordination, visuospatial ability, and emotion and impulse regulation.	& Adolescent Psychiatry 2
11.	Instrumental Music and Reading Achievement of First Graders, Heagy L., 2018.	Quasi-experimental study Analysis of covariance N=76 First graders	Although the results of this study did not show a relationship between instrumental music and academic achievement, this study has implications for positive social change.	Walden University, ProQuest Dissertations Publishing
12.	Exploring the Academic and Psychosocial Impact of El Sistema-Inspired Music Programmes within Two Low Socio-Economic Schools, Osborne M. et al., 2016	Quantitative InCAS method (Interactive Computerized Assessment System) Comparative research, 2 IS participating groups before and after 12 months. 3-5 graders, N=92, Australia	Academic and psychosocial status of disadvantaged students may be improved through music learning opportunities	Music Education Research 3
13.	Hitting the right note for child and adolescent mental and emotional wellbeing: a formative qualitative evaluation of Sistema Scotland's 'Big Noise' orchestral programme, Harkins, C. et al., 2016.	Mixed methods, non-clinical short- to medium-term impacts Semi-structured interviews, observation, participant drawing exercise, participatory filmmaking	Big Noise programme enhances participant mental and emotional well-being in three ways: happiness and enjoyment, security, increased pride, confidence and self-esteem	Journal of Public Mental Health 1
14	Leveraging After-School Programmes to Minimize Risks for Internalizing Symptoms Among Urban Youth: Weaving Together Music Education and Social Development, Hedemann, E.R. & Frazier, S.L., 2017.	Mixed method Several quantitative tests, open questions, Observations N=61 youth	Results suggest promise of this model (Miami Music Program) for mental health promotion for urban youth.	Administration and Policy in Mental Health and Mental Health Services Research 1
15	Improvement in South African students' outlook due to music involvement, Roy, M.M. et al., 2014.	Mixed methods, follow-up and comparative research. N=44 and N=28 Several different quantitative tests and a qualitative survey	The music programme appears to have certain psychosocial benefits, improving aspects of attitude and outlook for participants in the band.	Music Education Research 3
16.	An instrument for every child: a study on long-term effects of extended music education in German primary schools, <u>Krupp-Schleußner, V. & Lehmann-Wermser, A.</u> , 2018.	Quantitative. 2013 and 2014 survey of n = 886 sixth and seventh graders in North Rhine-Westphalia and Hamburg with questionnaires. The same children were questioned twice in two measurements.	Music at home and children's attitude to music have a bigger impact to instrument learning and general participation than any other factors.	Music Education Research 3
17.	From Caracas to the Canadian Prairies: Executive Summary of the Pilot Evaluation of an El-Sistema-Inspired After-School Orchestral Program, Morin, F., 2014.	Mixed methods: Participants (n=70) in the study included four sub-groups: children (n=31), teachers (n=7), families (n=29), and administrators (n=3). Interviews, focus groups, field notes, and open-ended survey items and later thematically analysed using interpretive strategies. Survey.	The Canadian pilot is a robust after-school orchestral programme that is working effectively and providing initial indicators of doing what it is intended to do.	Canadian Music Educator
18.	The Effects of Musical Training on Child Development: a Randomized Trial of El Sistema in Venezuela, Aleman, X & co., 2017.	Real clinical research, quantitative, comparative research N=2914, age 6-14 16 different focuses 1.5 years	We find that the programme improved self-control and reduced behavioural difficulties, with the effects concentrated among subgroups of vulnerable children.	Prevention Science 1

19.	El Sistema, Orchestrating Venezuela's Youth, Baker, G., 2014.	Interviews, ethnography	Questioned the symphony orchestra and the whole El Sistema Venezuela as a progressive pedagogical tool and motor of social justice and that the programme prioritizes social over musical goals and promotes civic values.	Oxford, University Press.
20.	Before you turn the page: Connecting the parallel worlds of El Sistema and critical research, Baker, G., 2016.	Essay / description	The critical aspects of El Sistema must not be overlooked when developing the method. New critical research is needed.	Revista Internacional de Educación Musical
21.	Changing Lives, Gustavo Dudamel, El Sistema, and the Transformative Power of Music, Tunstall, T., 2012.	Narrative, chronicle, interviews, narratives	Arts education can indeed effect positive social change in the US and around the world.	W.W. Norton & Company Inc.
22.	Thoughts on Seeing El Sistema, Booth, E., 2009.	Descriptive report of a visit	This is God's work—whatever that means to you.	Teaching Artist Journal 1
23.	Five Encounters With 'El Sistema' International: A Venezuelan Marvel Becomes a Global Movement. Booth, E. & Tunstall, T., 2014.	Comparative look at the now global El Sistema community orchestra programme/movement. Five encounters.	The resulting energy and excitement are igniting in different ways, in different places, to produce the same worldwide guiding light, a light that can guide many out of the ravaging cycles of poverty on a path made of beauty.	The Teaching Artist Journal 1
24.	From the model of <i>El Sistema</i> in Venezuela to current applications: learning and integration through collective music education, Majno M. et al., 2012.	Description	How to control quality in a growing system. A systematic categorization of different El Sistema applications.	Annals of the New York Academy of Sciences 1
25.	Adapting the El Sistema program to Canadian communities. Nemoy, L. & Gerry, D.W., 2015.	Structured interviews, á 45 min.	The programme is successful at effecting social transformation because it affects the community as a whole, and it does so by giving the children who live there the opportunity to 'find their voice through music'.	Canadian Music Educator
26.	Knowledge exchange with Sistema Scotland, Allan, J. et al., 2010.	Series of four learning space meetings	Some groups and individuals have more power than others when it comes to decision-making in the Big Noise organization.	Journal of Education Policy 3
27.	Harmony or Discord? Understanding children's valuations of a Sistema-inspired initiative. Rimmer, M., 2018.	Interview survey: Children N=38 Parents N=20, Heads/teachers N=22 In Harmony managers/tutors N=12	Musical content should be closer connected to participants' own interests in order to succeed.	British Journal of Music Education 2
28.	El Sistema USA: An exploratory study of the pedagogical approaches in beginning violin classes, Hsu, T., 2017.	Data: - existing published literature - writer's first-hand experiences - teacher survey	A recognized lack of consistent pedagogy especially in stringed instrument teaching. Peer-teaching well prepared by a teacher could be offer this, or the CATS-in method could be the El Sistema pedagogy, which suits the original IS ideology.	ProQuest
29.	Venezuela's National Music Education Program El Sistema: It's Interactions	Ethnography, autoethnography, interviews	The best programmes are able to engage in a form of praxis, working within the	Music and Arts in Action 1

	with Society and its Participants' Engagement in Praxis Uy, M., 2012.		local and historical context of their situations whole also learning from the programmatic success of organizations like El Sistema.	
30.	Sociological portraits: Orchestral socialization, paths and experiences, Lopes, J.T., Boia, P.S., Veloso, A.L., Matilde Caldas, M., 2018.	Sociological portraits of 35 young Orquestra Geração participants.	Transformation arises from the fact that socio-musical practices in lessons, rehearsals and concert performances are framed, organized and disciplined according to certain models of organization, socio-musical values and goals that are made explicit verbally	CIPEM and ISFLUP, University of Porto
31.	A music and health perspective on music's perceived "goodness" Edwards, J. 2011.	Critical exploration Description	Wider discussion and exploration of music's concrete health-promoting impact is needed.	Nordic Journal of Music Therapy 2
32.	The Orchestration of Civil Society: Community and Conscience in Symphony Orchestras, Ramnarine, T., 2011.	The case studies discussed in this article	Symphony orchestras move away from serving only as metaphors of society to being socially-aware participants in orchestrations of civil society.	Ethnomusicology Forum 2
33.	The power of discourse: reclaiming social justice from and for music education, Spruce, G., 2017.	Discussion / essay	El Sistema in the UK standardizes participants as a condition for participation.	Education 3-13, International Journal of Primary, Elementary and Early Years Education 1
34.	Music and the Myth of Universality: Sounding Human Rights and Capabilities, Nomi, D., 2015.	Description / discussion	By combining a capabilities approach with ethnographic research, we are able to see music not as removed from or transcendent of culture and politics, but intimately tied up with it. IS as an example.	Journal of Human Rights Practice 1
35.	Youth Education for Social Responsibility, Dyck, R., 2015.	Discussion / essay	Structural changes, such as El Sistema, have a big impact, not momentary financial assistance.	Systems Research and Behavioural Science 1
36.	Music Education for Every Child – Ideal or Reality? Susić, B.B., 2017.	"Through a historical and theoretical overview of this idea, this paper examines the potential for its realization in contemporary educational practice."	"The Venezuelan music education program El Sistema, which promotes the humanistic idea of changing society through classical music education, stands out as a unique example of good practice."	Journal of Elementary Education
37.	Things to Remember about El Sistema A Response to 'El Sistema—A Perspective for North American Music Educators' by Tricia Tunstall, Lesniak, M., 2013.	Description	El Sistema is a good addition to the North American music education system.	Music Educators Journal
38.	Changing social perspectives: teaching artists and transformative learning in an El Sistema-inspired after-school music program, Cortese, P.A., 2019.	Multiple case study Mixed methods Three cases Doctoral dissertation	The study found that participants experienced a change in perspective on social issues while working in the learning environment.	ProQuest Dissertations Publishing
39.	Instrument of social reform: A case study of the Venezuelan system of youth orchestras, Hollinger, D.M., 2006.	Qualitative case study, Interviews, observations, and collection of artefacts. Ethnography, narrative, document research	Supports claims that participation in arts education has a positive effect on students, especially those who are from the lowest socio-	ProQuest Information and Learning Company

			economic strata or students who have trouble engaging in traditional education.	
40.	The pedagogy of becoming: Identity formation through the Baltimore Symphony Orchestra's OrchKids and Venezuela's El Sistema, Shoemaker, A.H., 2012.	Interviews, ethnography	Both programmes impact their students by giving them a strong sense of personal identity and of belonging to community. The children learn responsibility for the communities around them and develop a sense of belonging to a larger international music community.	Pro Quest Dissertations Publishing
41.	Challenging symbolic violence and hegemony in music education through contemporary pedagogical approaches, Powell, B. Smith, G.D. & D'Amore, A., 2017.	Discussion article	El Sistema and its applications in the UK can be understood as a middle class educational task or development of working class using classical music as a tool. El Sistema may be a system that underlines social class differences.	Education 3-13 1
42.	Struggling for integration: universalist and separatist discourses within El Sistema Sweden, Bergman, Å et al., 2016.	Discourse analysis	Underlining participants' differences or similarities? Rather so-called third stage.	Music Education Research 3
43.	Music pedagogy as an aid to integration? El Sistema-inspired music activity in two Swedish preschools, Gustavsson, H.O. & Ehrlin, A., 2016.	Semi-structured, qualitative, research interviews, 'conversational interviews', 4 preschool teachers, 4 music teachers	Preschool teachers and music teachers have relatively limited knowledge about El Sistema's origin and content. Assimilation promoted rather than integration, with Swedishness as a prerequisite for a social community.	Early Child Development and Care 1
44.	'We will fight Goliath': Negotiation of space for musical agency in children's music education, Kuuse, A-K., 2018.	Empiric, ethnographic research 3-month observation and recording in Gothenburg's El Sistema. Theoretical research	The dual claim of musical excellence and social transformation by El Sistema can be perceived as challenging. Correlation between music educational practices and social change cannot be taken for granted.	Research Studies in Music Education 2
45.	El Sistema fundamentals in practice: An examination of one public elementary school partnership in the US, Simpson Steele, J., 2017.	Qualitative case study: ethnographic observations and focus group interviews, 12 semi-structured focus groups and ethnographic notes from field observations totalling 27 observation hours	El Sistema has a great potential to influence young participants musically, personally, and socially, but may need the freedom to operate outside of the public school system to realize that full potential.	International Journal of Music Education 2
46.	In eine bess're Welt entrückt: Reflections on Music and Utopia, Levitas, R., 2011.	Essay	'In Harmony will be as much about building life skills, aspirations and self-esteem as it is about nurturing musical talent.'	Utopian Studies 1

CHILDREN COMPOSING IN GROUPS: COLLABORATIVE, COOPERATIVE OR COACTIVE LEARNING?

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Abstract

A common activity amongst many music teachers is to set a task for groups of children to work together to create and compose a piece of music on a theme either chosen by themselves, or by the teacher. Whilst group work has been shown to be effective in terms of enhancing children's learning, it also raises a number of problems and issues for discussion. The first issue relates to the fact that there is very little published research which has explored if or not children working within a group, follow a particular form of process, and we are not really aware of the types of learning which individual children within the group engage in during the group composition activity. Second, as with group learning in all subjects, the music teacher is subsequently faced with the problem of assessment of the compositional outcome; namely do they assess and grade the output from the whole group, or do they grade each individual. If the former, what is the use of a single grade to share between 5 or 6 students, and if the latter how does the teacher grade each individual contribution – especially if the types of learning taking place are unclear. This study explores eight groups of children working on a musical composition. In total, eight groups of children representing four schools were given a group composition task by their teacher. Video recordings were made of all eight groups and later subjected to thematic analysis in order to establish if, or not they followed a particular process and secondly, to try and identify the types of learning which occurred in each group. Contribution was explored from the idea of collaborative, cooperative and coactive learning.

Keywords: *compositional process, group learning, group assessment, learning styles*

Introduction

Previous work has highlighted the benefits to be gained from effective group work, (Pell et al., 2007; Tolmie et al., 2010; Kyndt et al., 2013), including providing children with the opportunity to share ideas, (Webb & Mastergeorge, 2003), to develop leadership

skills (Mercier, Higgins & Costa, 2014), to develop decision-making and negotiation skills, (Blatchford et al., 2006; Baines et al., 2007) and to develop their level of critical thinking (Fung, To & Leung, 2016). In addition, through the child-child interaction which can occur when working within an effective group, children appear able to improve their generic social skills (Baines et al., 2009; Blatchford et al., 2006); communication and discussion skills (Gillies, 2003, 2006), build up trust and respect (Galton & Hargreaves, 2009), and develop their planning and organisation skills (Baines, Blatchford, and Chowne, 2007; Veldman, et al., 2020).

However, merely placing children together in groups, does not always further their learning (Baines et al., 2008; Patterson, 2018), with numerous challenges needing to be overcome to ensure that group work is effective in terms of promoting childrens' development (Baines et al., 2015). Similarly, Miell and MacDonald (2000) also found that although children frequently talked with their friends within a group context, their conversations tended to consist mainly of off-task chat with the level of actual collaborative or cooperative group work being somewhat limited. Added to this, a number of other studies have highlighted how the impact of group work on aspects of pupil learning has also been found to be more beneficial in some subjects, than in others (Jin & Kim, 2018). As a result, teacher attitudes towards setting children to work in groups have also been found to be relatively negative with lack of control (Granstrom, 2006; Williams & Sheridan, 2010), increased levels of noise and increased levels of off-task behaviour being cited as the main problems of situating children in small groups to work on tasks (Baines et al., 2015). Further studies have also suggested that the decreasing use of group work in classrooms is due to the lack of knowledge which most teachers have in terms of designing, managing and assessing the group (Lotan, 2006, 2008); a phenomenon which is in stark contrast to rest of society which is requiring more and more collaboration in the workplace (Granstrom, 2006).

Parents, on the other hand, are also seen as holding negative views of their individual child being required to work in a group, and this is especially the case if they perceive their child as being 'gifted' (Saunders-Stewart et al., 2013). Many parents perceive their own child as being 'held back' by the 'less able' peers with whom they have been asked to work, and in subjects such as Maths or Science, children working together is often simply seen as 'cheating'. However, whilst working together in a group is often considered as dishonest in some subjects, working together in a group in music, is mainly seen as the only way to work. This was a concept that was well understood by pupils, who regarded music as the one subject in which you can work with your friends *legally* (Lamont et al., 2003). In other words, parents (and especially competitive parents) wish to see how their child is achieving in maths, science and their first language, for example, but have little or no concern as to how they perform individually in music. Thus, group work amongst pupils in music, which in reality is a mainly 'group activity', is typical in most schools. Yet, as Forslund Frykedal & Hammar Chiriack (2011), clearly state: "*The dilemma emerges as the knowledge is to be assessed and marked individually in a collaborative situation*" (p. 332).

The more usual approach to group assessment in music, certainly within the UK, is to provide two grades for the entire group; the first being for the musicality and accuracy of the task i.e. how well in a musical sense, did the group produce what was required of them. The second assessment is usually awarded for effort; enabling children who are less skilled musically to achieve as well as those who perhaps have additional

instrumental lessons outside of school hours. Group assessment is the process in which group members work together and receive one grade. The benefit of this approach relates to the fact that children develop social skills such as argument, debate, assertiveness, cooperation and increased confidence and social awareness (Meseke et al., 2009; Nafziger et al., 2011). What group assessment does not necessarily achieve is any measure of individual achievement, with a number of studies highlighting the fact that an assessed group score is seldom a reliable indicator or a child's individual score (Ewald, 2005). The debate over what should be assessed within a group composition (e.g. effort, musicality, achievement, contribution etc.) is interesting but it is also beyond the scope of this current paper. Our argument here is that the more teachers understand about the type of learning which can take place within a group as they compose together, the more able they are to construct an appropriate and accurate assessment framework.

The theoretical basis for requiring children to work in groups has often been based on a social constructivism idea (Vygotsky, 1978): namely that children develop meaning and learn by engaging with more knowledgeable peers, teachers, or others, and are therefore 'scaffolded' to a new level of thinking; which Vygotsky termed the zone of proximal development. If utilised well, group work enables children to gain a variety of skills through working together. However, it is not yet clear as to what exactly takes place when children work together and collaborate to create a piece of music, and there have been calls for further research into the precise processes involved in these typical composition activities (MacDonald & Miell, 2000). Therefore, any research which highlights or explains more accurately the precise nature of the processes taking place when children work together to compose will enable music teachers to develop more effective strategies and pupils to achieve far more of the potential skills and musical knowledge available through working collaboratively with others. Thus, this current paper will explore the process whereby children work together in a group to create a collaborative musical composition, and seek to identify the types of learning which take place within that process.

Cooperative, Collaborative or Coactive?

Certainly, in the English language and when discussing group work with teachers, these two terms are used synonymously. However, in this text we take a more detailed definition of the two terms. Collaborative learning takes place when a group of learners work together in order to achieve a task (Marjan & Seyed, 2011). Cooperative learning is perhaps best viewed as a more social tool in which a group of people help each other to achieve a task, or common goal; however, they may not achieve the same level of learning or contribute to the same degree; however, they cooperate to ensure the task is completed (Doymus, 2007; Burcin et al., 2012). Dillenbourg (1999) distinguished between cooperative and collaborative learning depending on how the various tasks in the group were arranged. If the tasks required to complete the common goal are distributed equally amongst the group; this was seen as a collaboration. In collaborative learning, the resulting knowledge and meaning coming out of the group task are constructed from the equal contribution of group members. The aim of collaborative learning is therefore the joint construction of knowledge and meaning (Chi & Wylie, 2014). On the other hand, cooperative learning requires only group members to fulfil their individual role to the final product without actually contributing anything to what

is learned. Thus, collaborative learning requires each group member to make a coordinated effort in order to solve the problem with others, whilst cooperation more specifically focuses on the accomplishment of an end product through the division of working hard. Therefore, when comparing collaborative and cooperative approaches, collaborative learning may also be said to include a higher level of problem-solving, whilst cooperative learning can be said to be the act of working together in order to accomplish a joint task.

Further studies into group learning (e.g. Williams, 2010) have further discussed the issue of what can be said to constitute a 'group'; in other words, how small can a group become and yet still enable collaborative work to take place. In this sense we accept, for example, that whilst two pupils working either together or individually cannot be classed as a 'group', nevertheless they are able to work together on a collaborative basis. Within this paper and to take note of this argument, we adopt and use the term 'co-active learning' (Shivaswamy & Thorsten, 2015) to denote situations in which sub sections of a group can appear to be working alone on an individual project but come together at some point to share ideas; they briefly collaborate with the effect of mutual, equal co-learning taking place.

Specifically, with regard to children working on a collaborative composition task (e.g. Seddon, 2006). A collaborative group will include discussion, and probably arguments about the form, the tempo, the instrumentation and possibly the beginning and ending of the piece. Within this group, two children may isolate themselves from the rest of the group and practice with an instrument. Briefly, the same two may come together and share an idea from which they both learn. They can then move apart and incorporate their newly acquired idea into their own individual contribution to the group (co-active learning). Meanwhile others in the group may be asked to hit their instrument loudly to begin a second stage in the composition. They work with the group to ensure the outcome, but have not contributed or necessarily learned anything musical but may have learned to work within a group (cooperative learning).

To summarise, although previous studies have investigated the ways in which children work together in groups, it is still unclear as whether or not children engage in a structured process when given the task of creating a musical composition within a group. In addition, when the group have actually created and performed their final composition, it is the responsibility of the teacher to then judge and assess the piece; should this be done according to contribution from each child, or on the learning that has taken place; with the additional question of what type of learning takes place within the group.

Thus, the current study had two main research questions:

- To what extent do children follow a specific process when composing in a group?
- What types of learning can be accomplished within a collaborative, compositional task?

Method and Procedure

10-11-year-old children were observed in four primary schools in London, UK. The age of the participants was selected in particular because this was suggested as being an optimal age for productive communication (MacDonald et al., 2002). A total of 39 participants (19 boys and 20 girls) across the four schools were involved. The activity required five or six participants in each of eight groups (two per school) to work together on creating a musical composition. Each group contained both boys and girls and all groups were arranged by the music teacher. The teacher in each school provided the title for the theme of the piece (e.g. 'Rain' or 'Space') and all groups in each school were allocated similar musical instruments including percussion and keyboards. Two sessions from each school was observed and although the sessions were planned individually, all music teachers followed a similar lesson structure consisting of a five minutes introduction for instruction and organisation into groups, 25 minutes was allocated for the group to carry out the activity, and 15 minutes was allowed for a performance of each group composition to the whole class and to receive feedback from the teacher.

Video recordings were made of each of the groups and the behaviours taking place within each of the groups were subsequently subjected to thematic analysis following standard qualitative procedures as set down in the model suggested by Braun and Clarke (Braun & Clarke, 2006, 2014; Clarke & Braun, 2017). Viewing of the video content enabled an initial event log to be created. This log simply listed all behaviours as they occurred chronologically. Secondly, descriptive terms of the children's behaviours were then created and transferred to summative data sheets. We then adopted an inductive, 'bottom up' approach in which our initial descriptive level of coding was systematically built up towards a more theoretical and interpretive level of understanding (Langridge, 2004). In this respect we carried out an initial 'horizontal' analysis which created four descriptive themes summarising the behaviours we observed (namely: experimentation, coordination, performance and appraising). Subsequently, these four horizontal themes were subjected to further reflection and a number of theoretical perspectives were identified producing a hierarchy of analysis (vertical). Our vertical analysis of the horizontal themes produced three further categories namely collaborative, cooperative and coactive; each being a descriptor of a specific learning type.

Subsequent comparison of the four behaviour categories alongside the chronological event log highlighted the fact that certain behaviours within each of the four categories tended to dominate a specific period of time within the compositional process. That is, similar behaviours appeared in all groups in a specific order. As such, we hereby argue that when children are placed in groups and given the task of creating a musical composition, their overall compositional process tends to progress according to a four stage, spiral process with each stage employing specific and discrete behaviours namely Stage 1: Experimentation, Stage 2: Coordination, Stage 3: Performance, and Stage 4: Appraising. This then leads to the piece being 'presented' to the class and teacher.

Behavioural Themes

Stage 1: Experimentation

In virtually all cases, children began the compositional process by sitting WITH their group but not interacting with it. Instead, the main focus was on experimenting with their instrument; experimenting with a range of sounds in order to decide which sound they wanted to play within the group, and they often spent a significant amount of the available time in this stage.

Stage 2: Coordination

Following on from this 'experimental stage', children then began to interact with each other mainly through talk but also occasionally demonstrating their chosen sound. However, the dominant activity in this stage of the process was talk with the group, discussing and arguing about the form and overall structure of the musical piece. Within our 4 groups, there was a tendency for boys to be more vocal and assume leadership positions, whilst in instances where a group produced a graphic score, this was a role almost totally assumed by a girl. Of particular note in this second stage is the fact that the overall concept of the piece, the form, the coordination of the different instruments was decided through talk and not through playing. In addition, children who did not involve themselves in any major way in the coordination of the piece, tended to withdraw and revert to stage one; to carry out further experimentation.

Stage 3: Performance

The third stage involved performance, or more realistically, a practice of the whole composition. Of note here is that in a number of cases, the individual who had assumed a leadership role in the coordination stage, did not necessarily take a leadership role in the musical stage.

Stage 4: Appraising

The fourth stage of the process involved an appraisal of the performance. Again, this stage was carried out mainly through talk and not through any form of musical activity. Discussions included suggestions of ways to improve, evaluations, criticism of self or other and arguments about the overall form of the piece. At this point, depending on the group dynamic it was possible for groups to return to any of the previous stages. In some instances, groups would begin to experiment as individuals again, whilst in others they would perform the piece again.

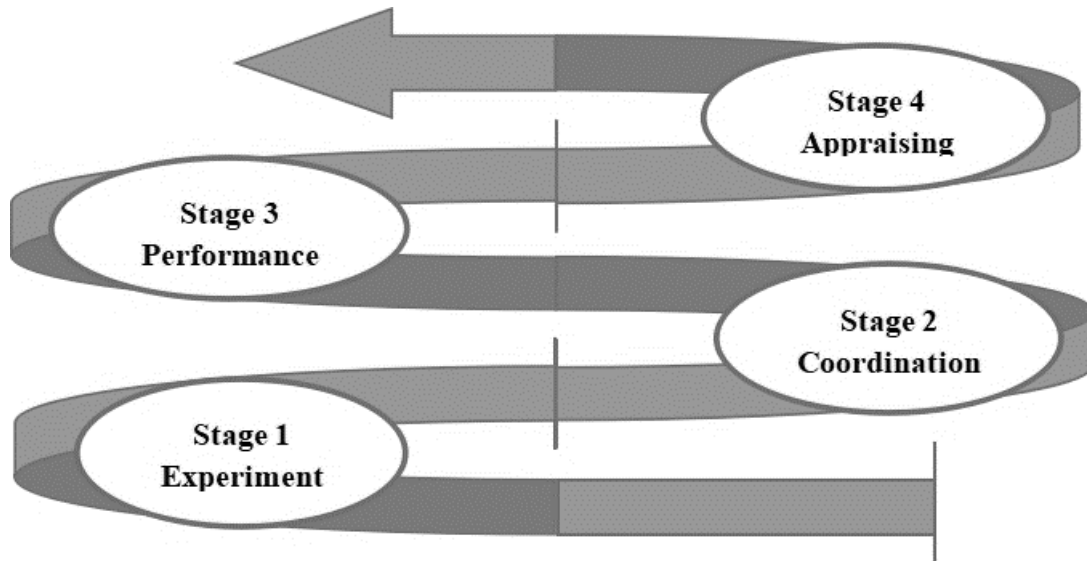


Figure 1: Spiral theory of the compositional process

Presentation

The final act in the process took place when the group composition was performed to the class and the teacher and the assessment took place, and the group received feedback. At this point, our detailed observations highlighted three main issues. First, the majority of the time allocated to creating the composition was taken up with talk, and not with musical activity. Second, the individual who tended to lead in the 'talk' did not necessarily also take the lead in the performance. This role was often seen to be taken over by one child who had been far less vocal during the time the piece was being composed. Third, whilst the overall work within the group tended to follow our proposed stage theory, there were instances in which children reverted to an earlier stage before progressing. For example, having performed and appraised the piece, some groups reverted to the experimental stage in order to carry out either further individual experimenting, or by opting out to work in pairs.

So, in this respect, in answer to our first research question, we argue that children in our particular study did tend to work towards their final composition with a set process with each stage of the process involving very specific and discrete behaviours. We argue that the model is better seen as a 'spiral' rather than a set stage theory in that whilst, for example, children did on occasions return to an earlier stage, they did so, on a higher level, building on the learning which had already taken place. However, what more can we say about the learning and the behaviours which took place within this group activity?

Cooperative, Collaborative or Coactive?

Our analysis of the video material enabled one further problematic issue to be identified, namely that frequently although two pupils were seen to be demonstrating similar behaviours, (e.g. creating a range of sounds on a drum), it was also apparent that the level of motivation, the intentionality of the behaviour and the ultimate outcome of the behaviour was in fact very different. In this respect, we argued that some children

could be said to be ‘collaborating’ whilst others could more accurately be described as ‘cooperating’.

A second analysis was thereby carried out representing an attempt to identify the similarities and differences between pupils who were collaborating and those who were cooperating. A suggested taxonomy of the different attitudes and behaviour of the children towards the group was created, i.e. an attempt was made to define precisely when a behaviour was collaborative, when it was coactive and if and when it became cooperative. A brief description of the representative behaviours which are indicative of collaborative, coactive and cooperative learning in each of the four stages is presented as follows:

Stage 1: Experiment

In this stage, children tended to work individually around choosing their own individual sound. They experimented with playing their instrument and explored the full range of sounds they could produce. Although on the surface level, the behaviours were similar. More subtle behaviours could be identified which indicated the type of learning taking place.

Table 1. Children’s collaborative, cooperative or coactive approach in the first stage

COLLABORATIVE LEARNING APPROACH	COOPERATIVE LEARNING APPROACH	COACTIVE LEARNING APPROACH
Experiment with wide range of sounds/rhythms	Random repeat playing of instrument	Experiment with wide range of sounds/rhythms
Focused practice to improve	Repetition – monotony – no variation in sound	Focused practice to improve
Concentrate on instrument and the task	Non-musical behaviour/focus elsewhere looking at other groups	Converse with or observe behaviour of another child
Purposeful and absorbed	Periods of doing nothing	Adopt their technique or develop joint technique
No engagement but learning taking place in isolation to support the group process	Isolated - still active	Assimilate the jointly developed behaviour

In Table 1, two children could both be demonstrating an identical behaviour, for example, they are both sitting apart from the group creating a variety of sounds on a small drum. However, the behaviour of the collaborative learning child is purposeful, and focused on making a significant contribution to the task. Their attention is on the group task. Evidence for this included – demonstrating their sound to group members, or checking or appraising how their sound will fit in with the group task. They might still be collaborating even though they are mostly working alone. On the other hand, the cooperative child continually repeats their initial identical behaviour but in an

unfocussed way. Interaction with other members of the group does not take place and the activity does not progress beyond the initial repetitive actions. When asked to do something, they comply and cooperate to get the task done. Attention is often on activity in other groups.

The understanding of the idea of coactive learning here though, is important. As described in Table 1, two children, for example, can be apart from the group and experimenting alone. Both can be collaborating by discovering the ideal sound for their individual contribution. In a brief interaction with another child, through either demonstrating to each other, discussing or arguing, they develop a new technique which they then assimilate into their own individual task although they go back to working alone. This is coactive learning and is important part of the process. On a number of occasions, we witnessed a child learning coactively but then to be asked by the teacher: *“Are you part of this group or not?”* Put bluntly, a significant learning experience was dismissed.

Stage 2: Coordination

In this second stage of the compositional process, children started interacting with other children in order to demonstrate and share their ideas, gained from the experimental stage, and build up further information. The level of contribution and involvement in the group was different between collaborative and cooperative approaches, as highlighted below:

Table 2. Children’s collaborative, cooperative or coactive approach in the second stage

COLLABORATIVE LEARNING APPROACH	COOPERATIVE LEARNING APPROACH	COACTIVE LEARNING APPROACH
Start interacting and making comments	Remains apart, no contribution to ideas	Continues to learn through observation, discussion with others
Suggesting, Arguing, Supporting	Listening and accepting their role as seen by others	Contributes but assimilates other ideas
Active engagement	Passive engagement	Co-active engagement
Strong opinion and high motivations	Limited energy and motivation to improve	Strong opinions but open minded

In this stage, the collaborative child increased his or her level of interaction and often an argument or confrontation took place in order to establish some level of agreement on an idea. Strong opinions, assertive behaviour and confrontation all appeared to be part of the collaborative process of negotiating ideas and opinions and collaborating towards a shared objective. In contrast the cooperative child tended to remain silent, was often distracted and contributed nothing to the final objective but did play/act as was directed. On the other hand, the coactive learner listened and contributed in equal measure. However, we would say the main difference though between the collaborative

learner and the coactive learner was that the collaborative learner tended to contribute to the task outcome by *negotiating* what they had learned (the sound they had developed), whereas the coactive child *assimilated* their contribution into the end task.

Stage 3: Performance

Following a series of behaviours involving interactions and trial and error with peers, children tested their ideas through performing the piece, ready for their presentation.

Table 3. Children's collaborative, cooperative and coactive approach in the third stage

COLLABORATIVE LEARNING APPROACH	COOPERATIVE LEARNING APPROACH	COACTIVE LEARNING APPROACH
Perform with conviction but disrupt if things are not seen as right	Perform their part but without conviction	Perform with attention; willing to moderate and adapt to keep the piece going
Sometimes change role for leader to follower	Lack of interest, motivation	Performance might involve a selection from what they have practiced – not just repeat of what they practiced
Good eye contact	Less or no eye contact	Equal eye contact and attention to all
Sometimes remove instrument from a cooperative group member to play themselves	Happy to give in to more dominant member	Flexible, tolerant and adaptive and constantly assimilating new ideas, behaviours and opinions

In this stage, we noted a difference between those children who were collaborating with high levels of motivation and those who were coactive. Whilst collaborative learners were focused on the process of mixing and coordinating the precise components of what individuals had developed and to ensure the task was completed; coactive children were still engaging in the performance as a further opportunity to learn. Collaborating children regarded the learning as being complete and the purpose of the performance was to ensure the piece was performed 'correctly', and to practice performing it correctly. As such, they often stopped the performance, or dropped out of the performance. In this respect, they ceased to cooperate. Coactive children however, regarded the performance as part of the learning experience. They were willing to be flexible and around issues which emerged. For example, if it was felt that their contribution did not fit well during the performance, they were able to listen and monitor the effect and change their behaviour (having learned) in subsequent repeats.

Stage 4: Appraising

In this stage, children engaged more in 'problem-solving': assessing, appraising and the revision of sounds and rhythms were demonstrated frequently. Compared to the

previous stage, the number of children's comments increased, and the level of the involvement of children was higher.

Table 4. Children's collaborative, cooperative and coactive approach in the fourth stage

COLLABORATIVE LEARNING APPROACH	COOPERATIVE LEARNING APPROACH	COACTIVE LEARNING APPROACH
Increased the number of comments	Silence	Tended to be quite but attentive
Give directions to others	Obedience	Gave suggestions to others
Negotiate within set parameters	Repeating sounds and rhythms ; no notable change from beginning of the process	Moderated, continued to take on new ideas and adaptive opinions according to discussion
Restrictive commitment to the task	Without opinion	Flexible commitment to the task

In this final stage, collaborative children tended to remain focused and motivated and interacted with the other group members in order to ensure the task was completed accordingly. However, it became clearer that the focus of their collaboration was on 'knitting together' more effectively what each individual had developed and contributed, and in this sense, it could be said they truly collaborated. They were indeed happy to consider new ways to coordinate and link aspects of the individual musical elements together with the aim of producing a good and effective end product. However, they were not usually quite so willing to change (to learn?) and incorporate what musical aspects could have been learned from the actual performance. Collaborators were not always willing to accept new learning which had taken place in others. For example, a common comment was along the lines of: *"That is not what you did before ..."* Often collaborative children expressed some form of frustration or annoyance at the end of the performance if all had not gone exactly as planned.

Cooperative children obeyed instructions and simply repeated their own individual musical pattern, performed with little or no motivation and seldom changed, developed or improved on their initial contribution. It was also notable that the few times when strongly, collaborating children became cooperative children by refusing to accept the learning which had taken place in others. Similarly, we noted some cooperative children become both collaborative and coactive as the leadership role moved from one relying on talk to one relying on musicality, or musical skill.

Coactive children can probably be best described as 'collaborators who cooperate' in that they continued to learn both musically, technically and socially throughout the entire compositional process.

Discussion and Conclusions

Our first research question asked if children tended to follow a specific process when composing in a group. We have argued here that following observations of a total of eight groups of children working on composing a similar piece of music, that a pattern can be discerned and subsequently posited as a spiral, stage theory, with each stage containing distinct sets of behaviours. Subsequently we argue that in answer to our second research question a number of learning types can be determined namely collaborative learning, cooperative learning and coactive learning. We have argued that what may initially appear to be similar, or identical behaviours exhibited by three different children can in fact be evidence of three different learning types with one child collaborating, one child cooperating and child coactively learning, with each type involving different learning processes.

We have specifically argued that the contribution made by individual children, and the types of learning taking place within the group are varied and frequently unseen by the teacher. In this respect some of the deeper, more effective leaning taking place can be not only curtailed, but negatively impacted. For example, in the situation where the coactively learning child was asked to become more a part of the group, this one statement carried with it a number of negative messages. First, it conveys the idea that there is a hierarchy of learning with the group in which the social learning, being social and acting social take priority. Second, it can convey the idea that learning along with others is the better thing to do, rather than reflecting on the learning which develops in the individual but arising out of what others have done or said.

Finally, we accept the limitations of this study in that it is based around a relatively small group of school children within a small geographical area. Not only were children located within the same geographical area, but it is also possible that children had all be taught to work in a similar way during group composition; hence the similar behaviours we observed in eight groups could be an artefact of the teaching style common within that group of teachers. What the study has tried to do however is suggest a process and taxonomy of behaviour which if explored further could give us a greater level of insight into the mechanism taking place within a group working together on a musical composition. Such an insight would certainly give us more of an understanding of the range of elements which should be assessed when taking into the contribution of individuals working within a group.

References

- Baines, E., Blatchford, P. & Chown, A. (2007). The effectiveness of collaborative group work in primary schools: Effects on science attainment. *British Educational Research Journal*, 33(5), 663–680. doi: 10.1080/01411920701582231
- Baines, E., Blatchford, P. & Kutnick, P. (2008). Pupil grouping for learning: Developing a social pedagogy of the classroom. In R.M. Gillies, A. Ashman, & J. Terwel (Eds.), *The Teacher's Role in Implementing Cooperative Learning in the Classroom* (pp. 56-72). New York: Springer.
- Baines, E., Blatchford, P. & Webster, R. (2015). The challenges of implementing group work in primary school classrooms and including pupils with special educational needs, *Education 3-13*, 43(1), 15-29. doi: 10.1080/03004279.2015.961689

- Baines, E., Rubie-Davies, C. & Blatchford, P. (2009). Improving pupil group work interaction and dialogue in primary classrooms: Results from a year-long intervention study. *Cambridge Journal of Education*, 39(1), 95–117. doi:10.1080/03057640802701960
- Blatchford, P., Baines, E., Rubie-Davies, C., Bassett, P. & Chowne, A. (2006). The effect of a new approach to group work on pupil-pupil and teacher-pupil interactions. *Journal of Educational Psychology*, 98(4), 750–765. doi:10.1037/0022-0663.98.4.750
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101.
- Braun, V. & Clarke, V. (2014). What can “thematic analysis” offer health and wellbeing researchers? *International Journal of Qualitative Studies on Health and Well-Being*, 9(1), 26152.
- Burcin, G., Sefa, D., Yasin, S. & Levent, A. (2012). The effects of learning together technique which is based on cooperative learning on students’ achievement in mathematics class. *Procedia Social and Behavioral Sciences*, 46, 3431–3434. doi: 10.1016/j.sbspro.2012.06.079
- Chi, M.T.H. & Wylie, R. (2014). The ICAP framework: Linking cognitive engagement to active learning outcomes. *Educational Psychologist*, 49(4), 219–243. doi:10.1080/00461520.2014.965823
- Clarke, V. & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology: Qualitative Positive Psychology*, 12(3), 297–298.
- Dillenbourg, P. (1999). What do you mean by ‘collaborative learning’? In P. Dillenbourg (Ed.), *Collaborative Learning*. Oxford, England: Elsevier.
- Doymus, K. (2007). Teaching chemical equilibrium with the Jigsaw technique. *Research Science Education*, 38, 249–260.
- Ewald, J.D. (2005). Language related episodes in an assessment context: A small group quiz. *The Canadian Modern Language Review*, 61(4), 565–586. doi: 10.3138/cmlr.61.4.565
- Forslund Frykedal, K. & Hammar Chiriac, E. (2011). Assessment of students’ learning when working in groups. *Educational Research*, 53(3), 331–345. doi:10.1080/00131881.2011.598661
- Fung, D.C., To, H. & Leung, K. (2016). The influence of collaborative group work on students’ development of critical thinking: The teacher’s role in facilitating group discussions. *Pedagogies*, 11(2), 146–166. doi:10.1080/1554480X.2016.1159965
- Galton, M. & Hargreaves, L. (2009). Group work: Still a neglected art? *Cambridge Journal of Education: Classroom Group Work*, 39(1), 1–6.
- Gillies, R.M. (2014). Cooperative learning: Developments in research. *International Journal of Educational Psychology*, 3(2), 125–140. doi.org/10.4471/ijep.2014.08.
- Gillies, R.M. (2006). Teachers’ and students’ verbal behaviours during cooperative and small-group learning. *British Journal of Educational Psychology*, 76(2), 271–287. doi: 10.1348/000709905X52337

- Gillies, R.M. (2003). The behaviors, interactions, and perceptions of junior high school students during small-group learning. *Journal of Educational Psychology*, 95(1), 137-147. doi:10.1037/0022-0663.95.1.137
- Granstrom, K. (2006). Group phenomena and classroom management in Sweden. In C.M. Evertson, & C.S. Weinstein (Eds.), *Hand Book of Classroom Management: Research, practice, and contemporary issues* (pp. 1141–1160). Mahwah: Lawrence Erlbaum Associates.
- Jin, Q. & Kim, M. (2018). Metacognitive regulation during elementary students' collaborative group work. *Interchange*, 49(2), 263-281.
- Kyndt, E., Raes, E., Lismont, B., Timmers, F., Cascallar, E. & Dochy, F. (2013). A metaanalysis of the effects of face-to-face cooperative learning. Do recent studies falsify or verify earlier findings? *Educational Research Review*, 10(2), 133-149. doi:10.1016/j.edurev.2013.02.002
- Lamont, A., Hargreaves, D.J., Marshall, N.A. & Tarrant, M. (2003). Young people's music in and out of school. *British Journal of Music Education*, 20(3), 229-241. doi: 10.1017/S0265051703005412.
- Langridge, D. (2004). *Introduction to Research Methods and Data Analysis in Psychology*. Harlow: Pearson.
- Lotan, R.A. (2008). Developing language and mastering content in heterogeneous classrooms. In R.M. Gillies, A. Ashman, & J. Terwel (Eds.), *The Teacher's Role in Implementing Cooperative Learning in the Classroom* (pp. 187-203). Brisbane: Springer.
- Lotan, R.A. (2006). Managing group work in the heterogeneous classroom. In C.M. Evertson, & C.S. Weinstein (Eds.), *Handbook of Classroom Management: Research, practice, and contemporary issues* (pp. 525-540). Mahwah: Lawrence Erlbaum Associates.
- Macdonald, R.A.R. & Miell, D. (2000). Creativity and music education: The impact of social variables. *International Journal of Music Education*, 36(1), 58 -68.
- MacDonald, R.A.R., Miell, D. & Mitchell, L. (2002). An investigation of children's musical collaborations: The effect of friendship and age. *Psychology of Music*, 30(2), 148-163.
- Marjan, L. & Seyed, M.G. (2011). Benefits of collaborative learning. *Procedia Social and Behavioral Sciences*, 31, 486-490. doi:10.1016/j.sbspro.2011.12.091
- Meseke, C.A., Bovee, M.L. & Gran, D.F. (2009). Impact of collaborative testing on student performance and satisfaction in a chiropractic science course. *Journal of Manipulative and Physiological Therapeutics*, 32(4), 309-314.
- Mercier, E., Higgins, S. & Costa, L. (2014). Different leaders: Emergent organizational and intellectual leadership in children's collaborative learning groups. *International Journal of Computer-Supported Collaborative Learning*, 9(4), 397-432.
- Miell, D. & MacDonald, R.A.R. (2000). Children's creative collaborations: The importance of friendship when working together on a musical compositions. *Social Development*, 9(3), 348-369.
- Nafziger, R., Meseke, J.K. & Meseke, C.A. (2011). Collaborative testing: The effect of group formation process on overall student performance. *The Journal of Chiropractic Education*, 25(1), 11-15.

- Patterson, E.W. (2018). Exploratory talk in the early years: Analysing exploratory talk in collaborative group activities involving young learners. *Education 3-13*, 46(3), 264-276. doi: 10.1080/03004279.2016.1243141
- Pell, T., Galton, M., Steward, S., Page, C. & Hargreaves, L. (2007). Promoting group work at key stage 3: Solving an attitudinal crisis among young adolescents? *Research Papers in Education*, 22(3), 309-332. doi:10.1080/02671520701497571
- Saunders-Stewart, K.S., Walker, C.L. & Shore, B.M. (2013). How do parents and teachers of gifted students perceive group work in classrooms? *Gifted and Talented International*, 28(1-2), 99-109.
- Seddon, F. (2006). Collaborative computer-mediated music composition in cyberspace. *British Journal of Music Education*, 23(3), 273-283.
- Shivaswamy, P. & Thorsten, J. (2015) Coactive learning. *Journal of Artificial Intelligence Research*, 53, 1-40.
- Tolmie, A.K., Topping, K.J., Christie, D., Donaldson, C., Howe, C., Jessiman, E., Livingston, K. & Thurston, A. (2010). Social effects of collaborative learning in primary schools. *Learning and Instruction*, 20(3), 177-191.
- Veldman, M.A., Doolaard, S., Bosker, R.J. & Snijders, T.A.B. (2020). Young children working together. Cooperative learning effects on group work of children in grade 1 of primary education. *Learning and Instruction*, 67, 1-13.
- Vygotsky, L.S. (1978). *Mind in Society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Webb, N. & Mastergeorge, A. (2003). Promoting effective helping in peer-directed groups. *International Journal of Educational Research*, 39(1-2), 73-97. doi:10.1016/S0883-0355(03)00074-0
- Williams, K.D. (2010). Dyads can be groups (and often are). *Small Group Research*, 41, 268-274. doi: 10.1177/1046496409358619
- Williams, P. & Sheridan, S. (2010). Conditions for collaborative learning and constructive competition in school. *Educational Research*, 52(4), 335-350. doi.org/10.1080/00131881.2010.524748

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