Composition in Music Education: A Literature Review of 10 Years of Research Articles Published in Music Education Journals

Tine Grieg Viig

ABSTRACT

This article provides a comprehensive review of 89 articles published over ten years in the journals Music Education Research, British Journal of Music Education, Bulletin of the Council for Research in Music Education, Research Studies in Music Education, The Journal of Research in Music Education and International Journal of Music Education. Through a systematic search method on the topic composition in music education, the extensive body of research is examined, covering a wide scope of areas in both formal and informal learning contexts, including issues such as music technology, collaboration, challenges to teaching composition, and assessment, from different perspectives.

Keywords: composition, learning contexts, music education, literature review

Introduction

The learning and teaching of musical composition is an important issue in music education. From the work of John Paynter in the 1970s up until today, composing music has become a part of the school curriculum in many countries. A widespread community of researchers has contributed to the practices of teaching composition through research published in books, journal articles and presentations at music education conferences across the globe. Navigating this continuously expanding field of research is not an easy task for even experienced researchers. This article provides a comprehensive literature review on composing processes in learning contexts. Using a systematic approach to investigate a selected scope of articles, this study synthesizes findings from the most recent research on this topic in the field of music education.

The terms 'composing', 'composition' and 'composing process' hold many conceivable meanings. Closely conjoined to concepts such as 'musical creativity', an ideology of the composition of music as an individual activity for a gifted few has retained a strong position in the field (Burnard, 2012a: 10). Researchers have found that teaching practices in creative disciplines are influenced by the teachers' perceptions of creative practices (Kaschub & Smith, 2009; Odena & Welch, 2012). Hickey (2012) writes that composition can be taught, and that all children are able to compose. However, a major obstacle to the learning and teaching of composing music is identified as the limited knowledge and capacity of teachers to implement the curriculum in classroom practices. Many teachers feel unprepared and ill-equipped to guide and teach music composition to their pupils (Hopkins, 2013; Sætre, 2011).

Burnard (2012b) calls for a redefinition of musical creativity to a situated understanding of a cultural and social activity in terms of a Bourdieuan perspective. To be able to define the concepts, we need to learn more about the actual *practices*. The overarching aim of this article is to investigate recent research that examines practices of composing in different learning contexts, from informal to formal classroom activities with participants of different ages, from novices to specialists in higher education programs.

A rigorous approach was utilized to obtain a focused scope on relevant literature, derived from the methods described in a previously published review by Robert Duke (1999). Some might argue that a literature review, even one using a systematic approach, cannot qualify as research. However, the articles in this review are treated as a kind of data: from the selection of scope of interest, to the collection, and organization, of material for analysis. This article can therefore be understood as systematic research on a specific corpus of published research. The expected outcome of such a review is the establishment of 'the state of art' within the topic of interest (Folkestad,

2004). This article is divided into three parts. The first part elaborates this research method used in the article to select, categorize and analyze the sources for the review. Second, the findings from the analyzed studies are organized into themes based on questions related to the topics of composing in learning contexts to which current research responds. This section seeks to identify important themes in the research, an approach adapted from a published review on the theme of music-reading produced by Helga Rut Gudmundsdottir (2010). In the concluding section, implications for further research are suggested.

Sources for the review

The diverse contributions to this research field are reflected in the large amount of journals and other sources, such as monographs, edited books and conference papers posted online. To gain an overview of the field through a literature search, I chose to tighten the frames of the review, accepting the unavoidable risk of forfeiting some sources. In conducting a critical synthesis of research in a large field, the selected method to establish appropriate scope and coverage becomes an important issue (Boote & Beile, 2005: 7). This leads to another research question for the article: How can a systematic search be designed and pursued in order to write a literature review about composing processes in learning contexts?

Selection of sources

To provide an international scope of relevant literature for this review, primary sources were selected according to the following criteria:

- Journals with an international scope, providing research from several countries addressing an international audience, profiled within the field of music education.
- Journals commonly accessible online through university research library subscriptions, with articles in English.
- Journals with a high impact factor in the field, according to their position in journal rankings.
- Journals that are peer reviewed, and with a professional readership of researchers in music education.

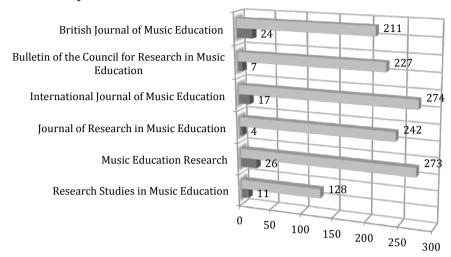
Four of the journals ranked within the top 10, as scored by the SCI*mago*¹ database. This means the articles published in these journals are widely cited and considered to represent the field of music education, with a high impact factor. Two of the journals are published in the United Kingdom, with an editorial board comprised mostly of UK-based members (*Music Education Research* and *British Journal of Music Education*). However, both journals have an extensive international advisory board with members worldwide. Also, a journal published from Australia was included, *Research Studies in Music Education*, with an international editorial board of 31 members. Additionally, *The Journal of Research in Music Education* published in the USA, along with the *International Journal of Music Education*, publications affiliated with the International Society for Music Education were included. To begin, I explored the most recent five years of research published in these sources. Later, as a consequence of time elapsed while working with the review and the process of searching for relevant research; the scope was expanded to nearly ten years starting in January 2004, and extending through August 2014.

Design of search method

A manual search narrowed to the six aforementioned journal titles produced a total of 89 articles selected as primary sources for this literature review. The selection was initially based on titles, keywords, and the content of abstracts; the initial search was based on the main terms 'compos*', 'composing', 'composition' and 'songwriting'. An additional search was performed using the term 'creativity', to see if there were any further articles that could be included in the scope. As a consequence, the concept of *songcrafting* (Muhonen, 2014) was later added to the search terms. Table 1 describes how the 89 relevant articles are spread across the selected journals. Additionally, the table shows how the number of articles concerning composition in music education relates to the total number of articles published in the different journals over the nearly 10 years of publications.

¹ SCImago builds on an algorithm of citations registered and the importance of a journal archived in the Scopus database (Scimago Lab, 2013). For an extensive list see for example http://www.scimagojr.com/journalrank.php?category=1210&area=1200&year=2011&country=&order=sjr&min=0&min_type=cd&page=0

Table 1: Primary sources



■ Total of articles published from 2004-2014 ■ Relevant articles in the scope of the review

Researchers from a total of 16 countries authored the articles. A large number of contributors belonged to institutions situated in the UK, (approximately 36 %), and USA (25,8 %). Also, researchers from Scandinavian countries such as Sweden (4,5 %), Finland (2,2 %) and Norway (2,2 %) have contributed. Other countries include Cyprus, Spain, Italy, Belgium, Greece, Canada, and also Hong Kong, China, Australia and New Zealand as well as South Africa. Three articles were based on international research collaborations. 52,1 %, of the authors of the 89 articles were male. However, while 36,8 % of the authors from the UK were female, in the USA 61, 5 % of the articles were authored by female researchers. A majority of the articles from outside UK and USA were published in the *International Journal of Music Education*, but also in the *British Journal of Music Education*, Research Studies in Music Education and Music Education Research.

The Nordic countries Finland, Norway and Sweden have contributed with 8,9 % of the total of articles in the scope. Researchers from Denmark and Iceland have no publications in these journals within the scope of this review. Are these numbers representative for research conducted on composition in these countries? A quick glance at the NNMPF Yearbook over the years 2004 (Vol. 7) to 2013 (Vol. 14) shows that out of 90 articles, only 3 are based on studies of composition in music education (Thorgersen, 2008; Falthin, 2011; Muhonen & Väkevä, 2011). At the same time, only 6,6 % of the total of articles in the six journals in the scope of this review are about

composition, which implies that composition in music education is a relatively small research topic also internationally.

All related articles and their findings were categorized according to 1) journal title, 2) country of origin, 3) research setting (for example secondary school, higher education, informal practices), 4) participants, 5) purpose or aim of the study, often expressed as a research question, 6) method, 7) emerging topics and keywords, 8) theoretical conceptions underpinning the research and 9) findings of the study². Finally, a category of 'recommendations' was also added, as many of the articles provided implications for future research and recommendations for teaching practices in the concluding paragraphs. These categories provided a model for structuring and gaining an overview of the total amount of data derived from the primary sources.

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Table 2: Excerpt from data matrix

This model functioned as an analytical tool for an outline of the debates covered in the recent research in the field. The contexts of the studies range from classroom practices to special projects and workshops in informal settings; however, most of the studies (93,3 %) are situated in some form of learning context associated with school music education at different levels. Approximately 90 % of the studies can be described as primarily qualitative, using for example case study methodologies, interviews and observations. There are also other approaches described, for example action research studies with a participating researcher (Miller, 2004; Strand, 2009; Ward, 2009), or online surveys (for example Savage & Fautley, 2011). The articles' theoretical foundations are informed by previous work in the fields of sociology, musicology, psychology and phenomenology, and also music therapy (for example Baker & Krout, 2012) and an array of pedagogical models and orientations. Research in the Scandinavian

² The categories are for the most part adapted from the similar review on a different topic by Duke (1999), but additional categories were added for the purpose of this study.

countries focus, similar to international tendencies, on a diversity of topics, from art partnerships between schools and professional artists (Oltedal, 2011), algorithmic composition (Falthin, 2011), collaborative composition (Partti & Westerlund, 2013) and music technology (Nilsson & Folkestad, 2005). However, it is interesting to note that the majority of these research studies discuss their empirical data in relation to among others the theories of John Dewey, Lev Vygotskij or sociocultural perspectives (Muhonen & Väkevä, 2011; Muhonen, 2014; Partti & Westerlund, 2013; Falthin, 2011; Thorgersen, 2008; Wallerstedt, 2013; Söderman & Folkestad, 2004).

Additional sources

Limiting the scope of a literature review to only six journals across ten years inevitably means that some important research will be omitted from the review. A glance at the theories and references in the primary source articles reveals that the researchers utilize and refer to theories of 'well known' and much cited authors and respected authorities in the field. Also, through for example book reviews and tributes published in the journals, a lot can be learned about what is being published through other channels in addition to the research articles included in the scope of this review. Nevertheless, it is important to acknowledge that this method provides a solid foundation for a literature review, and there is much to be learned from approaching the substantial body of research in this way. However, additional books on the topic identified through citations in the primary sources and the book reviews were also consulted to add more context to discussion of material in the scope of this search.

Review findings

The review of articles is built on the question 'What can be learned from recent research on composing processes in learning contexts through a focused scope review?' Referring to the material from the primary sources, the articles found to be of relevance for this review cover a wide array of topics on composing in different learning contexts. The forthcoming sections of the review aim at obtaining an overview of the practices described in research on composing in music education. What kinds of practices are investigated in these articles? Who is involved, and how do they experience and elaborate on the practices of teaching, learning and undergoing processes of composing? Core themes in some of the articles include how sociocultural factors, or physical environmental issues (for example, the utilization of digital technology

tools) have an impact on composing in learning contexts. Also, it is interesting to see how the composing process itself is described. All these topics will be elaborated in the next sections, tracing the ideas and descriptions of composing processes and on going debates in the recent research.

What are composing practices in learning contexts?

Composition is a term with normative associations (Tobias, 2013). Muhonen (2014) chooses to describe the process of 'songcrafting' rather than composition, and the terms songwriting (Draves, 2008), producing, sound design (Savage, 2005) and others are used to described different notions of the activities of composing in the articles. Elaborating how a composing practice may be defined can start with where the practice takes place, and who is involved. Only about 6,7 % of the examined studies are based on informal learning contexts outside an education system (Abramo, 2011; Biasutti, 2012; Nichols, 2013; Partti & Westerlund, 2013; Söderman & Folkestad, 2004), meaning the majority of practices studied take place in either primary, secondary or higher education. The debates raised in the articles are manifold, ranging from the role of the teachers or composers as leaders, facilitators or guides, to how learning and teaching to compose can be developed.

What challenges are identified when teaching composition in formal learning contexts?

Time limitations are identified as a challenge for composition activities in several studies (Hopkins, 2013; Leung, 2004; Miller, 2004; Muhonen, 2014). Time is always "at premium" (Oltedal, 2011) for music teachers, and composing is easily identified as an inherently complex process that requires substantial time for development and exploration. When working together with a composer in a composition project with her pupils, Lewis (2012) also identified the challenge of time and physical facilities limitations. But, in collaboration with the professional composer involved in the project, they found a solution to the problem. To avoid a wasting of time when pupils worked in groups, the 'Seven Minute Challenge' was introduced. The pupils had to finish the composing task proposed through quick decision-making and careful selection. Also, having external deadlines in the form of a public performance or, as in this study, a CD production of the compositions, required a focused and smart use of time (Lewis, 2012: 157).

Do music teachers feel capable of teaching composition?

One notable challenge described in these articles is how insufficient teacher training, vague curriculum descriptions and muddy conceptions of creativity and the notion of 'composition' represent major challenges for composing practices in music education. In Norway, music is a core subject in school, but suffers from a low status in teacher education (Oltedal, 2011). Specified demands of the curriculum on composing raise an important question: how to approach and fulfil these demands with little or no training or education in art subjects? How does the lack of proper teacher education and opportunities for gaining experiences in composition impact on teaching practices?

One consequence may be that teachers avoid teaching music composition. Low confidence and a feeling of vulnerability may cause teachers to leave out, and even fear, to include music composition in the curriculum (Crow, 2008; Hopkins, 2013). A romantic notion of the composer still seems to permeate the field in the early twenty-first century, with major consequences for teaching practices. The ideas and understandings surrounding musical creativity and the act of composing are manifold and widely distributed through practices in the field of music education, even in music teacher education (Crow, 2008). Crow (2008) shows that diverse understandings and experiences of creativity are reflected in the conceptions expressed among student teachers. Their responses were given before and after a school teaching practicum. Before teaching experience, the results showed a difference in how they regarded creativity in 'the real world' compared to classroom activities: "There appeared to be two versions of creativity in the minds of the respondents: one that applied to 'real' music and one that applied to the classroom" (Crow, 2008: 378). A creative musician or composer was described as someone attributed with musicianship at a high level, inspiration, originality and performance skills. In the classroom situation, when considering the pupils' possible learning outcomes in engagement with musical creativity, the focus was rather to develop pupils' self-expression and life skills. Crow (2008) relates the student teachers' replies concerning classroom creativity to the notion of 'little c'- or everyday creativity, which is counterpointed by the mythical idea of the lone genius composer (Odena, 2012; Rusinek, 2012). However, such preconceptions can be changed through direct experience in creative processes.

Through identifying music teachers' educational orientations, Sætre (2011) finds that actions and attendant discourses shape the music teacher practices. This finding corresponds with the research of Lewis (2012) and Clennon (2009), showing a strong link between a teacher's knowledge, skill and identity as composer and their pupils' experiences and development as composers. Francis (2012) emphasises that we

need to investigate and identify these conceptions of creativity and discuss possible alternative scopes of action in a pedagogical perspective.

One of the suggested solutions to the challenges teachers face is to examine possible composing strategies through a pedagogical perspective reflected in a new curriculum (Winters, 2012). Composing pedagogy at the secondary level "[...] remains extremely undeveloped when compared to the pedagogy for performance skills" (Hopkins, 2013: 40). On the other hand, book reviews of *Composing our Future* by Kaschub and Smith (2012; reviewed by Randles, 2013) and *Music Outside the Lines* by Hickey (2012; reviewed by Riley, 2013) show that recently there are thorough descriptions of composing practices in book formats, offering practical samples that can be a foundation for developing effective approaches to composing pedagogy. Also, as Fowler (2014) suggests, it might be fruitful to integrate the forms of performing and composing skills, in particular perhaps in composing projects where pupils also perform their composed music. Or, as Strand (2005) emphasizes, the development of teaching strategies focusing on *transfer* of musical understandings from performance and listening to composition.

How do professional composers approach teaching in a learning context?

In the expanding development of art partnership programs worldwide (Bolton, 2008; Espeland, 2010; Oltedal, 2011; Watson & Forrest, 2008), pupils meet with external forces in arts subjects in schools, as professional artists are brought in to develop and perform programs with and for pupils. These meetings are to a very little extent investigated in the articles in this review. Only eight of the total 89 articles describe involvement of a professional composer, and out of these two are studies situated within higher education (Mateos-Moreno, 2011; Onyeji, 2008), and one is from an informal learning context (Partti & Westerlund, 2013).

The debates surrounding artists teaching in learning contexts focus on matters of educational skills and artistic desire compared to a licenced music teacher's competence (Espeland, 2010). These debates invoke questions of the roles of the teacher or professional composer in relation to the pupils or learners in the composing process, and who is really 'the composer' in these relationships. Additionally, the artist is not necessarily accustomed to working within the frames of a curriculum and other formal constraints. However, as Oltedal (2011) writes: "[...] success of arts input from outside school depends in no small degree to its relevance to the curriculum goals" (p. 200). Pupils experience collaboration with composers as a motivational factor (Watson & Forrest, 2008). Moving briefly outside the scope of this literature review to elaborate

further, it is interesting to find that the collaboration developed between artists and pupils in a partnership of composing music together enables pupils to develop a confidence that provides a support for learning experiences (Burnard & Swann, 2010). Lawy, Biesta, McDonnell, Lawy, and Reeves (2010) found that an artist builds different kinds of relationships with the pupils, enhancing democratic, non-hierarchical learning relations compared to teacher relationships. Other studies on experienced teachers working with composing in the classroom attained similar results (Bolden, 2009). An important issue that needs to be elaborated further is implied by Oltedal (2011) in her discussion of arts partnerships: "Are we, in effect, weakening the cause for appointing well-qualified music teachers in school?" (p. 201).

What are the main issues of interest in studies of composing in informal learning contexts?

The five articles investigating composing in informal learning arenas covered different topics of interest, from gender, to hip-hop communes, and music technology. Söderman and Folkestad (2004) describe the composing processes of two hip-hop groups, and finds that the participants' knowledge development and skills can be considered as intertextual and glocal. Partti and Westerlund (2013) described a composing project in the form of an online community-based collage led by a professional composer. The four remaining articles are all based on popular-music practices, two focusing on gender issues (Abramo, 2011; Nichols, 2013) with different scopes. Abramo (2011) investigated the collaborative practices of band composition, observing differences in composing styles between boys and girls. While the boys communicated through testing out musical ideas in a non-verbal manner as a seamless sonic process, the girls in his study negotiated ideas verbally before testing out by playing them on instruments. In mixed groups, however, these different composing styles cause tension, leading Abramo (2011) to recommend teachers to function as negotiators in such situations. Nichols (2013) used a narrative inquiry method to write a story of a transgendered adolescent. An important finding is the way this adolescent used songwriting as a way of attaining a deeper understanding of herself and also experiencing others' understandings: "Rie's composition served not only as a creative outlet but as a means of authoring self" (p. 274).

As a part of the conclusions, a common feature in several of the studies of informal composing learning contexts seems to be how studies of informal contexts are applicable to formal music education, and how teachers can learn from these studies to inform their practices.

The impact of the sociocultural environment

Demographic and cultural factors have also been investigated as issues in the learning of music composition. An approach based on "[...] critiques of Western music education as a colonizing invader of non-western cultures" (Espeland, 2010: 129) is found in research from South Africa (Onyeji, 2008). In addition, research from the United States (Hoffman & Carter, 2012; Tobias, 2012) found a similar challenge in classrooms with pupils from different cultural backgrounds. These articles discuss how the music education curriculum favours classical canonizations of a Western culture with a performance-based perspective, rather than taking in the social and cultural, not to mention musical, perspectives of the present. For example, Tobias (2012) introduces his article with a call for broader music education programs in the US, including alternatives to the customary large band ensembles performing mainly music from the Western European classical tradition. The research is built on evidence that many of the pupils³ will benefit from a integration of popular music, informal learning practices (referring to the studies of Folkestad, 2006, on formal and informal learning situations), technology-oriented courses and through challenging the boundaries and ideas of traditional roles of the musician, composer, listener and performer in classroom practices (Tobias, 2012: 331). Through his research, technology in a songwriting course allowed the pupils to engage in multiple roles, elucidated as songwriters, performers, sound engineers, as well as producers. The conclusion is that music educators should develop abilities in teaching "hyphenated musicianship in hybrid spaces" (Tobias, 2012: 343), to provide possible openings for a larger pupil population to engage in school music programs. Younker and Hickey (2007) also found that students in socially disadvantaged urban areas suffered from social and physical circumstances that have consequences for their opportunities to participate and contribute in music composition activities.

Collaborative composition projects can also have an impact on cultural integration, as described in a study by Simpson (2013). The project studied was not only found to have positive implications for cultural integration during the project period, but also caused a prolonged interest in music and learning following the completion of the project.

³ It is important to note that US, Canadian, Australian and New Zealand researchers refer to pupils at all ages as 'students', while researchers from other parts of the world identify 'students' as adults in higher education in the articles reviewed. To avoid confusion, I have chosen to use 'pupils' as a reference to all children and young adolescents of primary and secondary school age.

How do gender issues impact on the practice and teaching composition?

As previously mentioned under studies of informal learning contexts, gender is a topic addressed by several of the researchers in this sample. Inspired by the research of Lucy Green (1997; in Legg, 2010) on gender in the music classroom, Legg (2010) focus on newly qualified music teachers' gender perceptions. Through analysis of listening and assignment tasks, Legg attained conclusions that indicate greater awareness needs to be awakened regarding how professionals in music education judge and perceive gender in music composition classes. In spite of their expressed opinions of gender equality and old-fashioned perceptions of creativity, the participants in this study assessed music believed to be made by men higher than the compositions believed to be made by women (Legg, 2010: 147; Table 1).

Pupils' experiences of composing in learning contexts

In the interaction between teacher and pupils, and also between pupils collaborating to compose music, Major (2008) examines different kinds of 'talk'. She identifies six different types of verbalizations, for example the descriptive, the exploratory, the problem solving and the affective response talk. Development of a more mature and reflective dialogue about composing can be promoted by the teacher (Major, 2007). The pupils' interactions with the teacher are also important in Sætre's (2011: 44f) study. However, he has a different focus: one of the major concerns the pupils expressed in the study was about fulfilling the expectations of the teacher, and also struggling to understand fully the requirements of the task required by the teacher. The pupils in the focus group, interviewed retrospectively, simultaneously expressed a concern over how the teacher takes control over creative ideas during the process, raising the question of ownership over the creative product.

Hoffman and Carter (2012) identifies a strong link between the students' meaning making when composing and developing a learner identity, to power structures in the music classroom. Ruthmann (2008) also found a similar relationship in his study of the negotiation of creative intentions in composing activities. When the intentions of the teacher overtake the ideas of the pupil, the pupil is left with a negative emotional response; namely feelings of disempowerment, and a loss of confidence and sense of ownership of the music.

Ownership tends to be an important keyword in pupils' and students' descriptions of composing processes (Bolden, 2009; Gould, 2006; McGillen, 2004; Stavrou, 2013), where one of the main aims of the process for the pupils seems to be the development of

'their own piece', in some cases expressed as more important than creating something 'new' or 'original'. There is clearly more information needed about these relationships, and how both the participants experience the impact of interrelations on the music collaboratively created.

What is a composing process in learning contexts?

Research on creative processes also often includes interrogation of the process in and of itself. Only a few of the articles in this review offer detailed description of actual composing processes. Rather, many of the articles explain the contours of a process, often with references to the original theories about creative thinking, for example Graham Wallas (1945). These can be summarized via the description and identification four main aspects (Breeze, 2009; Hopkins, 2013; Bo Wah Leung, 2008; Lewis, 2012; Oltedal, 2011; Partti & Westerlund, 2013; Ward, 2009):

- 1. The task is initiated by playing a sample or listening to something that can represent what the pupils will do, or exploring possible material to serve as a basis for their work.
- 2. A process of experimentation with the material starts, improvisation, variation, and idea gathering.
- 3. The reflection, arranging and final reworking phases.
- 4. A performance or final product recording.

There are also several researchers problematizing existing approaches to the creative processes of composing music. For example, Berkley (2004), and also Burnard and Younker (2004) propose an alternative pedagogy as the *problem-solving approach*. The teachers or composers can work with implementing different compositional strategies as a part of the task design. Task and assessment design appears to be a crucial factor for the composing processes discussed in many of the articles (Legg, 2010; C. C. Leung, Wan, & Lee, 2009; Savage & Fautley, 2011; Thorpe, 2012). For example, Breeze identified learning design as 'the key influence on enabling pupils to compose effectively' and the teacher as a learning design creator (Breeze, 2009: 216).

Determining routes for composing

Another way of defining the process can be indicated as finding routes or pathways for composing, as described in the research of Biasutti (2012), Burnard and Younker (2004) or Mellor (2008). Biasutti (2012) describes a democratic compositional process

of group collaboration as *horizontal* (cited from Burnard & Younker, 2008). Ideas brought into the group by the individuals were 'tried out, received, modified, adapted and revised through a democratic process involving all the musicians' (p. 354). In research on computer-based composition, Mellor (2008) describes individual composing processes, and demonstrates how the pupils derive musical material from personal experiences, musical background and social contexts. All the pupils in the study have a *vertical* composing process, using strategies to finish sections consecutively (Mellor, 2008: 467). Mellor reflects on whether the vertical strategy finishing each section before moving on to the next, may be influenced by the visual appearance of the music software used in the composing activity.

Lewis (2012) links assessment and task design to professional practice, by for example showing the relevance of the assessment to how a composer works when receiving a commission, with specifications for how the composition is to be designed. This is similar to the findings of Bolden (2009), who writes that authentic assignments provide motivation factors and meaningful involvements in classroom composing. Through identifying when, how and why creative decisions are made, individual creative thinking skills and creative processes can be described and opened up for suitable learning challenges and knowledge development adapted to individual pupils. Martin (2012) also emphasizes authentic opportunities connected to professional composing practices, in his research on the creation of contemporary electronic music. Task design is seen as crucially linked to the musicality in the compositional product, as described in Smith's (2009) study.

Collaborative composing processes

In classroom practices as well as informal band composing, collaboration has become an important working method for music composition. Several of the articles address aspects of how collaborative composing practices occur. What kinds of collaborative practices are investigated, and how do they impact both the people involved and the music under development?

The social implications of collaborative work seem to be the main focus of such studies of collaboration in music composition. For example, Baker and Krout (2012) found that collaborative peer songwriting has a number of positive implications. Their music therapy students, working in duets, developed professional as well as emotional skills, from personal growth to insights into the process of writing music as therapists.

In Lewis' (2012) study, the pupils worked in slightly larger groups. However, one pupil was appointed as the composer-director in a session. A member of the group led each session, and allowed the individual to create unique music with the same peer

groups. In contrast, Sætre (2011) describes one example where all of the students in a collaborative composing group refused to act as a leader. As a consequence, the composing progress was delayed.

Several of the studies emphasize that the teacher's role and facilitating practices should be more adapted to the individual's compositional intentions (Ruthmann, 2008), composing style (Mellor, 2008), and concerns for the motivation and skill enhancement of each pupil (Randles, 2010).

A new way of collaborating on the composing of music is described by Partti and Westerlund (2013), where the participants are members of an online community. A professional composer is in charge of the process and task design, whereas all members of the community contribute with individual notated contributions of different lengths. The members sign up voluntarily, with a variety of experience, competencies and ages and come from a total of 43 countries. Partti and Westerlund (2013) identifies a challenge to this collaborative practice, as the composer in charge also makes the final decisions about how the piece is put together as a whole. In this pastiche-like process the participants felt disempowered, losing control of 'their' contribution to the piece.

What is the role of music technology in composition learning contexts?

Music technology has become an important topic in music education research. In 24 of the articles of the review, technology in some form is utilized as a part of the composing activity. An urgent issue in this field is the need for more knowledge on how to use technology in composing activities (Espeland, 2010); furthermore, the extended consequences for practice and learning strategies proposed by teachers and students require a broader discussion. Is music technology in the new millennium also a tool for multicultural teaching and learning, and a form of "[...] enabling musical empowerment" (Ruthmann & Hebert, 2012: 569)? Do teachers agree with the statement that "Computer technology is to music composition in the classroom what the phonograph was to music appreciation just after the turn of the twentieth century." (Hickey, 2012: 24)? Also, the term 'music technology' comprises an array of different concepts and understandings, from selections of software to hardware capabilities. How does music technology impact composing processes in learning contexts? And, what is the focus and outcome when using particular technologies to learn composition?

What music technology tools are used, and how?

Breeze (2011) and Wallerstedt (2013) study different practices where pupils compose using a keyboard and a computer to record their compositions. But, as Lewis (2012) explains, there might also be a lack of available keyboards and physical equipment at the school. In her study, this problem leads to an unexpected solution: the pupils record their ideas and composition in progress with their mobile phones. Availability quickly becomes an issue when hardware is needed; for example, one composing project was delayed for several weeks when the school's iPads were in use by another teacher in de Vries' (2013) study.

Chen (2012) identifies four tool utilizations in his study: music technology as a *recording tool*, a *refining tool*, an *improvising tool* and an *experimental tool* (Chen, 2012: 168). Hoffman and Carter (2012) describe two different uses of music technology: as a recording tool (Garageband software) and, through a notation program, a substantiation of aims in the curriculum connected to literacy skills. Further, these tools were used 'to create original melodic and rhythmic motifs' (Hoffman & Carter, 2012: 6). Different applications and software are described in the articles, from Garageband to common notation software, such as Finale, Sibelius, and Noteflight.

Using music technology gives the composer, whether pupil or professional, an opportunity to receive instant feedback. Pupils can listen to the piece while still experimenting with it, and the recording can become a source of motivation while simultaneously making the creative process transparent (Ward, 2009). Wise, Greenwood, and Davis (2011) found that music technology offer completely new opportunities for composing activities. However, it is unclear whether the music technologies used in many of the articles are tools of sampling and redefining or transformation. Breeze (2011) is, as an exception, very clear that it in his study, music technology is considered a *transformation* tool.

What is the main focus of composing activities with music technology tools?

In her empirical study of the verbal communication between children in collaborative composing processes, Wallerstedt (2013) found that visual representations produced through musical inputs to computer software became important remedies for dialogues and sense making associated with composing activities. When children, lacking a developed instrumental music language, work with creating sounds, the on-screen visualisations provided by the music technology program become an important tool for discussing and negotiating the evolving music. As an example of this issue, she displays an empirical description where a group of four girls create a cluster sound

visualised as a thick line on the computer screen. The girls agree on naming the visualisation a 'sausage' (p. 429), and this concept achieves a mediating function for the cluster sound. As the composition proceeds, the visualisations on screen are used as an important factor for developing the piece.

Reynolds (2012) uses a hermeneutical approach to examine intentions of participants' (seven children from 10 to 12 years old) while writing electronic musical compositions through use of the software programs *Audacity* and *Cakewalk Home Studio*. One of the example pieces is named *Little Princess* by the pupil composer, produced through drawing a figure of a girl into a midi score using the pencil tool in *Cakewalk Home Studio* (Reynolds, 2012: 319; Figure 7). Obviously unintended by the child, the piece is judged by Reynold's colleagues to have 'qualities of Bartok or Hindemith' (Reynolds, 2012: 320).

Ward (2009) takes a different viewpoint from Reynolds' (2012), calling for a recognition of music technology as a music creation tool, not as a toy, in terms of understanding the making of *original* music rather than *representations* of music. According to Ward's study, the possibilities offered by such software as *Cubase* and *Wavelab* to work with instant transformation of for example textures and timbres, added to the pupils' experience of creating something valuable and original.

These studies, where the focus of the activity is questioned, add to an interesting debate for the field of music technology in education. In terms of outlining the criteria for concepts such as originality and creativity, and also judgements of value and what is a 'good' composition: Can children's approaches to composing with digital tools provide new and meaningful experiences of making music, also when they create visual representations that are not necessarily directly associated with – nor intended as – music? Or are these approaches not really about music making at all, if the original intention is to draw a picture of 'a sausage'? What happens to music composition when the practices do not match the criteria of music composition as based on skills and knowledge about composing techniques and experiences?

Implications of teaching and learning with music technology

A few of the articles focusing on music technology also implicate the future of music technology in music education based on the findings of their studies. In the study of Tobias (2012) music technology becomes a part of a 'hybrid space'. This space, both including the digital and the 'real' world practices, expand the possible roles, tools, techniques and processes the students develop and use in music education. A similar way of defining various aspects of the compositional processes using music technology is presented by Breeze (2011) as a 'multimodal space'; including the interactions with

the computer, the classroom environment and the teacher and pupils. And, additionally, Crawford (2013) introduces a concept of a 'multidimensional perspective model' for teaching and learning with music technology. These theories add into the discussion of how music technology can provide new arenas for learning composition, but also add new complex concepts to the rhetoric language of music technology.

Applying music technology in music education may have consequences the types of composing activities the digital tools allow, and the intentions of the learning contexts in which these activities occur. A challenge seems to be how we can actually confirm if and how children learn about *composing music* through the digital tools. How are musical composing competences defined in digital learning contexts?

How can teachers assess composing activities?

Assignment design has been described as "[...] key to the successful engagement of students in classroom composing" (Bolden, 2009: 148). Several other studies are also based on a discussion of how assignment design is an important and complex issue in composing processes in learning contexts. For example, as Lewis (2012) asks: can constraints of assessment and curriculum have an impact on creative opportunities and experimentation? Subsequently, how do defined criteria challenge the "[...] validity, ownership and authenticity of the voice of the composer" (p. 154)? Beston (2004) finds that assessors often agree on criteria within the western tonal tradition, but not in genres as jazz and rock.

Providing pedagogical feedback seems to be dependent on choosing a role that interrelates with the intentions of both the teacher and the pupil. For example, in Ruthmann (2008), when the professional role leans towards a self conception of the 'expert' or the 'teacher', while the pupil requires a 'guide', a gap or tension is created in the relationship, leaving one or both of the parts disempowered. The agency and educational goals of the teacher needs to be negotiated with the pupils, and the pedagogy informed by a questioning advocacy that enables the pupils to develop confidence as composers (Ruthmann, 2008, p. 56). A teacher's ability to promote and develop the revision of musical material during a creative process may have a great impact on both the product developed and the process in itself (Webster, 2012). Introducing strategies for revising, helping the student expand his or her capability on their own premises, Webster (2012) shows the need for a student-centered pedagogy that allows musical ideas to expand through individually adapted feedback and revision of their own work, which can be compared to the findings of Fautley and Savage (2011) where teachers adapt existing assessment criteria into a more child-friendly language. Teachers may

not be aware of that their utterances *during* the process of composition, not only as a final product evaluation, can be regarded as assessments (Fautley, 2004).

Assessing compositions is also identified as a challenge in the studies of C. C. Leung et al. (2009). Through an assessment framework, both micro- and macro-parameters are included: a judgement scheme ranging from technical aspects to overall aesthetic value. To these authors, the main goal of assessment is, however, enhancing the students' learning process, and the comments should be individually adapted, informative and supportive. Through a well developed assessment practice students experience the assessment as motivating and encouraging (C. C. Leung et al., 2009).

Why is composing in learning contexts important for the field of music education?

The articles also provide a rich contribution to the establishment of arguments to support why composing is an important activity within music education. The arguments bolster social inclusion, identity construction and personal expression, along with development of professional competencies and musical skills. Younker and Hickey (2007) write that composing projects can be a way of including students that for social or cultural reasons are largely absent from or passive in music education contexts. Pupils' engagement in composing activities provides them with a positive experience (Hopkins, 2013), and also becomes a motivation factor for engaging in music education activities (Leung, 2008). Among the reasons identified are the opportunity to express one's self (Lewis, 2012; Nichols, 2013) and gain personal knowledge (Bolden, 2009). Composition projects can also enable a shift in the teacher's role, meaning that pupils establish different relations with their teacher, who may become more of a partner or facilitator in the students' creative projects (Hopkins, 2013).

How can the teacher gain confidence and self-efficacy?

Competence in the teaching of composition is widely recognized as an important issue. Research shows that the teacher is important for students' experiences of and success with composing (C. C. Leung et al., 2009; Lewis, 2012). The teacher role is complex, described as facilitating (Major & Cottle, 2010), based on authentic composing practices (Martin, 2012), and of significant importance for the pupils' achievement, development and interest in continued music studies (Draves, 2008). Also, as Clennon

(2009) writes, teachers gaining knowledge and skills regarding creative thinking exhibit these to learning contexts with pupils.

Experience

A key concept in the recommendations of de Vries (2013) and Stavrou (2013) is that through experiencing and mastering composition projects, the teacher establishes confidence and motivation to continue working with composing practices. de Vries (2013) also suggests establishment of an advisory teacher relationship with ongoing support. Through experiencing creative processes, preconceptions of creativity are changed and student teachers gain confidence to teach creative activities. A further elaboration on the preconceptions determining teaching practices might lead to new and interesting approaches to teaching composing in learning contexts.

Implications for further research

The articles included in the scope of this review considered as a whole provide an in-depth perspective on the current state of research in this field. The topics range from the challenges teachers face considering composition as a part of their teaching practices, to how music technology has, in its complex variety, facilitated new dimensions to the possibilities of composing in learning contexts. There are still many questions to be asked, and complex discourses and forces affecting the practices of teachers, composers, pupils, and researchers in this field. Burnard (2012b) confronts the challenge of the third millennium where teachers' preconceptions, referring to the romantic Western art discourse and the collaborative 'band-music-making' discourse, about music creativity in music education creates a gap between musical creativity in school and 'real life' (p. 7). Children engage actively in music activities through digital devices as well as spontaneous song-making (Wallerstedt, 2013), but what actually happens in the classroom? The practices described here can be considered as points of departure for more highly detailed descriptions and explorations of composing processes across a broader array of learning contexts.

It is interesting that some music teachers seem to believe that they are less 'old-fashioned' in their determination of creativity than they actually are. For example, in studies of teacher perceptions on creativity, as we find in Kokotsaki (2011) and Sætre (2011), the research leaves no doubt that the teachers' perceptions influence their practices and consequently their students' experiences. This underscores the necessity

of learning and reflecting upon one's own perceptions and pre-understandings that inform practices.

There are, as mentioned previously, only a few descriptions from informal contexts in this review. Does this mean that children and adolescents do not compose outside educational institutions, or are there other learning sites not yet researched? Informal contexts should be studied independently, not only to support the development of formal practices. The formal context of school and classroom practices is determined by criteria from the curriculum, for example. Meeting pupils in these contexts influence on how they perceive and experience composing processes. Wallerstedt (2013) mentions that the 'school-based task format' makes pupils focus on fulfilling the task rather than making aesthetic decisions about the music under development. On these terms, it would be interesting to study formal and informal practices including the pupils' perspectives. What can be learned about the possible learning outcomes from these different contexts?

Also, only a very few of these articles focus on art partnerships-collaborations, now increasingly becoming a part of the education system (Burnard & Swann, 2010). This means there are still many issues not yet examined. What are the consequences of these partnerships? How do the pupils, composers and teachers experience the composing process, and what implications does this have for creative thinking, development and music composition? Stephens (2013) writes:

"It is as 'artist-teacher' (Stephens, 1995) that we are able to engage others in appreciating and understanding the arts – the application of subject knowledge and skill within a creative, ethical framework of learning." (p. 92).

What can be learned from such collaborations?

Music technology is also an expanding field, with digital software and applications development constantly evolving, and the challenge of available hardware equipment available. Important questions in this field concern the implications of implementing new music technology in learning contexts, and also, as Folkestad (2012: 194) asks: "[...] what are its options in various educational situations?". There is a whole area of the pupils' digital world barely touched upon in research, for example how gaming and tutorial games within music making enables novice composers to enter a new world of musical engagement. Originality, quality and novelty in musical products have been widely discussed in aesthetic education. In the articles within this review only researchers interested music technology are taking up the debate. Are researchers within the field of music technology particularly occupied with this debate because of the opportunities for reproduction and re-arranging with digital tools? In these

discussions, does a product orientation lead to other questions than research focusing on the composing process? In a few of the articles, the digital tools provide a unique way of gaining insight to the process by preserving screen shots and saving excerpts from the developing piece (Breeze, 2011; Mellor, 2008). But still, there are music teachers and also researchers avoiding the use of music technology in their practices. How can music educators and researchers keep up with this development, and what do children and adolescents actually learn through digital devices?

As collaboration seems to have become a common feature in the composing practices studied, an important question is whether these practices actually are collaborative. Baker and Krout (2012) examined the practice of composing with one partner in a higher education context, but among other studies at the primary and secondary levels, larger groups seem to be more common. In Sætre (2011) the composing process stagnates due to poor group collaboration and leadership. Contrarily, and in Lewis' (2012) study, the leadership role circulates across the group in a more successful approach to collaboration. But is it really collaboration when one leader makes the final decisions? How do the roles in a collaborative group affect the composition under development? Also, there is a need to discuss the role of collaboration in a composing process: what are the aims and outcomes of composing collaboratively as an alternative to individual processes? A risk identified is that social interaction and negotiation become the focus of the project rather than the actual composing. As Wallerstedt (2013) found in her study: The children were occupied with social rather than musical questions when attempting to solve the composing task given. How can the focus be turned towards the music composing practices when working collaboratively?

It is also interesting to note that even though the creation of actual music is at the core of composition practices, surprisingly there are just a few direct samples of music displayed in the articles examined in this review. Oltedal (2011) and Reynolds (2012) provides a few transcribed samples in traditional notation, and Locke (2009) used excerpts from the pupils' graphic notation. Within studies that address music technology, there are samples of visual representations of the product or samples from the composing process (Kardos, 2012; Mellor, 2008; Reynolds, 2012), and also some transcriptions of music in traditional notation (Breeze, 2011; Smith et al., 2009). There is, apparently, a need for developing more effective visual representations for and descriptions of music samples and products under development that are suitable for analytical purposes.

A major part of the articles and secondary sources in this literature review provide rich perspectives on selected practices. However, few researchers have chosen to focus on both sides of the participants' experiences, attempting to address different

perspectives on the same shared experiences by focusing on interpersonal relations, and creative teaching and learning strategies, as well as competency sharing and development. How might a study be designed so as to allow the actions and perceptions of all key participants to be taken into account, one must consider. Moreover, what might be the outcomes of such a holistic study?

This article presents a rigorous method to investigate research on composition in music education over the last ten years. As contrasted with a more random search, the approach can be used to systematically elaborate important research trends in the chosen field. In addition, the reviewer can investigate for example which methods that are commonly used to perform research on the topic; the empirical data such studies are built on; and theoretical perspectives suitable for further discussion and understanding of the research area. However, there will also be additional sources outside the scope of such a review determined by the chosen criteria for the search. The systematic approach, giving the review a dimension of a research project, has been a tool for learning and understanding the existing research to a greater extent. This method provides a framework for expanding the scope of a review to include other publications, such as PhD theses, book sections and books, by providing a way of categorizing, analysing and gaining an overview of the field.

These articles provide limited, but nevertheless valuable, insights to a field that might appear large and complex. The findings have covered a large number of topics, researched through different approaches and participants. The studies include perspectives of young pupils, adolescents and adults, teachers, novices and specialists on music composition in venues ranging from the rock band rehearsals to classroom practices. There are important questions that remain to be examined concerning composing practices in learning contexts, which call for new approaches and offer the promise of new discoveries.

References

- Abramo, J. M. (2011). Gender differences of popular music production in secondary schools. *Journal of Research in Music Education*, *59*(1), 21–43.
- Baker, F. & Krout, R. (2012). Turning experience into learning: Educational contributions of collaborative peer songwriting during music therapy training. *International Journal of Music Education*, 30(2), 133–147.
- Berkley, R. (2004). Teaching composing as creative problem solving: conceptualising composing pedagogy. *British Journal of Music Education*, *21*(03), 239–263.
- Beston, P. (2004). Senior Student Composition: An Investigation Of Criteria Used In Assessments By New South Wales Secondary School Music Teachers. *Research Studies in Music Education*, 22(1), 28–41.
- Biasutti, M. (2012). Group music composing strategies: A case study within a rock band. *British Journal of Music Education*, *1*(1), 1–15.
- Bolden, B. (2009). Teaching composing in secondary school: a case study analysis. *British Journal of Music Education*, *26*(2), 137–152.
- Bolton, J. (2008). Technologically mediated composition learning: Josh's story. *British Journal of Music Education*, *25*(1), 41–55.
- Boote, D. N. & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational researcher*, *34*(6), 3–15.
- Breeze, N. (2009). Learning design and proscription: how generative activity was promoted in music composing. *International Journal of Music Education*, *27*(3), 204–219.
- Breeze, N. (2011). Multimodality: an illuminating approach to unravelling the complexities of composing with ICT? *Music Education Research*, *13*(4), 389–405.
- Burnard, P. (2012a). *Musical creativities in practice*. Oxford: Oxford University Press.
- Burnard, P. (2012b). Rethinking 'musical creativity' and the notion of multiple creativities in music. In: O. Odena (Ed.) *Musical creativity: insights from music education research* (pp. 5–27). Farnham: Ashgate.
- Burnard, P. & Swann, M. (2010). Pupil perceptions of learning with artists: A new order of experience? *Thinking Skills and Creativity*, *5*(2), 70–82.
- Burnard, P. & Younker, B. A. (2004). Problem-Solving and Creativity: Insights from Students' Individual Composing Pathways. *International Journal of Music Education*, *22*(1), 59–76.

- Burnard, P. & Younker, B. A. (2008). Investigating children's musical interactions within the activities systems of group composing and arranging: An application of Engeström's Activity Theory. *International Journal of Educational Research*, *47*(1), 60–74.
- Chen, J. C. W. (2012). A pilot study mapping students' composing strategies: Implications for teaching computer-assisted composition. *Research Studies in Music Education*, *34*(2), 157–171.
- Clennon, O. D. (2009). Facilitating musical composition as 'contract learning'in the classroom: the development and application of a teaching resource for primary school teachers in the UK. *International Journal of Music Education*, *27*(4), 300–313.
- Crawford, R. (2013). A multidimensional/non-linear teaching and learning model: teaching and learning music in an authentic and holistic context. *Music Education Research* (ahead-of-print), 1–20.
- Crow, B. (2008). Changing conceptions of educational creativity: a study of student teachers' experience of musical creativity. *Music Education Research*, *10*(3), 373–388.
- de Vries, P. (2013). Generalist teachers' self-efficacy in primary school music teaching. *Music Education Research*, *15*(4), 375–391.
- Draves, T. J. (2008). Music achievement, self-esteem, and aptitude in a college songwriting class. *Bulletin of the Council for Research in Music Education*, 35–46.
- Duke, R. A. (1999). Measures of instructional effectiveness in music research. *Bulletin of the Council for Research in Music Education*, 1–48.
- Espeland, M. (2010). Dichotomies in music education–real or unreal? *Music Education Research*, *12*(2), 129–139.
- Fautley, M. (2004). Teacher intervention strategies in the composing processes of lower secondary school students. *International Journal of Music Education*, 22(3), 201–218.
- Fautley, M. & Savage, J. (2011). Assessment of composing in the lower secondary school in the English National Curriculum. *British Journal of Music Education*, 28(1), 51–67.
- Folkestad, G. (2004). A Meta-Analytic Approach to Qualitative Studies in Music Education: A New Model Applied to Creativity and Composition. *Bulletin of the Council for Research in Music Education* (161/162), 83–90.
- Folkestad, G. (2012). Digital tools and discourse in music: The ecology of composition. In: Hargreaves, D., Miell, D. & MacDonald, R.A.R. (Ed.) *Musical Imaginations: Multidisciplinary perspectives on creativity, performance and perception* (pp. 193-205). Oxford: Oxford University Press.

- Fowler, A. (2014). Composing and performing in the key stage 3 classroom: a study using multi-trait, multi-method analysis. *British Journal of Music Education*, *31*(01), 5–18.
- Francis, J. (2012). Teaching Composing with an Identity as a Teacher-Composer. *British Journal of Music Education*, *29*(2), 163–170.
- Gould, E. (2006). Dancing composition: pedagogy and philosophy as experience. *International Journal of Music Education, 24*(3), 197–207.
- Gudmundsdottir, H. R. (2010). Advances in music-reading research. *Music Education Research*, 12(4), 331–338.
- Hickey, M. (2012). *Music Outside the Lines: Ideas for Composing in K-12 Music Classrooms*. Oxford: Oxford University Press.
- Hoffman, A. R. & Carter, B. A. (2013). Representin' and disrespectin': African-American wind band students' meanings of a composition-based secondary music curriculum and classroom power structures. *Music Education Research*, 15(2), 135-150.
- Hopkins, M. T. (2013). A Descriptive Case Study of Two Veteran String Teachers' Perceptions of Including Composing in Middle School Orchestra. *Bulletin of the Council for Research in Music Education* (196), 25–44.
- Kardos, L. (2012). How music technology can make sound and music worlds accessible to student composers in Further Education colleges. *British Journal of Music Education*, 29(02), 143–151.
- Kaschub, M. & Smith, J. (2009). *Minds on music: Composition for Creative and Critical Thinking*. Lanham: Rowman & Littlefield Education.
- Kaschub, M. & Smith, J. (2012). *Composing Our Future Preparing Music Educators to Teach Composition*. Oxford: Oxford University Press.
- Kokotsaki, D. (2011). Student teachers' conceptions of creativity in the secondary music classroom. *Thinking Skills and Creativity*, 6(2), 100–113.
- Lawy, R., Biesta, G., McDonnell, J., Lawy, H. & Reeves, H. (2010). 'The art of democracy': young people's democratic learning in gallery contexts. *British Educational Research Journal*, *36*(3), 351–365.
- Legg, R. (2010). 'One equal music': an exploration of gender perceptions and the fair assessment by beginning music teachers of musical compositions. *Music Education Research*, *12*(2), 141–149.
- Leung, B. W. (2004). A Framework For Undertaking Creative Music-Making Activities In Hong Kong Secondary Schools. *Research Studies in Music Education*, 23(1), 59–75.

- Leung, B. W. (2008). Factors affecting the motivation of Hong Kong primary school students in composing music. *International Journal of Music Education*, 26(1), 47–62.
- Leung, C. C., Wan, Y. Y & Lee, A. (2009). Assessment of undergraduate students' music compositions. *International Journal of Music Education*, *27*(3), 250–268.
- Lewis, R. (2012). Composing the curriculum: Teacher identity. *British Journal of Music Education*, *29*(02), 153–161.
- Locke, T. (2009). Orff and the 'ivory tower': fostering critique as a mode of legitimation. *International Journal of Music Education*, *27*(4), 314–325.
- Major, A. E. (2007). Talking about composing in secondary school music lessons. *British Journal of Music Education*, *24*(02), 165–178.
- Major, A. E. (2008). Appraising composing in secondary-school music lessons. *Music Education Research*, *10*(2), 307–319.
- Major, A. E. & Cottle, M. (2010). Learning and teaching through talk: music composing in the classroom with children aged six to seven years. *British Journal of Music Education*, *27*(3), 289–304.
- Martin, J. (2012). Toward authentic electronic music in the curriculum: Connecting teaching to current compositional practices. *International Journal of Music Education*, 30(2), 120–132.
- Mateos-Moreno, D. (2011). Is it possible to teach music composition today? A search for the challenges of teaching music composition to student composers in a tertiary context. *Music Education Research*, *13*(4), 407–429.
- McGillen, C. W. (2004). In conversation with Sarah and Matt: perspectives on creating and performing original music. *British Journal of Music Education*, *21*(03), 279–293.
- Mellor, L. (2008). Creativity, originality, identity: investigating computer-based composition in the secondary school. *Music Education Research*, *10*(4), 451–472.
- Miller, B. A. (2004). Designing Compositional Tasks For Elementary Music Classrooms. *Research Studies in Music Education*, *22*(1), 59–71.
- Muhonen, S. (2014). Songcrafting: A teacher's perspective of collaborative inquiry and creation of classroom practice. *International Journal of Music Education*, 32(2), 185–202.
- Nichols, J. (2013). Rie's Story, Ryan's Journey Music in the Life of a Transgender Student. *Journal of Research in Music Education*, 61(3), 262–279.
- Odena, O. (Ed.). (2012). *Musical creativity: insights from music education research*. Farnham: Ashgate.

- Odena, O. & Welch, G. (2012). Teachers' perceptions of creativity. In: O. Odena (Ed.) *Musical creativity: insights from music education research* (pp. 29–48). Farnham: Ashgate.
- Oltedal, E. (2011). Bendik and Aarolilja: An example of arts partnership material for schools? *International Journal of Music Education*, *29*(2), 191–204.
- Onyeji, C. (2008). Drummistic piano composition: an approach to teaching piano composition from a Nigerian cultural perspective. *International Journal of Music Education*, *26*(2), 161–175.
- Partti, H. & Westerlund, H. (2013). Envisioning collaborative composing in music education: learning and negotiation of meaning in operabyyou. com. *British Journal of Music Education*, *30*(02), 207–222.
- Randles, C. (2010). The Relationship of Compositional Experiences of High School Instrumentalists to Music Self-Concept. *Bulletin of the Council for Research in Music Education* (184), 9–20.
- Randles, C. (2013). Composing our future: preparing music educators to teach composition. *Music Education Research*, *15*(3), 371–374.
- Reynolds, N. (2012). Hermeneutics and an understanding of children's electronic musical compositions. *Music Education Research*, *14*(3), 309–327.
- Riley, P. (2013). Music outside the lines: ideas for composing in K-12 music classrooms. *Music Education Research*, *15*(3), 369–371.
- Rusinek, G. (2012). Action-research on collaborative composition: an analysis of research questions and designs. In: O. Odena (Ed.) *Musical creativity: insights from music education research* (pp. 185–200). Farnham: Ashgate.
- Ruthmann, S. A. (2008). Whose agency matters? Negotiating pedagogical and creative intent during composing experiences. *Research Studies in Music Education*, *30*(1), 43–58.
- Ruthmann, S. A. & Hebert, D. G. (2012). Music learning and new media in virtual and online environments. In: G. E. McPherson & G. Welch (Eds.) *The Oxford Handbook of Music Education Vol. 2* (pp. 567–583). Oxford: Oxford University Press.
- Savage, J. (2005). Sound2Picture: developing compositional pedagogies from the sound designer's world. *Music Education Research*, 7(3), 331–348.
- Savage, J. & Fautley, M. (2011). The organisation and assessment of composing at Key Stage 4 in English secondary schools. *British Journal of Music Education*, 28(2), 135–157.
- Scimago Lab. (2013). Science Analysis. Retrieved 30.05. 2013, from http://www.scimagojr.com/

- Simpson, P. A. (2013). Looking back at Orpheus: Opera and cultural integration. *International Journal of Music Education*, *31*(4), 442–453.
- Smith, J. A., Larkin, M. & Flowers, P. (2009). *Interpretative phenomenological analysis: theory, method and research*. Los Angeles: SAGE.
- Stavrou, N. E. (2013). Fostering musical creativity in pre-service teacher education: Challenges and possibilities. *International Journal of Music Education*, *31*(1), 35–52.
- Stephens, J. (2013). Artistic Knowledge in Practice. In: E. Georgii-Hemming, P. Burnard & S.-E. Holgersen (Eds.) *Professional knowledge in music teacher education* (pp. XVIII, 220 s.). Farnham: Ashgate.
- Strand, K. D. (2005). Nurturing Young Composers: Exploring the Relationship between Instruction and Transfer in 9–12 Year-Old Students. *Bulletin of the Council for Research in Music Education* (165), 17–36.
- Strand, K. D. (2009). A Narrative Analysis of Action Research on Teaching Composition. *Music Education Research*, *11*(3), 349–363.
- Sætre, J. H. (2011). Teaching and learning music composition in primary school settings. *Music Education Research*, *13*(1), 29–50.
- Söderman, J. & Folkestad, G. (2004). How hip-hop musicians learn: Strategies in informal creative music making. *Music Education Research*, *6*(3), 313–326.
- Thorpe, V. (2012). Assessment rocks? The assessment of group composing for qualification. *Music Education Research*, *14*(4), 417–429.
- Tobias, E. S. (2012). Hybrid spaces and hyphenated musicians: secondary students' musical engagement in a songwriting and technology course. *Music Education Research*, 14(3), 329–346.
- Tobias, E. S. (2013). Composing, songwriting, and producing: Informing popular music pedagogy. *Research Studies in Music Education*, *35*(2), 213–237.
- Wallas, G. (1945). The art of thought. London: Watts & Co.
- Wallerstedt, C. (2013). 'Here comes the sausage': an empirical study of children's verbal communication during a collaborative music-making activity. *Music Education Research*, *15*(4), 421–434.
- Ward, C. J. (2009). Musical exploration using ICT in the middle and secondary school classroom. *International Journal of Music Education*, *27*(2), 154–168.
- Watson, A. & Forrest, D. (2008). Nurturing the careers of Australia's future composers. *International Journal of Music Education*, *26*(4), 315–325.
- Webster, P. (2012). Towards pedogogies of revision. In: O. Odena (Ed.) *Musical creativity: insights from music education research* (pp. 93–112). Farnham: Ashgate.
- Winters, M. (2012). The challenges of teaching composing. *British Journal of Music Education*, *29*(1), 19–24.

Wise, S., Greenwood, J. & Davis, N. (2011). Teachers' use of digital technology in secondary music education: illustrations of changing classrooms. *British Journal of Music Education*, *28*(2), 117–134.

Younker, B. A. & Hickey, M. (2007). Examining the profession through the lens of social justice: two music educators' stories and their stark realizations. *Music Education Research*, *9*(2), 215–227.

PhD-student
Tine Grieg Viig
Bergen University College, Faculty of Education
PO Box 7030
N-5020 Bergen
Norway
+47 971 18 196
tine.grieg.viig@hib.no