

# Crossing the boundary from music outside to inside of school: Contemporary pedagogical challenges

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Music education in formal settings has the last decades been characterised by informal methods borrowed from outside school. In this study we analyse situations in Swedish secondary school where pupils' experience of music outside school becomes visible in music class. Pedagogical challenges in these situations are identified that concern how to (i) coordinate perspectives on music in classrooms when arenas for learning music is increasing in number, (ii) make space for new musical movements in school, and (iii) consider the situated nature of learning that complicates the transfer from musical experiences outside to inside school.

#### Introduction

A recent report on the media habits of Swedish young people shows that the ownership of mobile phones among teenagers is almost 100%, and the use of smart phones is predominant. Using the phone for listening to music is as common as using it for calling and texting (Medierådet, 2014/2015). This constitutes yet another reminder of the diverse arenas for experience and learning music that are accessible to people today. Many music education researchers have highlighted this issue lately, e.g. Finney (2007) discusses the question of where music education takes place today: 'The answer is complex: all around, in and out of school. It is regular, ritualised, spontaneous, irregular and pervaded by ICT. The learning is both intentional and unintentional, formal and informal, casual, frequently private and variously directed by self and others (p. 11). In general education, learning outside and inside school has been regarded as two separate things with broad differences. Resnick (1987) characterises learning outside school as typically collective, contextualised and situation-specific. Allsup (2003) shows that musical learning as it occurs in rock bands and other out-of-school practices ties in well with Resnick's characteristics. Even if learning outside school, as Resnick describes it, sometimes seems like the ideal type (cf. Folkestad, 2006), it is not always possible, or even desirable, in school. Säljö (2000) discusses the evolution of education and makes a point about the need for schools in society: 'This decontextualisation of learning, resulting in what we call schooling and education, is both a pre-requisite for learning in a complex society and the change that causes many of the problems with learning that we see examples of in contemporary schools' (p. 41, our translation).

Numerous examples could be given of how efforts have been made in recent decades to make formal music education more relevant to students. The overall tendency has been to

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blur the boundary between musical experiences in school and in everyday life, something that also according to some studies has proven to be successful (Byrne & Sheridan, 2000; Green, 2002; Lamont, Hargreaves, Marshall & Tarrant, 2003). Critical voices are heard as well. For example, Cain (2013) raises the question: 'are informal pedagogies necessarily preferable' (p. 75), and compares a music teacher's formal pedagogy with the influential informal pedagogy described by Green (2006, 2008) in the British project Musical Futures. Green (2006) points out five characteristics of informal learning practices: (1) The learners are free to choose what music they like to play, music that they are already familiar with, enjoy and can identify themselves with. (2) The practice involves copying recordings by ear. (3) Learning takes place in groups, where the role of peers is as important as the teacher's. (4) Learning is haphazard, that is, not predefined in stages where the easiest part of a song must be learnt first; the globality of the song can be taken as point of departure. (5) Focus is on listening, performing and improvising rather than on reproduction. Cain (2013) contrasts this informal pedagogy by presenting a case study of a teacher practising a formal pedagogy, whose main affordances prove to be that conceptual learning is made possible; e.g., 'understanding musical features and the terms that name these features, enabling informed discussions and analysis' (p. 88).

In Sweden, rock band practice has been influencing formal music education in secondary school for a long time (Georgii-Hemming & Westvall, 2010; Lindgren & Ericsson, 2010). In this article we aim to problematise the practice of music education with blurred boundaries between musical experiences in and outside school, with particular focus on (i) the learners' perspective, (ii) learning as situated and regulated in contextual practices, and (iii) the very recent technological development and its consequences for musical learning. This discussion will be empirically grounded in data from a Swedish secondary school.

# Informal learning in Swedish music education - A background

The entrance of popular music into Swedish music education could be traced to the curriculum reform in teacher education in the 1970s (Olsson, 1993). One important change was that the earlier priority of Western music was substituted by a new and broader view on the value of different music styles. In particular, Afro-American music was given increased importance. This change has been described as a transition from *School Music* to *Music in School* (Stålhammar, 1995), where the transition means a shift from music as a school subject to a subject where the students' own preferences and experiences from outside school were viewed as important. The change was in line with the ideals voiced in educational, democratic and cultural politics during this time. Scheid and Strandberg (2012) have described this period as a change in focus, away from the main foci of teaching Western Classical music to the increased use of popular music. In parallel, a transition from formal to informal music teaching could be seen, since strategies from informal contexts replaced more formal ones. Rock band musicianship gained particular status as a model during this period (Campbell, 1998; Green, 2006; Gullberg & Brändström, 2004; Westerlund, 2006).

Considering 'music outside school', it is important to pay attention to the constant development of music in society. The popular music genres included in school in the 1970s are still present (Georgii-Hemming & Westvall, 2010), but what about later musical

movements? Technological progresses have created a multitude of new ways for people to experience, create and perform music, including new genres. Learning music is possible through a variety of sources, such as media, the Internet, MIDI and recording equipment (North, Hargreaves & Tarrant, 2002). Today everyone with loop-based music software on her computer can, at least theoretically, make music (Väkevä, 2010). In what way this affects, or should affect, teaching and learning music in school is discussed among researchers. Some argue that digital technologies can help the teachers enhance the learning experiences of the students to a greater extent than before (Burnard, 2007; Wise, Greenwood & Davis, 2011); others that teachers need to broaden their understanding of what digital technology can bring to school music education (Savage, 2007). The use of technology in the music classroom, including YouTube, mobile phones and MP3 players, cannot be considered in isolation, since most teaching and learning assume a range of available technologies (Stowell & Dixon, 2014). Empirical studies also indicate that even if new possibilities to use ICT in music education exist, technologies tend to change the practice in quite surprisingly limited ways (Olsson, 2014; Thorgesen & Zandén, 2014; Wallerstedt & Hillman, 2015). In Swedish music classrooms, where playing music together in conventional rock bands is common practice, researchers argue that the use of digital technology gives the pupils and teachers access to a large spectrum of artists, music, chords and lyrics, although the repertoire is still limited to rock and pop music (Scheid & Strandberg, 2012).

When outcomes of the 'rock-band model' in Swedish compulsory schools have been examined, some critical issues have been raised. Firstly, since rock and pop music are dominant other musical genres such as Western Classical music, jazz, folk music or music from other cultures are marginalised. Secondly, selections of styles within pop and rock genres are limited as well. A standardised school music repertoire consisting of well-established songs from the popular music genre, songs that are easy to sing and play, has emerged (Georgii-Hemming & Westvall, 2010). And thirdly, lessons based on notions about rock band musicianship also have consequences for the use of music instruments. Electric guitar, electric bass, keyboards and drums are the most common in the classroom. One of the conclusions in Swedish research is that the dominance of the rock band model at school is risky, since it *excludes* pupils. The pedagogy in use seems to be beneficial only in groups consisting of pupils with adequate instrumental skills (Lindgren & Ericsson, 2010). Since the rock band model embraces the pupils' influence, and means a shift of power from teacher to student, it can also cause ideological dilemmas between the pupils' desire for free expression and the school's fostering mission (Ericsson & Lindgren, 2011).

# Learning understood as situated and regulated in communities of practices

From a sociocultural perspective (Lave, 1988; Lave & Wenger, 1991), knowledge is always integrated in communities of practice. Lave (1988) has shown how a person who is able to solve mathematical problems in a particular situation may be unable to conduct 'the same' calculation in another setting. The problem is so intertwined with the setting in which it is learned that it can hardly be seen as identical to a similar one in a different setting. Säljö and Wyndhamn (1993) illustrate an analogous principle in a study of how pupils in maths

class solve an everyday problem. They show that the school is a context, with its traditions, tools and specific conditions, which shapes pupils' thinking in certain ways that does not necessarily facilitate the solving of everyday problems in other contexts.

In the sociology of education, one interest is directed toward how established knowledge regimes frame and regulate teaching and learning, as well as what can be regarded as knowledge. Pedagogical practices are social contexts through which cultural reproduction/production takes place (Bernstein, 2000). Teaching, learning and being in school have to be understood as processes of socialisation into an institutional context marked by social, educational and historical standards, typical for school practice. In the context of 'school music', a specific classroom culture of standardised rules and orders have been identified (Ericsson & Lindgren, 2010). The pupils are expected to be willing to follow these rules of the school's 'task culture' (p. 52), which set the framework of which musical activities may occur. The rules of the classroom function as discursive techniques for social control and student management. When theorising learning in educational research, one may not take for granted contexts and cultural practices (Kullenberg & Lindgren, in press).

Emphasising the situated nature of knowledge and learning constitutes a critique against the cognitivist notion of transfer (Säljö, 2015). From a situated perspective, there is no straightforward transfer of knowledge learned in one situation to a new context. In the context of education, this transfer is primarily discussed as occurring from school to everyday life, e.g., people do not practice their school knowledge in mathematics when they do calculations in a shop. In music education, as explained above, the 'direction' of transfer is often supposed to work from outside school to inside. That pupils recognise music in school that they know from outside school may enhance their learning. But what happens to musical experiences when they occur in new situations? Since the context is different, how the students experience the music may differ (cf. Green, 1988). Säljö (2015) argues that 'we are responsive to how we experience a situation and its conditions, and our thinking is thereby situated in practices that are social and emotive' (p. 113, our translation). An important task for teachers, from this sociocultural perspective, becomes to consciously work on the crossing of boundaries, i.e., explaining how one solution can be adequate in a new situation. Grossen, Zittoun and Ros (2012) identify two kinds of 'boundary crossing events' in investigations of lessons in philosophy. In the first, 'the teacher or a student imports a cultural element, a social event, or a personal experience occurring outside the context of the classroom and connects it with a cultural element currently taught in the classroom'. The second type consists of 'exporting a school subject matter outside the class in order to make sense of elements, events, or experiences that take place in everyday life' (p. 19). The former type is of particular interest to the present study, where the focus is on a practice clearly aimed at integrating a music practice known from outside school into the context of formal music education. Grossen et al. find that a cultural element introduced by the teacher, and assumed to be known by the students, did not necessarily provoke the students' participation.

## Learning from the learner's perspective

In order to point out challenges facing the learners' perspective in the music classroom, we draw on the concepts of didactics. In continental Europe, as well as in the Nordic countries,

didactics has been central throughout educational history. In the English-speaking world it may have different connotations (Hopmann, 2007; Nordkvellen, 2003) and therefore some clarification may be useful. What we refer to is not didactics as a 'lecturing teacher and listening children' (Pramling & Pramling Samuelsson, 2011, p. 4) but as 'a contentbased student activity, not as swallowing a sermon or a monologue or otherwise one-sided knowledge distribution by a teacher' (Hopmann, 2007, p. 113). From a didactic perspective, teaching practices are understood as a relationship between three foundations: the teacher, the learner and the content. Central to a didactic discussion is the distinction between matter and meaning, i.e. the curriculum and how the learner experiences it. The notion of the learner's perspective is emphasised in the education of children, and practically means that the teacher must give room for children to express their views of the teaching content (Sommer, Pramling Samuelsson & Hundeide, 2009). In a sociocultural perspective, the need to coordinate the teacher's and the child's perspective is theorised in the concept of intersubjectivity (Rommetveit, 1985). A state of intersubjectivity means that partners in a dialogue are able to share perspective. Didactic knowledge is fundamental for the professional teacher, and is defined as the teachers' ability to make deliberate choices about what and how to teach.

#### Method

The empirical material referred to in this article is extracted from a larger project: *Changing notational practices and the transformation of musical knowing among the young in the digital age* (2013–2015). Its general purpose is to study the development of musical skills among young people in the new media ecology and the main source of data is video observations of music classes in compulsory school year nine. Two student groups in one school are followed for eight weeks. The school is located in a small town in Sweden and the majority of the pupils are ethnic Swedes with a middle-class background. Prevailing ethical guidelines have been followed which means, among other things, that all the participants were informed about the purpose of the study and that they will remain anonymous. They all gave their informed permission to participate.

One of the researchers was present at the school during the study. Each class had a one-hour lesson every week. The activities were organised as a 'band project' where the students formed ensembles, decided on a pop song (mostly songs that the teacher had prepared even if other choices were possible), rehearsed, and in the end undertook a performance at a local school concert. In addition to the main music classroom, the ensembles had access to three other rooms which were all equipped with drum sets, electric and acoustic guitars, electric bass, keyboards and PA systems with microphones for singing. The school is one of many Swedish schools that have invested in a one-to-one project, which means providing every student with a personal laptop. Most of the students also own and bring private mobile phones with Internet access to the classroom.

There were four bands in each class, observed by using two cameras; one placed on a tripod in the rehearsal room, and one hand-held by the researcher. In total 12 hours of rehearsals were recorded and all the resulting video data were transcribed verbatim. We will selectively focus on findings of *boundary crossing events* (Grossen *et al.*, 2012) where

pupils' experiences of music outside school become visible in the classroom, and point out pedagogical challenges of a didactic nature.

# Pedagogical challenges

i. Diverse meanings of the same matter

The teacher in this study rotates between the four different ensembles rehearsing in different rooms, and each group meets the teacher for sometimes as little as five minutes during a lesson. In many ensembles the students express desperation and frustration while struggling with learning to play their songs. Often they fail in their attempts to play together. In one of these groups the guitarist is missing one day. This constitutes an example of how a pupil's musical experience of playing the guitar is brought to school, but not 'crossing the boundary' to music as it is taught in the classroom. She has skipped class and is sitting outside the classroom. She has brought a guitar and when we find her, she is playing a quite advanced song on the guitar.

Excerpt 1: Being able to play

RESEARCHER: That sounds great! Where have you learnt that?

Guitarist 1: Well, I've been playing for a year or so, and today I'll take my first guitar lesson outside school!

RESEARCHER: A-ha, are you going to the community music school [Swedish: musikskolan]?

(The guitarist explains that it is a private school and that the lesson is a birthday present from her parents.)

Guitarist 1: My parents want me to go there to learn the basics. Actually, I can play already 'cause I watch YouTube a lot, and friends and stuff.

RESEARCHER: Okay.

Guitarist 1: But they want me to learn the basics, like facts about ... the technique.

This episode highlights the diverse arenas for learning to play instruments available to young people today (cf. Finney, 2007). Besides compulsory school there are public and private music schools, and most recently, both video-lessons and informal video clips on how to play different instruments are available on the Internet (cf. Kruse & Weblen, 2012; O'Neill, 2012). Still, the *matter* of learning to play the guitar can have different *meanings* in different settings; or framed differently, the musical knowledge is embedded in different communities of practices (Lave & Wenger, 1991). Therefore, a didactic challenge becomes how to coordinate perspectives and meanings picked up from different musical practices from which students have varied experience. When the young guitarist in this excerpt describes her musical learning, the music class that is running while this conversation is taking place, is not mentioned. She has learned at home through *YouTube* and friends, and she will take classes, she says. That a school project is going on, specifically aimed

at teaching skills in guitar playing, does not seem to be important to her; she avoids mentioning it while talking about her own learning. One obvious difference between the potential meanings of playing guitar in these parallel settings is that 'the school guitar' is always conducted as an collective activity, playing in whole class or in smaller ensembles, while her own guitar playing is an individual project; she plays solo and is not a part of a band. Guitar-playing as a private and individual practice is more seldom mentioned as example of informal musical practices that more often are described as playing in bands.

#### ii. The teacher, the learner and the content

When considering the relationships between the teacher, the learner and the content (the music), the teacher and the music didactically serves as a starting point in secondary music education tinged by 'the rock band model'. The content has tended to be taken for granted, since new electronic genres are neglected in favour of the guitar-based rock and pop that makes up the new canon of 'school music' (Georgii-Hemming & Westvall, 2010). As already mentioned, while what is regarded as 'teenage music' is constantly changing, in school, it seems to be the same 'teenage music' that is practiced today as the last three decades. The following observation is made in the same group to which the guitarist in Excerpt 1 belongs.

# Excerpt 2: Practising 'teenage music'

One boy (Guitarist 2) in the ensemble sits in the middle of the room. He picks up the electric guitar, makes noise using it and sings with a boisterous and foolish voice. The drummer starts to play the song they are supposed to be playing (a typical acoustic pop song), but everyone stops just after a bar or so. Guitarist 1 screams that the boy in the middle is 'messing things up for the whole fucking band' and one of the others adds 'shut up'. Guitarist 1 hides her face in her hands and calls for the teacher with a desperate voice. Then the boy in the middle (Guitarist 2) starts to chat with the drummer. He says that at home he is using a DJ-program and that he has made his own remix of a contemporary song in the genre of disco. He describes how it sounds.

In Excerpt 2, two versions of 'teenage music' are visible, one is brought as a cultural element by one of the pupils, and one is part of the established culture of 'school music'. The boy mentions his personal experience of music outside the context of school, but there does not seem to be any room for it in the classroom practice, following the rules of the rock band model.

The song they are supposed to rehearse, albeit failing in doing so, is a typical song within the genre described as easy-to-play pop with few chords. The song is possible to play only using quarter notes, and acoustic guitar is the most salient instrument. The ensemble consists of students playing guitars, piano, bass and drums. The musical experience put forward from one of the boys is an individual one, as in the former example. He has access to a DJ software programme at home, and he has skill in using it (according to himself) obtained outside the school setting. Here there are no indicators that the students are motivated in rehearsing their song by familiarity with the genre as being 'their own' music.

On the contrary, they seem clearly uncomfortable. They are not able to play together, they blame each other and they desperately call for the teacher to help. It even results in some of them skipping class later.

The didactical challenge arising here is related to *the musical content* and *what* is to be learned. Contemporary technological development, both in terms of the digitalisation of music, and the availability of mobile technology, has changed young people's ownership of music. Today, new musical genres exist, as well as new possibilities to practice music creatively (cf. Burnard, 2012). This points to a need for a discussion about *what* music to teach in school, and *whose* music. It also underlines the didactical challenge of creating intersubjectivity.

The problem of what is being meant by what is said cannot any longer be pursued in terms of stipulated unequivocal 'literal' meanings of expressions. The basic riddle within a pluralistic approach is rather how states of intersubjectivity and shared social reality can be attained in encounters between different 'private worlds'. (Rommetveit, 1985, p. 187)

In different 'private worlds', to practice music can have very different meanings, and thus working on the boundary to take one another's perspective becomes crucial for an inclusive music education.

### iii. Everyday experiences in a formal setting

Along with the development of new technologies, especially information technology, the nature of musical skills is also changing (Wallerstedt & Pramling, 2015). For example, being able to cover a song is no longer a solely ear-based activity. One who wants to carefully listen to how a song is to be played can very often rely not only on his or her keen listening, but also on search engines such as Google available on the mobile phone, a device almost always at hand. A consequence is that it is no longer equally important to be able to cover exactly how the lyrics go; it is easier to find them on the Internet, via a written representation. The same goes generally for chords, while rhythm more seldom is notated and is something that must be discerned by ear (ibid.). The mobile phone becomes a mediator between the students' experiences of music outside and inside school (Stowell & Dixon, 2014). With this artefact students can literally bring their own musical worlds to school in form of playlists and sites that serve as communities for sharing musical interests. On such sites they are used to sharing and searching for music and musical notations. In this empirical study, we can see how the mobile phone is used for precisely these purposes. In the empirical study, the students use no CD players. On every occasion when recorded music is listened to, the streaming service Spotify on their personal mobile phones is used (see also Wallerstedt & Hillman, 2015). An overall aim of the band project, stated by the teacher, is to afford an authentic musical experience of playing in a pop ensemble, but it is still framed as a school task. This framing is visible, for example, in the clear awareness the students show of the fact that they will be assessed (see below, Excerpt 3b).

In the following excerpt, the members of an ensemble are practising the intro and the first two verses of the pop song they have chosen. One of them has put a mobile phone on the piano and they try to play along with the music. Firstly, the pianist plays an intro consisting of four bars. Secondly, the singer sings the first verse. After that, the other instruments are supposed to join in, but the players fail to hear when it is time to begin. The teacher enters the room.

Excerpt 3a: Covering a pop song vs. solving a school task

TEACHER: Why do you start with only song and piano?

Guitarist: 'Cause it starts like that. According to Spotify.

TEACHER: According to Spotify? [--] And you have to do exactly as on Spotify, do

you?

Guitarist: No. It is easier if everyone starts at the same time, do you think?

TEACHER: Yes.

The informal way of learning, using a private mobile phone to cover the song, is here being formalised when the teacher intervenes and supports them. She represents the ideal of the authentic rock experience by initiating the project, but at the same time she re-frames 'their own' project to a question of a school song which it is possible for them to succeed in playing. The song needs to be reduced in a way so it is hardly recognisable.

In the following excerpt, another ensemble also tries to cover a song with the instruments being played in different parts. The teacher is not present here; still the students themselves carry out the 'school's task culture' (Ericsson & Lindgren, 2010).

Excerpt 3b: Covering a pop song vs. Solving a school task

Guitarist: (Listening to the song using Spotify.) It is not much guitar here.

Drummer: As I said! The music is not so prominent here (in-audible).

Singer: But go for the chords! Everyone will be assessed.

In excerpt 3b, the students are able to hear that there is no guitar in a certain part of the song. The drummer equates the guitar with 'the music'; it is just the melody and the rhythm being heard, not the chords. But even when finding out that the original song (a pop song they have chosen by themselves and which they seem to like very much) is played like this, they prefer to let all instruments play at the same time. It seems they find it more likely they will get a higher grade if they show that they can change chords on the guitar instead of following the original song, here represented on the mobile phone and *Spotify*. It is also notable that they do not discuss this as a question of an aesthetic choice, of which sounds the best. It is a question of doing what is best for non-musical reasons.

One question that arises of how to teach concerns what project the teacher should support, in order to include *all* students' musical knowledge. Another question is how the teacher can help in coordinating the informal experience of music with the formal frame. There are conflicting interests shown in the excerpts, but these could not be easily divided in the students' and the teacher's interest, or in methods linked to formal and

informal learning. Rather, we argue that they have to be understood as effects caused by polarities on a structural level. The didactical dilemmas can be traced to interests derived from the school's culture in general. '[W]hen institutional arrangements set boundaries and create patterns for how to speak and learn' it is 'important to take into consideration that learning is not a clear-cut category or unequivocal phenomenon' (Säljö, 2000, p. 46, our translation). The institutional setting, known to the pupils as characterised by grades and tasks, is clearly acting to frame the activity (see excerpt 3a and 3b) as something different from the 'everyday' rock band activity it is meant to be.

#### Conclusion

In this study, we aimed to problematise the practice of music education in secondary school, renowned for its blurred boundaries between musical experiences in and outside school, with particular focus on (i) the learners' perspective, (ii) the critique of transfer informed by sociocultural theory and (iii) the very recent technological development and its consequences for musical learning. Using concepts from the didactical research tradition, we have found three challenging areas, described and exemplified above. The first is related to the many new arenas for making musical meaning that are available through the Internet. All the possible parallel musical worlds of young people challenge the established 'sense of music' that has become inscribed in music culture of school; music as 'authentic', guitarbased pop and rock music played in ensembles. The second concerns the question of what to be learnt, and whose music is, or should be, used in education. The diverse possibilities for young people to learn and make musical experiences constitute a challenge to teachers to make room for new musical movements to be brought across the boundary from outside to inside school. The third and maybe the greatest challenge concerns the question of how to teach in the new media landscape. This challenge has its roots in the general problem of education, which is that learning is situated in practices, and that the school from the learners' perspective never will be a similar context to musical arenas outside school. One question for further research is to pay attention to the contextual difference experienced by the pupils when practising in groups, in school, what they at home may have played individually (e.g., with an instructor on YouTube).

Like Burnard (2014), we argue that there is a need to rethink, develop and reconsider the epistemological foundation of music education. In order to progress the democratic tradition in Swedish schools we have to challenge what is didactically taken for granted within the field. One way of doing this is to reconsider the relationships between the teacher, the learner and the content from a contextual perspective.

#### References

ALLSUP, R. E. (2003) Mutual learning and democratic action in instrumental music education. *Journal Of Research In Music Education*, **51**(1), 24–37.

BURNARD, P. (2007) Reframing creativity and technology: Promoting pedagogic change in music education. *Journal of Music Technology and Education*, **1**(1), 196–206.

BURNARD, P. (2012) *Musical Creativities in Practice*. Oxford, Oxford Scholarship Online, DOI: 10.1093/acprof:oso/9780199583942.001.0001.

- BURNARD, P. (2014) Problematizing what counts as knowledge and the production of knowledges in music. In E. Georgii-Hemming, P. Burnard & S.-E. Holgersen (Eds.), *Professional Knowledge in Music Teacher Education* (pp. 97–108). Aldershot: Ashgate.
- BYRNE, C. & SHERIDAN, M. (2000) The long and winding road: The story of rock music in Scottish schools. *International Journal of Music Education*, **36**, 46–57.
- CAMPBELL, P. S. (1998) Songs in their Heads. Music and its Meaning in Children's Lives. Oxford: Oxford University Press.
- CAIN, T. (2013) 'Passing it on': Beyond formal or informal pedagogie. *Music Education Research*, **15**(1), 74–91
- ERICSSON, C. & LINDGREN, M. (2011) The conditions for the establishment of an ideological dilemma: Antagonistic discourses and over-determined identity in school music teaching. *Discourse: Studies in the Cultural Politics of Education*, **32**(5), 713–728.
- FINNEY, J. (2007) Music education as identity project in a world of electronic desires. In J. Finney & P. Burnard (Eds.), *Music Education with Digital Technology*. London: Continuum International Publishing Group.
- FOLKESTAD, G. (2006) Formal and informal learning situations or practices vs formal and informal ways of learning. *British Journal of Music Education*, **23**,135-145.
- GEORGII-HEMMING, E. & WESTVALL, M. (2010) Music education a personal matter? Examining the current discourses of music education in Sweden. *British Journal of Music Education*, **27**(1), 21–33.
- GREEN, L. (1988) *Music on deaf ears: Musical meaning, ideology, education*. Great Britain: Manchester University Press.
- GREEN, L. (2002) How Popular Musicians Learn. Aldershot: Ashgate Publishing.
- GREEN, L. (2006) Popular music education in and for itself, and for 'other' music: Current research in the classroom. *International Journal of Music Education*, **24**(1), 101–118.
- GREEN, L. (2008) Music, Informal Learning and the School: A New Classroom Pedagogy. Aldershot: Ashgate.
- GROSSEN, M., ZIDDOUN, T. & ROS, R. (2012) Boundary crossing events and potential appropriation space in philosophy, literature and general knowledge. In E. Hjörne, G. Van der Aalsvoort & G. De Abreu (Eds.), Learning, Social Interaction and Diversity Exploring Identities in School Practices (pp. 15–33). Rotterdam: Sense.
- GULLBERG, A-K. & BRÄNDSTRÖM, S. (2004) Formal and in-formal music learning amongst rock musicians. In J. Davidson (Ed.), *The Music Practitioner: Research for the Music Performer and Listener* (pp. 161–174). Aldershot: Ashgate Publishing.
- HOPMANN, S. (2007) Restrained teaching: The common core of didaktik. *European Educational Research Journal*, **6**(2), 109–124. DOI: 10.2304/eerj.2007.6.2.1.9.
- KRUSE, N. B. & VEBLEN, K. K. (2012) Music teaching and learning online: Considering YouTube instructional videos. *Journal of Music, Technology & Education*, **5**(1), 77–87.
- 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**, 229–241.
- LAVE, J. (1988) Cognition in practice: Mind, Mathematics and Culture in Everyday Life. Cambridge, MA: Cambridge University Press.
- LAVE, J. & WENGER, E. (1991) Situated Learning: Legitimate Peripheral Participation. Cambridge, MA: Cambridge University Press.
- LINDGREN, M. & ERICSSON, C. (2010) The rock band context as discursive governance in music education in Swedish schools. *Action, Criticism & Theory for Music Education*, **9**, 3.
- MEDIERÅDET (2014/2015) Ungar och medier: Fakta om barns och ungas användning och upplevelser av medier [Kids and media: Facts about young people's use and experience of the media] Statens Medierad. Rapport.
- NORDKVELLEN, Y. T. (2003) Didactics: From classical rhetoric to kitchen-Latin. *Pedagogy, Culture & Society*, **11**(3), 315–330.

- NORTH, A.C., HARGREAVES, D.J. & TARRANT, M. (2002) Social psychology and music education. In R. Colwell & C. Richardson (Eds.), *The New Handbook of Research on Music Teaching and Learning.* A Project of the Music Educators National Conference (pp. 604–625). Oxford: Oxford University Press
- OLSSON, B. (1993) Sämus en musikutbildning i kulturpolitikens tjänst? En studie om en musikutbildning på 70-talet' [Sämus music education in the service of a cultural policy? A study of a teacher training programme during the 1970s]. Göteborg: Skrifter från musikvetenskap, nr 33. Musikhögskolan i Göteborg.
- OLSSON, B. (2014) Den IT-baserade musikundervisningens context, kärna och äkthet [The ICT based music education's context, core and authenticy]. In P.-O. Erixon (Ed.), Skolämnen i Digital Förändring. En Medieekologisk Undersökning [School Subjects in Digital Transformation. A Media Ecological Study] (pp. 77–110). Lund: Studentlitteratur.
- O'NEILL, S. A. (2012) Becoming a music learner: Towards a theory of transformative music engagement. In G. E. McPherson & G. Welch (Eds.), *The Oxford Handbook of Music Education* (Vol. 1) (pp. 163–186). Oxford: Oxford University Press.
- PRAMLING, N. & PRAMLING SAMUELSSON, I. (2011) Introduction and frame of the book. In I. Pramling Samuelsson & N. Pramling (Eds.), *Educational Encounters: Nordic Studies in Early Childhood Didactics* (pp. 1–14). Dordrecht, The Netherlands: Springer.
- RESNICK, L. B. (1987) Learning in school and out. Educational Researcher, 16(9), 13–20.
- ROMMETVEIT, R. (1985) Language acquisition as increasing linguistic structuring of experience and symbolic behaviour control. In J. V. Wertch (Ed.), *Culture, Communication, and Cognition. Vygotskian Perspectives* (pp. 183–204). Cambridge: Cambridge University Press.
- SAVAGE, J. (2007) Reconstructing music education through ICT. Research in Education, 78(1), 65–77.
- SCHEID, M. & STRANDBERG, T. (2012) Schools' permeable walls and media cultures: An example of new prerequisites for music education in Sweden. In M. Gall, G. Sammer & A. De Vugt (Eds.), European Perspectives on Music Education 1: New Media in the Classroom (pp. 237–255). Innsbruck: Heibling academics.
- SOMMAR, D., PRAMLING SAMUELSSON, I. & HUNDEIDE, K. (2009) *Child Perspectives and Children's Perspectives in Theory and Practice*. Dordrecht, The Netherlands: Springer.
- STOWELL, D. & DIXON, S. (2014) Integration of informal music technologies in secondary school music lessons. *British Journal of Music Education*, **31**(1), 19–39.
- STÅLHAMMAR, B. (1995) Samspel. Grundskola Musikskola i Samverkan: En Studie av den Pedagogiska och Musikaliska Interaktionen i en Klassrumssituation [Interplay. School and Music School in Collaboration: A Study of Pedagogic and Musical Interaction in a Classroom Situation]. Göteborg: Göteborgs universitet.
- SÄLJÖ, R. (2000) *Lärande i Praktiken. Ett Sociokulturellt Perspektiv* [Learning in Practice: A Socio-cultural Perspective]. Stockholm: Prisma.
- SÄLJÖ, R. (2015) *Lärande en Introduktion till Perspektiv och Metaforer* [Learning an Introduction to Perspectives and Metaphors]. Malmö: Gleerups.
- SÄLJÖ, R. & WYNDHAMN, J. (1993) Solving everyday problems in the formal setting. *An empirical study of the school as context for thought.* In S. Chaiklin & J. Lave (Eds.), *Understanding Practice. Perspectives on Activity and Context* (pp. 327–342). Cambridge MA: Cambridge University Press.
- THORGESEN, K. & ZANDÈN, O. (2014) The Internet as teacher. *Journal of Music, Technology & Education*, 7(2), 233–244.
- VÄKEVÄ, L. (2010) Garage band or GarageBand®? Remixing Musical Futures, *British Journal of Music Education*, **27**(1), 59–70.
- WALLERSTEDT, C. & HILLMAN, T. (2015) 'Is it okay to use the mobile phone?' Student use of information technology in pop-band rehearsals in Swedish music education. *Journal of Music, Technology & Education*, **8**(1), 71–93.

- WALLERSTEDT, C. & PRAMLING, N. (2015) 'Playing by the connected ear': An empirical study of adolescents learning to play a song from Internet-accessed resources. *Research Studies in Music Education*, **37**(2), 195–213.
- WESTERLUND, H. (2006) Garage rock bands: A future model for developing musical expertise? *International Journal of Music Education*, **24**(2), 119–25.
- 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.

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