Broadening the notion of aural skills through peer learning, instruments and student-framed assignments: a course with music performance students

Lotta Ilomäki

Abstract
Aural-skills educators are increasingly subscribing to a broad notion of musical ‘hearing’, which recognises both formal and informal contexts of musical learning. The role of musical instruments has also garnered increasing attention, as well as open-ended types of musical tasks, which invite the students to explore different solutions rather than to pursue single ‘correct’ answers. Such development is also connected to wider discussions on future musicianship, which suggest the inadequacy of too fixed curricular contents, and emphasise students’ readiness to accept challenges and develop into lifelong learners.

The present article describes a pedagogical project that developed ways to integrate peer learning and the use of the students’ instruments or instrumental repertory into regular aural-skills learning in higher education and to involve the students in the design of their aural-skills tasks. The text maps some of the theoretical underpinnings of the project and describes a course for music performance students. Building on previous practitioner research projects, the course sought to develop practical solutions that support a broad view of musical awareness and musicianship. The text describes the teacher’s experiences of the course as well as some challenges when moving from a tradition with fixed aims and precisely framed exercises towards a pedagogy that gives more responsibility to the students in framing their aural-skills practice.

Keywords: aural skills; ear training; peer learning; action research; curriculum development
1. Introduction: aural skills and future musicianship

The aim of aural-skills education is to support music students in developing their aural awareness of music and their music literacy. As a subject that belongs to the first years of higher education in music, aural skills is likely to contribute to the students’ ideas of what it is to study music professionally. It is therefore important to consider what ideas and values of musicianship aural-skills education conveys to students who should develop into future musicians.

Future musicianship has indeed been a central topic of discussion in institutions of higher music education. The rapidly changing cultural world calls for musicians who will be capable of responding to new types of professional demands and actively create opportunities for music in the society (Smilde 2009; Sloboda 2011). The discussion has also addressed the need to cultivate aural and musicianship skills that would enable musicians to respond to the growing stylistic diversity of music (Leong 2003) and to communicate with audiences (Sloboda 2013).

The last decade has brought about major developments in the field of aural-skills education. The music studied in aural-skills courses has become more authentic and inclusive in terms of musical styles, and teachers are increasing employing the students’ instruments, playing by ear and elements of improvisation (e.g. Blix & Bergby 2007; Bannan 2010). By broadening the students’ musicianship beyond traditional instrumental performance skills, modern aural-skills education seems to offer the type of breadth that serves to strengthen musicians’ response to future challenges.

Yet, formal music education still easily conveys a ‘hidden curriculum’ wherein aural skills are about responding to externally set demands, rather than a part of the students’ personal musicianship that they will develop through their own active choices, interests and habits of musical action. Frequently, too, the students are first expected to go through large amounts of traditional contents before their artistic development can begin –which involves the risk of constantly expanding curricula (Cox 2007).

The present project is rooted in the idea that aural-skills education should develop from an attempt to develop fixed and pre-determined skills into the cultivation of an active, questioning and listening relationship to music and its structures. To meet the challenges of future musicianship, the students should learn to develop their aural awareness themselves. Furthermore, they should also be given the possibility to share

---

1 I use the term *aural skills* (also *ear training* or *gehör*) for a formal subject and formally taught skills, and *aural awareness* for the broader variety of ways wherein people aurally perceive, anticipate and remember music in connection to their musical activities. I also refer to the term ‘hearing’, in quotation marks, to suggest that such skills involve many other domains of experience besides the aural (see section 3). (For international terminology, see Ilomäki 2011: 12.)
Broadening the notion of aural skills

their learning processes with others and thereby become increasingly aware of the possible richness and breadth of musical awareness.

2. The practitioner–research project

This article is based on a practitioner-research project with two teachers and 16 students at the Sibelius Academy, Finland, spanning the academic year 2012-2013. We explored how we can incorporate small-group work and the use of students’ instruments into a regular aural-skills use at bachelor’s level, and how we can involve the students in framing their aural-skills tasks. For the students, the course represented a somewhat new approach, which led us to discuss how underpinning pedagogical ideas are translated into educational practice. I acted as the teacher responsible for the course, and also took responsibility for the research. My colleague, M.Mus. Elina Haapamäki, taught part of the course and critically followed the small-group work and the use of students’ instruments.

The project can be regarded as one action cycle² that continues the work that we have previously done at the Sibelius Academy on instrumentalists’ aural needs (Becker-Gruvstedt 2009; Ilomäki 2011) and the development of collaborative learning in aural-skills groups (Ilomäki 2013). I will take here a limited view of the project, based on selected data, and address the following research tasks:

• to describe, from my teacher’s perspective, the process of incorporating peer learning and the use of students’ instruments or instrumental repertory into a regular course at bachelor’s level and encouraging the students to participate in the design of their aural-skills assignments
• to describe and reflect on some challenges while seeking to convey to the students a broad conception of aural skills, and how we worked on the challenges in the course.

The participants studied the viola (4 students), cello (4 students), percussion (2 students) and violin, clarinet, horn, harpsichord and kantele (1 student each). The course, called ‘Aural skills B’, was the second of two aural-skills courses belonging to the bachelor students’ programme, but students could start directly at this level if they had previous studies at professional level. The group involved five first-year students.

---

² Cyclical action-research models involve the idea of alternating action and reflection phases; see e.g. Elliott (1991: 69–71) and Altricher, Posch & Somekh (1993: 6). For criticism of the models or their use in research projects, see e.g. Somelkh (1995: 342), Noffke & Somelkh (2005: 91) and Cain (2008: 308).
and six second-year bachelor students, one exchange student and four who had for various reasons prolonged their aural skills studies. We met 28 times between September 2012 and April 2013, each meeting spanning 90 minutes.3

The course covered post-tonal melody and harmony, polyphonic and harmonic structures in tonal music (part writing, choral singing and harmonic analysis), score reading and rhythm study (e.g. changing metres). The curriculum suggests a flexible approach to these musical contents and encourages the use of the students’ instrumental repertory.

Practitioner research, which I conceive here as a sub-branch of action research, combines the pursuit of practical development with a search for a deeper analytical understanding of one’s professional practice, its underpinning beliefs and values (Altrichter, Posch & Somekh 1993: 203–204; Cochran-Smith & Lytle 2009: 45). Principles that I consider particularly important here are the pursuit of critical reflection of our own practice (Ilomäki 2011: 106–110) and the development of data-driven questions (ibid. 109). An important source behind the present project is the work of James McKernan (1996; 2008), who has advocated what he calls “the process-inquiry model for the design of curriculum” (McKernan 2008: 84). According to him, curriculum should be conceived not as a fixed description of contents and expected outcomes, but as a well-planned process for students’ and teachers’ construction of knowledge, insights and dispositions.

I focus this text on my teacher’s viewpoint in the spirit of a self-study (Noffke 2009: 15-16), and pursue a critically reflected description that has been informed by my gathering of data from the students and the possibility to get feedback from Elina. I also had the opportunity to share examples of my data with fellow researchers at the Sibelius Academy.

I informed the students about the research at the beginning of the course and invited them to contribute to the development of the new models of working and to share their viewpoints on a voluntary basis. After the course, all the participants gave their permission for the use of their data in the research.4

For the present text, I draw on the following data:

- my research journal, written correspondence with Elina and notes on our spoken conversations

---

3 Of the 28 meetings, I taught 19 and Elina taught 9. We were both present at two meetings. Additionally, we arranged two meetings with students who completed some of their assignments later, and I also received some written transcription afterwards.

4 The research project has been approved by the faculty of classical music at the Sibelius Academy. The Sibelius Academy has also committed itself to the guidelines for the responsible conduct of research set by the Finnish Advisory Board on Research Integrity, http://www.tenk.fi/en.
Elina’s observation notes on the students’ small-group work
my lesson plans, course materials and written course assignments for the small-group sessions
the e-mail correspondence wherein the students presented their plans for the optional assignments (see section 4) and my comments to them
the students’ written and verbal feedback at different stages of the course

In the following, section 3 maps some theoretical principles behind the project, and section 4 describes the progress of the course from my teacher’s perspective. Section 5 is based on selected findings from the project and describes the process whereby we negotiated some assumptions on aural-skills learning with the students.

3. An action-oriented perspective on aural skills

Aural-skills education has a very classroom-oriented tradition, which has emphasised the development of specific musical skills through sequentially ordered activities and materials. Even though the activities of aural-skills course have become richer and more varied than before, aural-skills pedagogy still often seems to rest on the belief that the skills and knowledge that future professionals will need could be predicted and organised into rather fixed curricula. However, recent discussions on higher education have heavily challenged this assumption, and emphasised the need to educate the students into life-long learners who would be able to face new challenges and to be responsible for their own learning (Barnett 2007; Smilde 2009).

The dichotomy between developing skills and knowledge and preparing students for the unknown future, however, erodes if conceiving musical skills themselves in a way that is dynamic. The present project approaches this task through what I call the action-oriented concept of the human mind: one that views human thinking and perception as being rooted in the constant interaction between people and their environment. From this perspective, aural-skills learning entails the development of a constantly evolving relationship between the musician and the environment – not the gathering and storing of knowledge and skills. I have articulated this approach to aural skills in more detail in my doctoral dissertation (Ilomäki 2011), drawing on the philosophy of John Dewey, its applications in recent music education philosophy (e.g. Westerlund 2002; Määttänen 2005; Väkevää 2012) and some cognitive research that shares a similar approach to the human mind (e.g. Lakoff & Johnson 1999; Johnson 2007).
From the action-oriented perspective, the production of musical sound by singing and playing leads musicians to develop habits of action that sensitise their perception to different dimensions of music and also to enable them to anticipate musical patterns and structures. Through sound-producing actions, they learn to connect action with expected musical sound and anticipate, for example, how certain phrases will sound if played or sung. If the musical actions involve instruments, notation or other written symbols, the musical patterns also get visualised and displayed outside the musician’s body. With experience, musicians can learn to connect musical notation, chord symbols or instrument positions to expected sound and mentally ‘hear’ the musical patterns that will result from certain actions – even without overt action and audible sound. For example, they can learn to anticipate the melodic patterns that will result from certain pitch combinations on an instrument or staff notation.

From the action-oriented perspective, much of the control and discrimination that characterised experienced musicians’ perception and imagery of music is actually derived from the different habits of action that the musicians have learned to connect with anticipated musical sound. Therefore, people who have learned different habits of musical action are not likely to ‘hear’ music in the same way. (Cook 1990; Downey 2002; Ilomäki 2011, 55–70.) For example, different instruments are likely to lead their players towards different perceptual tendencies by their very physical properties, but also through the different cultural habits whereby musicians have learned to use them. In keyboard instruments, pitch gets displayed in a highly visual and categorical way, whereas such instruments as the horn offer little visual coordinates for pitch but instead a rich range of possibilities in terms of intonation (see also Becker-Gruvstedt 2009). There are, however, great differences in the perceptual tendencies of even pianists, or other representatives of a single instrument, which seem to be connected to how they have learned to act with their instruments – for example play by ear versus only from scores.

By paying attention to habits of sound production as a basis of aural-skills learning, it is possible to understand processes of aural-skills learning both in classrooms and the many occasions wherein musicians develop their aural skills outside formal education. If needed, aural-skills teachers can provide students with the focused practice of selected dimensions of music, but they can also build a learning environment wherein the students can broaden their musical habits, reflect on their previous ones, and also be encouraged to develop the ‘habit of changing habits’.5

In practical teaching, the action-oriented perspective has led me to explore different ways to engage the students’ tacit bodily experience of music and to connect this

---

5 The notion of ‘habit of changing habits’ by pragmatists belongs to the thinking of American pragmatists, see e.g. Bowman & Frega (2012: 35).
Broadening the notion of aural skills

awareness with notation and other symbols. Besides singing activities, I have explored different ways of using the students’ instruments to enhance their aural awareness, as well as different improvisation activities. Since aural-skills education should support the students to develop their aural awareness in the context of musical composition, I make frequent use of what I call ‘extraction – elaboration – application’ tasks (Ilomäki 2011: 302–303). The students will listen to music, extract some elements (harmonic patterns, scales, rhythmic pattern) for closer study, and elaborate them in various ways: transpose, figurate and use the material for improvising one’s own musical phrases. Finally, this knowledge is applied to the study of new musical examples.

I also maintain that aural-skills education needs to acknowledge types of musical anticipation – ‘inner hearing’ – which involve the instrument and which may differ from the detailed melodic approach that is characteristic to singing (Ilomäki 2011: 193–221). For example, pianists or guitarists may anticipate music in a global, harmonically and texturally oriented way. Such awareness can be developed through improvisation activities, which do not involve a strict reproduction of musical material, but instead develop the musician’s ability to react to what they hear in a holistic way and judge what is appropriate and ‘fits’ the musical situation.  

4. The progress of the course: teacher’s perspective

I started the presently described project after gradually developing my teaching within the previously described pedagogical framework. However, I still perceived that the work we had done in special projects, often with a small number of volunteer students, had not become fully integrated with our work in regular courses or shared between teachers. I also wished to go further than before in offering all students the possibility to work with their own instruments throughout the course and to give peer learning a central place in the courses, as well as encourage the students to participate in framing their own aural-skills assignments.

In 2012-13, several new teachers had joined our team, some of them working as part-time teachers and others substituting for the permanent staff. Personally, I shared the teaching responsibility for the presently described course with Elina Haapamäki, who had just joined our team. The situation required us to share thoughts and also lent itself to a practitioner-research project wherein we could promote each

---

6 Jazz musicians have particularly emphasised how musicians should learn to anticipate possible courses of musical action, develop an ‘imaginative ear’ (Maceli 2009).
other’s reflection in the spirit of an ‘inquiry community’ (Cochran-Smith & Lytle 2009, 45–46). We also decided that this development required that we change the course assessment so that work of the students’ individual choice will gain a more recognised role than before.

In this section, I will describe the progress of the course from my perspective as the teacher responsible for the course, informed by the feedback and observations that my colleague Elina Haapamaki provided upon following the students’ work. I will first describe the first semester (13 meetings), wherein I took responsibility for the teaching, and then the latter semester (15 meetings), when we shared the teaching responsibility with Elina. When describing and discussing the findings in more detail in section 5, I will focus on the latter semester and especially the process whereby the students framed the individually chosen assignments that concluded the course.

In the beginning, the whole-group lessons contained singing, listening and basic improvisation exercises in order to get the students comfortable with working together and to introduce the musical materials of the course. Since most students’ previous aural-skills courses had not contained post-tonal melody or harmony, we started by musical examples that involved symmetric scales and interval cycles, which easily lent themselves to improvisation. We also reviewed harmonic structures in common-practice music, which the students had already studied before, as well as music with changing rhythms.

Following the extraction-elaboration-application model of work (section 3), the students listened to musical examples and used their melodic and harmonic materials for various activities. They sang their own melodies to a partner, learned each other’s melodies by ear and analysed their pitches using letter names, or wrote them down. We spent some of the whole-groups lessons in a room equipped with electrical keyboards, which enabled the students for such exercises as imitating each other’s phrases and playing by ear and transposing outer voices from musical excerpts. Later in the course, we also used the keyboards for small score-reading tasks.

For their homework, I asked the students to practise similar singing exercises as those we had done in the classroom: first scales and various aurally based exercises and later sight singing (choral music and exercises from Edlund: Modus Novus). They also wrote aural transcription exercises for homework, using a special audio database.

The students split into small instrumental groups for half of the meeting (45 minutes) eight times during the course. They also brought their instruments to some whole-group lessons. Initially, the students applied in their small groups basically similar exercises as those we had done in the whole group. They improvised and imitated melodies based on different scales or harmonic units extracted from tonal compositions (e.g. the first period of Schubert: Symphony 5, second movement).
I gave written instructions for all of the small-group sessions, but encouraged the students to adapt the exercises. Later, I started to give alternative assignments and asked the students to decide how to use their time. Some students also wished to practise singing and aural analysis without their instruments in the small groups.

In the second semester, we shared the teaching responsibility with Elina, who usually taught every second lesson. We decided that I would continue with the students’ instruments and improvisation exercises while she would concentrate on singing and writing. We worked with the whole group for more than two months, but the students took their instruments to my lessons and explored different exercises and playing by ear all together, often using half an hour from the lessons with instruments.

Once in the autumn term and once after the middle of the course, each student presented singing and transcriptions assignments, which contributed to their course evaluation. Two months before the end of the course, we held a traditional test that involved transcriptions of music without the instrument, sight singing and rhythm reading. This was to make sure that the students would attain a certain level and have the skills to proceed to the next, optional course. Otherwise, we designed the evaluation so as to encourage the students to find their personal approaches to aural-skills practice and to encourage peer work and work with instruments. We decided to end the course with assignments that the students should select and frame individually or in pairs or small groups, adapting or developing the activities we had used in the course.

For their final assignments, the students presented the following types of work:

- Singing and rhythm reading in ensemble (choir songs and percussion pieces from the course repertory, orchestral excerpts)
- Technical sight singing (Edlund: Modus novus), solo songs (e.g. Berg) with playing the bass
- Singing excerpts of solo and orchestral music
- Rhythm reading (repertory examples, polyrhythm exercises)
- Instrumental improvisation on harmonic patterns from musical excerpts
- Aural imitation exercises with a partner (melodies, chord progressions)

The students presented their assignments mostly in pairs. We held a debriefing discussion and the students also gave written feedback. This last period and the negotiation process that led to it turned out to be the most valuable part of the course.

---

7 Due to timetable clashes, some students missed lessons at the middle of the course, which they compensated by transcription assignments and by having extra rehearsals in pairs. Some whole-group meetings therefore involved ca. 10 students.
and also provided the most informative data. I shall describe them in more detail in the following section.

5. From implicit to explicit learning conceptions

We designed the collection of data so that the emergent findings could inform our teaching and enable us to focus on the research task (see also McKernan 1996: 223–227). In the first semester, I concentrated on the small-group work. I observed the small-group sessions, but only participated on a few occasions when the students seemed not to progress, and suggested, for example, roles that some players might take when improvising (e.g. invent an ostinato, take turns on melodic phrases). Elina also visited and observed the small groups before she started teaching. Twice, I asked the students to write a concise comment on their small-group work.

At the middle of the course, when Elina started to share the teaching responsibility with me, we collected our observations and the students’ comments so far. The students’ comments on the course and the small-group work were generally positive, but the data also suggested that some groups recurrently found it difficult to decide their assignments and could not get very far in their musical interaction.

The students’ comments also made me realise how I might not have sufficiently shared the pedagogical ideas behind the course with the students. This interpretation was based on the following kinds of observations, which still became clearer in the early second semester:

- The students still often referred to the assignments as if they had one single correct answer. For example, the notated chord symbols appeared as being ‘the answer’ to the harmony tasks wherein I had wished the students to explore the music through various activities and to conceive written analysis as one possible tool.
- Some students doubted the usefulness of their instruments at occasions wherein the instruments required different types of aural judgement. For example, some wind players could not join the aurally based exercises as fast as the string players, whereas the harpsichord and kantele players brought up how they could often rely on visual cues or the labelling of various chords without using their aural orientation in an optimal way.
• Some students brought that they would like exercises that would be more similar to one another and proceed more logically according to increasing difficulty.

On the basis of the above observations, we decided to work for two months only with the whole group. At my lessons, we explored different instrumental exercises all together. Elina, in turn, concentrated on the singing and writing activities and also encouraged the students to find their personal approaches of learning. We discussed our plans and shared our observations by phone after each meeting, and consciously emphasised different types of work in our teaching.

We also decided to prepare the final, individually chosen assignments in a way that would help us discuss the pedagogical ideas underpinning the course and the possible discrepancies between the students’ and teachers’ assumptions of good aural-skills learning. Two months before the end of the course, we gave the students a planning and self-evaluation task, which involved a set of questions and some materials for reading and commenting. We also asked the students respond to present a plan for ten individually chosen assignments, wherein they would adapt the course activities. The students should also have completed fifteen aural transcription assignments during the whole course.

The questions and material contained the following:

• A summary of the activities and topics we had covered in the course and the request to comment on the activities that the students had perceived as being the most useful.
• A request to present a plan for the student’s assignments of individual choice (10 aural tasks + transcriptions up to 15).
• A suggestion to reflect on which of the following criteria characterised the student’s chosen goals:
  – become more fluent and secure
  – learn new ways to practise
  – understand, organise your knowledge
  – find a solution to a problem
  – relax, find freedom and enjoyment
  – something else?
• A set of statements that summarised some pedagogical ideas behind the course and the request to comment on them if the students wished
As the questions were broad, I gave the students the freedom to comment on the material selectively. The students responded by e-mail. Most responses were concise (ca. 120 words), two up to 630 words. We went through the material, and I wrote a concise feedback to each student. Some students already had a clear plan for their assignments, and I only added some questions or ideas. Others had mainly suggested topics of interest, to which I gave some general ideas and suggested that we continue to frame the tasks when we meet.

We devoted one meeting to the students’ planning and rehearsal of their final assignments in small groups. Thereafter, the students had two more weeks to practise. We recommended certain students to work together, as their self-evaluation task had brought up similar needs. Other students had already joined into groups of two or three during the course. In the interest of classroom space, some student pairs who had similar ideas first practised in a group of six but presented their task as pairs.

We all, both the teachers and students, had a very positive experience of the final assignments. The musical results and the debriefing discussion suggested that many students had found connections between aura-skills learning and their instrumental study: both through repertory examples and by exploring how they could develop their aural awareness on their instrument. We also seemed to have reached some solutions to the problems I had wished to address when formulating the self-evaluations task. Some students had created exercises wherein they could devote time to the exploration of new approaches to their learning, without the pressure for immediate fluency. Other students who voiced their need for graded, systematic exercises, had joined together and created sets of exercises that involved both technical practice and exercises based on repertory.

The instrumental improvisations were often hesitant, but we appreciated that some students who found playing by ear difficult had explored this way of learning. Others, who were used to improvisation, took it as their goal to explore how they could also use improvisation as a tool to study repertory.

6. Concluding notes

I have described in this article some experiences from a course wherein we sought to encourage students’ peer learning and the use of instruments in a regular aural-skills course at bachelor’s level, and how we sought to involve the students in framing their aural-skills tasks. The project yielded us lots of practical experience on what to improve, and suggested models of working that we will continue to explore in future.
I focused this text on how conceptions and ideals of aural-skills learning are translated into the daily practice of aural-skills education. Namely, the setting wherein the students took responsibility for their small-group work brought up the need to address students’ and teachers’ sometimes differing assumptions on valuable and worthwhile aural-skills learning. Quite clearly, the process whereby we addressed and negotiated these assumptions could still become deeper and more effective, and become a form of ‘thinking together’ along the lines of dialogic inquiry (Wells 2009: 55–56).

Making the underlying pedagogical thinking of a course explicit and having freedom regarding the practical activities and specific skills is also congruent with the ‘process-inquiry’ approach to curriculum (see also McKernan 2008). I also view such teaching as a way to inform aural-skills education by current knowledge on the richness and wideness of aural awareness and skills (chapter 3). Despite its demands, I also regard students’ responsibility in the design of their own aural-skills assignments as a way to respond to the challenges of future musicianship and life-long learning (Smilde 2009).

Quite obviously, an essential perquisite for successful implementation of the small-group work and instrumental tasks was the changed procedure of student assessment, wherein we retained some traditional requirements but gave emphasis on the students’ individually chosen assignments. While this topic was not the main focus of the present text, we will continue to develop and study it in the future.

On the basis of the experience, we are continuing to incorporate small-group work and student-framed assignments to our courses. A direction of further research that I wish to pursue in the future is to engage the students in documenting their optional tasks, e.g. by recording them. This will provide a further possibility to conveying to the students an idea of aural skills that is broad and inclusive and to encourage the students to develop their aural skills in service of their holistic musical learning.

References


Broadening the notion of aural skills


