Learning in Group: An Educational Action-Research Project as a mode of Educational Development

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Abstract: This action-research project aimed to develop playing by ear in group in Functional Piano classes and understand how this practice could contribute to music learning in this discipline. The project was developed in one academic semester with two groups of five undergraduate music students who tested the new teaching-learning approach which had more emphasis on playing by ear. The action-research took place in three cycles. At the end of each cycle, an interview was held with each group in order to assess the work done and propose new teaching-learning strategies to enhance the approach. In this paper I will discuss the main findings through focus group method and the efficacy of the action-research design. The analysis of the interviews shows that: 1) results of the playing by ear practice clarified theory of existing knowledge; 2) the involvement in the project lead to powerful learning for the participants; 3) the focus on reflexivity more clearly shown what happened in the process; 4) the collaborative aspect of action research favored the group learning. From these results, it was concluded that the group discussions contributed to enhance a musical group practice and that the use of action-research in music education has great potential for improving practice.

Keywords: Action-Research; Music Education; Group Learning; Functional Piano.
This paper is part of my ongoing Ph.D. research\(^1\) about the relationship between playing by ear and music literacy. In order to understand and improve the practice of playing by ear, an action-research was developed in Functional Piano Classes, a course aimed at students who study piano as a second instrument. In this context my objective for this paper is to show the effectiveness of action research to achieve research results. When I started this research, my purpose was to improve my own practice as a piano teacher. In this situation I would have to assume two roles: one as a teacher and another as a researcher. This type of research is known as *practice-based research* and it can be defined as “an area situated between academia-led theoretical pursuits and research-informed practice, and consisting of a multitude of models of research explicitly conducted in, with, and/or for practice” (Furlong and Oancea 2005: 9). On this basis, my research was situated in this area, a term which has been used as a kind of “umbrella” that includes different methodologies. If my purpose was not only to understand but also to change some aspect of the focus of my research, then it could be defined as an action-research. According to Carr and Kemmis (2004: 165-66):

> It can be argued that three conditions are individually necessary and jointly sufficient for action research to be said to exist: firstly, a project takes as its subject-matter a social practice, [secondly] regarding it as a form of planning, acting, observing and reflecting, with each of these activities being systematically and self-critically implemented and interrelated; thirdly, the project involves those responsible for the practice in each of the moments of the activity, widening participation in the project gradually to include others affected by the practice, and maintaining collaborative control of the process.

The three conditions mentioned by the authors existed in my project: 1) music education is a social practice, considering that it generally involves the direct interaction of teachers and groups of students; 2) the research and the change would be made through a cyclical and reflective process; 3) the students would be participants of reflections and decision making this a collaborative work. On this basis, the main goal of this action-research was to develop playing by ear in group in functional piano classes and understand how this practice could contribute to music learning quality. My purpose was not only to give greater emphasis on playing by ear but also to strengthen the relationship between aural learning and notational learning.

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To accomplish this, I developed a new teaching-learning approach to functional piano which I called “the integrated approach”. This name was chosen because I wanted to integrate aspects of learning that commonly appear to be opposites: aural and notational, informal and formal, holistic and sequential learning. Then, the same musical contents were approached in aural and notational classes. In the aural classes it would be possible to have some aspects of informal learning such as copying recordings by ear, choosing student’s own music and learning to play songs through self-directed learning, peer directed learning or group learning (Green 2012: 10). The study was developed in one academic semester with two groups of five undergraduate music students. Students attending this course are usually beginners in musical literacy who have learned to play their instruments through informal learning. The action-research took place in three cycles that included planning, action, observation and reflection. The methods applied were: participant observation of the researcher, video and audio recordings, field notes, tests, evaluation of a critical friend, individual interviews and focus group interviews. This paper is focused only on the analysis and the results obtained from the focus group method. The focus group aims to explore perceptions, experiences and meanings from a group of people who have some experience and/or knowledge in common about a given situation or topic. According to Carr and Kemmis,

> Action research therefore precipitates collaborative involvement in the research process, in which the research process is extended towards including all those involved in, or affected by, the action. Ultimately, the aim of action research is to involve all these participants in communication aimed at mutual understanding and consensus, in just and democratic decision-making, and common action towards achieving fulfillment for all (2004: 199).

Considering the aspects mentioned by the authors as “collaborative involvement”, “communication”, “mutual understanding” and “consensus”, the focus group can promote a democratic space for discussion, reflection, exchange of ideas and group decisions. In focus group discussions "a kind of ‘chaining’ or ‘cascading’ effect [takes place]; talk links to, or tumbles out of, the topics and expressions preceding it” (Lindlof & Taylor 2002: 182). Thus, “the group becomes a tool for reconstructing individual opinions more appropriately” (Flick 2009: 107). The purpose of the focus group interviews was to evaluate the work done at the end of each cycle so that the
students could contribute by giving suggestions to improve the quality of the classes. At the end of the last cycle, the students evaluated the final project and the process as a whole.

Figure I. Propose of the focus group method by cycle.

**First Cycle**

In the first cycle we worked on one song by ear for each unit of the functional piano method applied\(^2\). Every week the students had two classes: the aural class always preceded the notational class so that they could make a link between the two classes. The first focus group interview clearly showed the view of the participants in which some positive aspects of the approach were pointed out by the students as innovative and effective. In valuing playing by ear, the approach was seen very important in academic teaching.

I think this is even something new (...) because we have come to the university with the impression that everything will revolve around the score, the [music] reading, the visual part, right? And indeed, for us musicians (...) the ear is what comes first. We learn music through playing or singing by ear, the ear itself, right? Of hearing. So I think in some ways it is even an encouragement to us, and helps a lot. (Student from group 2)

Furthermore, the way to work the same musical topics firstly in an aural class and after in a notational class every week showed to be very effective in “rooting” the topics. The students reported that this association facilitated their learning processes.

It is very efficient to have an aural and a notational class. You will read, trying to assimilate what you listened [in the aural class], right? Or try to learn music, songs from the score. Why is it much more efficient? Because it's like Carmen said, we

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\(^2\) Alfred’s Goup Piano for Adults vol. 1.
listen, we encourage our ear to grasp better, huh, sounds (...) in this case it will be written and then it will become much easier for us. For instance, we see... ah, that's how! So we will work on top of it. It becomes a lot easier. (Student from group 2)

Both groups of students were heterogeneous; some students only had an informal learning before the University and used to play by ear. Other students had only a little experience in music reading when playing their instruments. Thus, the approach showed to be inclusive on meeting all needs.

I think that, different from everyone here, I'm the only one who prefers... actually not that I prefer, [but] I feel more easiness in the notational [class], right? (...) But I think that the purpose of the work that you are developing is to help us to become a complete musician. What's that? It's not to be a musician who only plays by ear, nor to be a musician who only plays by score. I think it's interesting because (...) I always wanted, for example, to learn to play by ear. But I never had that opportunity and you have brought this opportunity over here. (Student from group 2)

Another important aspect observed in the first focus group interview is related with the principle of this approach that the sounds must precede the symbols on the development of musical literacy. Some authors argue that “even adults, who are accustomed to dealing with conceptual definitions and are sometimes more comfortable talking about a thing than doing it, learn more quickly and securely when working from the experience to the symbol” (Uszler at al. 2000: 245). Based on this principle, James Mainwaring created the concept of “thinking in sound” which means listening internally with musical understanding. He proposed a scheme of how literacy skills should be developed in which “the visual symbol evokes an image of the sound represented and stimulates the action necessary to produce the sound” (Mainwaring 1951: 201). One student described exactly how this process occurs.

Bruna: Let’s see if I understood. Do you think that when you play by ear, you listen better to what you are playing? How is it?
Student: Yes.
Bruna: The score ... How was this comparison that you made?
Student: There are times when we get so insecure playing that we play the wrong pitch. So, if any mistake happens [when reading], through playing by ear, we are able to rely more on the performance not focusing only on the score. We are more aware of the harmonic field, of the sounds that we can use. We are able to guess how that pitch is going to sound, what is the next pitch. (...) I feel safer [in reading] after having
had aural classes, because they make me feel freer. So I know the pattern, I know the sound it produces, then, as I know how to reasonably read scores, I already can relate to my mechanics and score. It is as if I had sight singing in my mind. (Student from group 1)

Besides the positive aspects of this approach pointed out by the students, it was important to reflect on what should be improved in the next cycle. All students agreed that there was no aspect of the approach to be modified but they realized that the interaction between them could improve and it was an important aspect of learning to improve playing by ear. For this reason, I decided that in the next cycle they would not only learn songs by ear in group but they also could play together.

**Second Cycle**
As in the first cycle we worked one song by ear for each unit of the piano method applied. The main change to promote greater interaction between the students was using arrangements of songs to ensemble or piano four-hands. During the second focus group interview one student mentioned about the chosen repertoire.

I think that the interaction has improved, increased eh... because we worked more... eh... more 'together', (...) [for example] that part of "Für Elise", which was adapted to everyone playing together, the Led Zeppelin song, that needed each one to play a part for everybody to play the whole song together. (Student from group 1)

Another strategy I applied to improve the interaction between them was to suggest that students who were more at ease would help the students who had more difficulty in performing the activities.

I thought it was very interesting to share (...) a way I... I practice, that... I do it, right? (...) I thought it was interesting this... this opportunity to share something that works for me and maybe to work with her and she think it was interesting. As if it was “vice versa” eh... it would be interesting also because we would be sharing something that works for us. So I thought it was cool that part of being able to transfer a way I practice... (Student from group 1)

At the end of the second focus group discussion, the students were very excited about the next cycle once I proposed that they would play their own instruments beyond the piano. All students agreed that to form bands and rehearse together
would be a good way to further improve the interaction between them and also to strengthen their ties of friendship.

Third Cycle
In the third cycle each student chose a song to be played by ear in a band or in an ensemble of his choice. Each student should play his chosen song at the piano with a band and should play his own instrument in the classmates’ songs. This work was called the “Final Project” and the goal for this cycle was to perform a concert with all the students. Throughout this cycle both groups worked together. Because of this fact the last focus group interview was made with both groups together. In the last reflection on the work done it was possible to observe that the collaborative learning among the students promoted autonomy. In this sense, one student reported what happened with him during one of the rehearsals.

I picked up the mechanics of my music and after that I just did not participate. I only watched because I had nothing to do with that rehearsal environment, that environment to prepare the rehearsal. In the rehearsals I had participated, the teachers organized the environment, and I just came and played. Then I had to come here and help building an environment so we can rehearse. There, at the time I thought: What do I do? When you see a person doing it, someone else doing it ... What do I do? I don’t know anything! It was almost on the [recital] day when I decided to let it go. I thought, I’ll try to do something. I went up there [on stage], picked up the bass, I looked around, I tried to give my classmates some tips and I tried to do as many things as I could, I tried to help somehow. Before that I used to just do my song, playing the keyboard. But in the recital I also played bass for two songs.
(Student from group 1)

At the end of the term of work, it was possible to realize how the students felt excited and they were very involved in the project. Both they and I realized that we had a deep learning experience. All the last reports about that experience were valuable and interesting and explained different meanings and individual results of the work. I chose a fairly representative report from one student as evidence of the feeling that this experience has brought to us.

I think we have to thank you for the “enlightenment” as well, because I felt much more stimulated in your classes than in any other discipline. For me it was the best class of all during this semester. From the first period so far, it was the best course I had. It was very nice to have known you, have the class with you. It was wonderful! I liked it
Final Considerations
The focus group method proved to be very efficient in promoting opinion sharing among the students. Through discussions, the students showed an understanding of their learning processes that I could not always perceive in the classroom and that interaction was very important to improve the practice of playing by ear. The analysis of the interviews showed that the results of the practice clarified the theory of existing knowledge: playing by ear helps to develop “thinking in sound”. The involvement in the project led to powerful learning for the participants, especially in the last cycle when they worked on the final project. The focus on reflexivity showed more clearly what happened in the process. The collaborative aspect of action-research favoured group learning: through the discussions they realized that it was important to improve the interaction between them. Besides that, through the discussions the students and I together made an effort to improve the classes’ quality. From these results, it was concluded that the use of action research in music education has great potential for improving practice. Lastly, the depth of experience and pleasure in music making are aspects that must be constantly reflected on by music teachers.

References