

A TEACHING SEQUENCE GRANTING SPACE TO THE STUDENTS' COLLABORATIVE CREATION IN THE MUSIC CLASSROOM: SOME OBSERVATIONS

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ABSTRACT

Classical traditions of research have generally been centered on the individual processes of musical composition. Our aim is to look at collective processes in order to understand how to provide space for creativity in music education in school. Activity theory, socio-cognitive research on learning, new curricula, analyses of student-teacher interaction and recent studies on collaborative creativity inform our research questions about the spare space usually allocated for students' collaborative creation in the music lesson.

We proceed by designing teaching sequences that invite pupils aged 11-13 to work together and compose a piece of music. We observe what happens via video and we make a descriptive analysis of the data: how pupils distribute the tasks amongst themselves; how agreements and disagreements arise when children compose together and write it down. Usually conflicts are solved implicitly or explicitly via the children's engagement in efforts to manage the composition together. They make comments that are sometimes relevant and sometimes not. This study helps to understand some of the cognitive moves and social interactions that happen in such an activity. It will give us a basis for reconsidering the importance of the teacher's role in creating and supporting this type of creative interaction in the classroom.

Keywords

Collaborative activity, creativity, music, social interaction, learning.

INTRODUCTION*

There has been a lot of research into musical creativity since the 1980s (Hickey, 2002; Webster, 1992). Processes of musical composition (Giglio, 1999; Hickey, 2002;

Kratus, 1989, 1991; Sloboda, 2000; Webster, 1977, 1991, 1992) and the product of these processes (Auh, 2000; Kratus, 1994; Levi, 1991) have generally been studied as individual activities. Recent research has observed collaboration between students when creating music (Burnard & Younker, 2008; Hewitt, 2008; Miell & Littleton, 2004, 2008; Morgan, Hargreaves, & Joiner, 2000). The purpose of this contribution is to focus on collective processes in order to better provide space for creativity in school education.

Composition in the classroom

A person is creative when she creates objects which are considered new within the field, and are ultimately accepted within a certain cultural context (Gardner, 2001a, 2001b; Mayer, 1999). Composition includes reflection and revision before the product is finished (Webster, 1992). In this respect, in classroom situations, teachers can recognise and consider their pupils as creative persons by offering them the opportunity to produce a new composition as an opportunity to learn music. According to our comparative studies (Giglio, 2006a, 2006b, 2006c) some curricula in Argentina, Brazil, Canada, France and Switzerland propose group improvisation and composition activities not only as a means of creation using the knowledge already gained, but also as an opportunity for learning. This requires new communication styles and the design of proper interaction modes within the classroom. Presently, teachers have few resources for designing such activities and they often express that they feel quite uncomfortable talking to their pupils about their compositions (Byrne, 2005).

Some contributions from social and cultural psychology

According to socio-cultural psychology of cognitive development, individuals do not develop alone, but thanks to social interactions mediated by symbolic systems. Activities requiring social co-ordination, in particular those devoted to solve "socio-cognitive conflicts", have an important role in the development of cognitive processes: if conditions are good, social interactions during a

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cooperative activity are likely to result in a series of consecutive advances for the individuals involved (Doise & Mugny, 1984; Hinde, Perret-Clermont & Hinde, 1985; Perret-Clermont, 1980; Perret-Clermont, Pontecorvo, Resnick & Zittoun 2004; Tartas & Perret-Clermont, 2008; Tartas, Baucal, & Perret-Clermont, 2010).

When there is disagreement between two or more equal peers, they usually become aware of the existence of points of views other than theirs. Solving the contradictions between these perspectives requires cognitive elaborations that might result in creative innovations. The work and productions of children influence their modes of doing and thinking, and can contribute to an environment of mutual learning (Bruner, 1996).

Collaborative creation in music education

According to Morgan, Hargreaves and Joiner (2000), verbal and musical communication are important for group composition and depend on the nature of the task. Burnard and Younker (2008) observed that composition fosters collaboration between students and reconciles them with the tasks at hand. Outside school, in band rehearsals, Miell and Littleton (2008) observed that young people can learn to reach a consensus on how they proceed to write songs together. Other studies show how collaborative creativity can provide students with a secure space, to listen to “criticisms” (Moran & John-Steiner, 2004), to explore ideas, and to accept progress with the help of others (Miell & Littleton, 2008, 2004; Miell & MacDonald, 2000; Morgan, 1998; Sawyer, 2004, 2008; Young, 2008).

RESEARCH QUESTIONS

We have designed sequences of pedagogical activities that offer space for creative collaboration to the students, and we now try to observe what happens when teachers implement them. In doing so we hope to gain useful knowledge to better design the role of the teacher in order to support and enrich these activities without inhibiting them.

In particular, we want to observe if and where this collaboration between the students offers them possibilities to express agreements and disagreements and, if so, how these are then negotiated by them.

METHODOLOGICAL APPROACH

In the first stage of the research, inspired by the steps of expansive learning (Engeström, Virkkunen, Helle, Pihlaja, & Poikela, 1996), we constructed different teaching sequences, and we then implemented them in different classrooms. Lessons were learned from this testing and we then modified the sequences accordingly. This process was repeated several times. The final version was sent to three teachers: one in Argentina, one in Brazil and another one in Switzerland. These teachers implemented these sequences in their teaching with students aged 11 to 13.

The structure of the sequences includes five phases:

- *Phase 1:* The teacher presents the activity to the students (in this research: composition of a rhythm or melody in four bars: in groups of 3 or 4 students).
- *Phase 2:* The group's students engage in the composition task using the instruments available (drums and panpipes in Argentina, metallophones and tambourines in Switzerland, guitars and recorders in Brazil).
- *Phase 3:* The teacher invites the groups (one by one) to perform (a mini recital) in front of the class.
- *Phase 4:* The teacher organises a discussion with the class reflecting on what they have created.
- *Phase 5:* Then teacher introduces new elements of knowledge likely to enrich the future compositions and the capacity of the students to reflect on their work and their musical skills.

We will only present observations from phase 2 here. In each of the three classes, two lessons were filmed. Each film was viewed several times and the collaboration between the students (in groups of 3 or 4) was observed. Special attention was paid to identify changes in their actions modes of collaboration, dialogues and musical performances.

RESULTS

The process of composition lasted between 5 and 15 minutes in each of the six lessons observed. Students engaged in dialogue, played the instruments and wrote down the melody. Some agreements and disagreements occurred as illustrated below:

Extract 1. Group 1 – lesson 1

(Group 1 had to compose a rhythm and a melody. Ana writes down the names on a sheet of paper and picks up the tambourine)

Ana: Then *(she picks up the tambourine and plays. Cécile watches. Xavier performs on the bells. They smile when they see that they are synchronised)*

Ana: The rhythm, what is it? *(she asks her friends)*. But it's me, I'm going to do that //We have to do it *(she keeps trying)*. //Can you do it? *(she asks Xavier. He sets the tempo for her)*

Ana plays the part of the composer. Without consulting her peers, she starts composing the rhythm. Xavier tries to follow her with the tempo. Without saying anything, the pupils spontaneously pick up the instruments. In this case, tasks and roles have been allocated without any discussion.

At other times, this allocation is managed via a dialogue:

Extract 2. Group 3 – lesson 1

(Group 3 composes a rhythmical line. Carlos begins with a rhythmic idea)

Marcos: Yes but stop/ I want to /to do it *(in rhythm)*

Carlos: tum, tum *(he plays the tempo with his pencil)*

Sacha: Do it with the drum

Marcos: No, no, no,

Arno: No, you mustn't /stop (*speaking to Marcos then looking at the teacher who comes closer in order to observe them*)

Marcos: That's why

Sacha: Afterwards we'll do the little drawings /and then

Marcos: Then

Sacha: He starts /he plays twice and we start

Here, Marcos does not want Carlos to decide and he stops him in order to tell him that he wants to input his ideas as well. Carlos continues performing the tempo. Meanwhile, Marcos rejects Sacha's idea and Arno supports him. Then Sacha tells his companions that they do not need to write down the score before they compose ("Afterwards we'll do the little drawings") and he suggests starting. After brief opposition, the students organise themselves to compose some new ideas which involve everyone. The result is the creation of a piece, but the various opinions are not examined by the pupils.

In extract 3, we see an example of a confrontation of ideas that is not discussed as such by the students:

Extract 3. Group 2 – lesson 2

(Group 2 has to compose a melody for recorder with an accompaniment on guitars. Emanoel and Joaquim compose with their guitars. Mara writes it down.)

Emanoel: Shall we use A-G-D? (*playing the guitar, Mara carries on writing down what her peers dictate and play*)

Joaquim: No, no, no, (*he replies by shaking his head*) with B minor (*and they carry on playing*)

Mara: (*writing them down*) B-A-G-C-D? (*while Joaquim and Emanoel explore other chords*)

Mara does not suggest any ideas but only records those of her partners! Emanoel makes a proposal but Joaquim does not accept it. Emanoel does not insist. During this extract, it is not clear whether Emanoel proposes taking out the note B; or if Joaquim thinks that Emanoel has forgotten the chord Bm. Ultimately, the melody has not been changed. These ideas are not discussed.

Extract 4. Group 3 – lesson 2

(Group 3 has to compose a melody to be performed with four panpipes)

Sacha: We don't know it (*They sing D-D-D-D-B*)

Carlos: Watch Arno, watch Arno, E-E-E-E/D (*Sacha, finishing writing, smiles*)

Arno: Good! (*clapping*)

Carlos: (*realises that Sacha has crossed out what he had written down and hitting him says*) no, you crossed mine out. This idiot is pissing me off (*then, Carlos again writes down the note that was crossed out on the paper*)

Together the students make an effort to learn to play what they have created and written down. When Carlos shows Arno that he is able to perform the extract they have created, Arno claps. Then Sacha and Carlos have an argument about the note that was crossed out in the score. Sacha does not answer. This conflict is not resolved by discussing what has been written down. Carlos writes it down again as before.

In extract 5, we observe an example of pupil collaboration in order to write down the score in a way which is faithful to what they have composed.

Extract 5. Group 1 – lesson 1

(Moments after extract 1)

Ana: This was how much?

Cécile: Eight

Ana: Oh yes (*the teacher comes closer and observes them*)

Xavier: And there /so there are they semiquavers?///one, two (*Cécile plays the pipes saying: CROTCHET, CROTCHET, TWO QUAVERS, CROTCHET*)

Ana: (*she looks up, and seems to repeat the rhythm in "her head" moving around*) Oh yes!

Xavier: (*pointing to the score he shows Cécile that she has to write*) one, two, one, two, three (*playing the rhythm*).

Ana: one, two

In this extract, the pupils ask questions and support each other in order to write down the score. It seems as though they are making cognitive efforts to recognise and transcribe the quantities and name the durations. In the video, we can see that the pupils do not write down the four semiquavers that Xavier indicates, but four quavers. When they play the piece, they play four semiquavers. The effort, does not result in a proper solution (the confusion between quavers and semiquavers is maintained). The students seem to be focused on the goal of achieving the composition and its writing, and again do not acknowledge and discuss the different opinions, as if they did not care to check their knowledge of quavers and semiquavers. Contrary to what happened in extract 1, here the students maintain the initial role distribution between composer, transcriber and helper.

In extract 6, the students scaffold each other in order to edit their creation:

Extract 6. Group 3 – lesson 2

(Group 3 continues its task illustrated in extract 4)

Carlos: so, E in the first one you played //D? (*Carlos writes down the right notes again*)

Víctor: E-E-E-E-D then, then, then Carlos, //then wait /then G-G-G-G-A that's not A //(he uses his finger to point out each note on each pipe of the panpipes) C-D-E-F-G-A-B-C

Carlos: But it should stay like this, look, look (*he plays:*
E-E-E-E-D//G-G-G-G-A//)

Víctor: It should stay like this, look if it was E-E-E-E-E-D
 Here, Carlos shows Víctor how to play the note A on the panpipes. Víctor manages by watching Carlos and checking with his fingers starting from the note C. Here we can identify a joint cognitive effort of Víctor, who knows, and Carlos, who does not agree or does not know how to play A on the panpipes. Finally, Víctor manages play the melody which has been created on the panpipes.

Extract 7. Group 1 – lesson 1

(Group 1 continues with its task. Later the students create a melody for the metallophone. Cécile tries out their composition on the metallophone and writes down the notes in the stave. Ana and Xavier accompany her with their instruments trying out the complete rhythm)

Xavier: put it over there (*he says to Cécile pointing out the position of the note on the stave. Without a word, Cécile corrects what she has written.*)

In this short extract, Cécile plays the role of the transcriber of the piece they have created. Meanwhile, Ana and Xavier try it out on their own instruments or help Cécile when she plays the notes on the metallophone. Xavier realises that something is not right in what Cécile has written down. Then he shows her: “put it over here”. Cécile does so. Either she is aware of the mistake and corrects it, or simply she does not object to Xavier's instruction and obeys him. As far as the final result is concerned, the score corresponds to what they have created except for the fact that semiquavers were written down instead of quavers as illustrated in extract 5. Here again, at various times, each student admitted that his or her idea was not necessarily the only possible one. This allows for evident sociocognitive conflicts. But, in the face of these conflicts, the students do not manage to acknowledge the different opinions explicitly and do not systematically examine the different possibilities for reconciling them. It is as if the “conflict” remained unsolved as such but bypassed in order to reach the goal: a common composition.

CONCLUSION

Our analysis has focused on understanding whether agreements and disagreements occur in the course of collaboration between students when they are composing in classroom situations, and how these arise and are solved. We have filmed and observed two composition tasks for each of the three groups within their social, cultural and pedagogical contexts in the three classes from Argentina, Brazil and Switzerland. We have observed that the activity of group composition is very complex and that pupils are motivated when doing this. Agreements and disagreements arise when creating a together “common task” a common object (piece and score). They are solved in various ways, sometimes with cognitive elaborations likely to lead to cognitive advances for the individuals involved but not

always: sometimes, they are useful and at other times less so – but most of the time they are concessions and rarely common solutions reached after an explicit argumentation that would have taken into account each person's perspective. More research has to be conducted on how the teacher can help students to enter into a kind of talk that, in the face of such disagreements, will transform them in opportunities for cognitive advancements.

But already, similarly to the observations of Miell & Littleton, during this composition process, some “strivings to establish agreement and consensus about their performance” (2008, p. 44) were reached between the pupils in the three groups observed, for instance they usually allocated implicitly roles and tasks. Most of the time, these “agreements” were made of an action by one student without the others offering any opposition. At other times, we have observed disagreements with brief oppositions and some conflicts “managed” in quite different ways: denials, rejections, proposing alternative ideas, but also swearing and displaying violence (but fortunately these only lasted a few seconds in a more or less playful manner!).

In this context, the three groups seemed to make positive efforts to respond to the request of the teacher to create a composition. But they seem to do it without any awareness of the usefulness of reflecting on the way in which they had proceeded, their decisions, distribution of roles, etc. They seldom explicitly open a debate around a disagreement.

We have observed that, while they do the task, the relationships between the students are more or less likely to evolve. Some keep their initial role of leader, composer, transcriber, critical checker, etc. Some change along the way. But not all the students adopt all the roles. During the task, the students share their ideas, accepting or rejecting other students' ideas. But their efforts are focused on starting, progressing with and finishing to create the piece, not pondering much the how and why. On a few occasions, the students make an effort to carry out cognitive elaboration of what they were doing during the composition process. Opposition is rarely discussed as such: more frequently it is observed that one pupil or another gives way and agrees maybe more out of goodwill than out of conviction – a strategy which is not always effective in allowing the composition process to progress. And when they do try to elaborate, this is not always done properly: for instance, in the case of the semiquavers they focused on how to write them down properly and not on their knowledge about the duration, nor did they back up their opinion or question the reason of their peer's statement. While they are composing, although some pupils admit that their idea is not necessarily the only possible one, they often do not examine the grounding of the other students' ideas, and opposition is then dismissed pragmatically by adopting (“blindly”?) the action or suggestion of one of them.

We believe that these observations take us a (small) step further in understanding the social and cognitive processes

involved in creative collaboration in music. We have seen some of the forms of collaboration that students use spontaneously when composing in small groups within the classroom context. In other extracts, we will want to observe how the teacher approaches the groups, and the effects of the teachers' actions on the way in which the pupils collaborate; or the effects that certain forms of collaboration between students have on the actions or reactions of teachers. We will use this descriptive approach as a basis for our studies on improving the design of the actions of a teacher whose aim is to encourage and enrich, via suitable instruction the children's creativity and capacity to contribute to collaborative practices (Giglio, 2010; Giglio & Perret-Clermont, 2009; Perret-Clermont & Giglio, in preparation).

REFERENCES

- Auh, M. S. (2000). Assessing Creativity in Composing Music: Product-Process-Person-Environment Approaches. Australian Association for Research in Education conference held at University of Sydney, December, 4. [online] Retrieved April 14, 2009, from <http://www.aare.edu.au/00pap/auh00016.htm>
- Bruner, J. S. (1996). *L'éducation, entrée dans la culture. Les problèmes de l'école à la lumière de la psychologie culturelle* (Y. Bonin, Trans.). Paris: Retz.
- Burnard, P., & Younker, B. A. (2008). Investigating children's musical interactions within the activities systems of group composing and arranging: An application of Engeström's Activity Theory. *International Journal of Educational Research*, 47(1), 60-74.
- Byrne, C. (2005). Pedagogical communication in the music classroom. In D. Miell, R. A. R. MacDonald & D. J. Hargreaves (Eds.), *Musical Communication* (pp. 301-319). Oxford: Oxford University Press.
- Doise, W., & Mugny, G. (1984). *The Social Development of the Intellect*. Oxford: Pergamon Press.
- Engeström, Y., Virkkunen, J., Helle, M., Pihlaja, J., & Poikela, R. (1996). The Change laboratory as a tool for transforming work. *Lifelong Learning in Europe*, 1(2), 10-17.
- Gardner, H. (2001a). *La inteligencia reformulada: las inteligencias múltiples en el siglo XXI*. Barcelona: Paidós.
- Gardner, H. (2001b). *Les formes de la créativité* (C. Larousseur & A. Botz, Trans.). Paris: Odile Jacob.
- Giglio, M. & Perret-Clermont, A.-N. (2009). L'acte créatif au cœur de l'apprentissage. *Enjeux pédagogiques* 13, 16-17.
- Giglio, M. (1999). Tiempo para el proceso de composición musical en niños de 7 a 11 años *Boletín de Investigación educativo-musical* 6(17), 35-37.
- Giglio, M. (2006a). La créativité dans les approches transversales et musicales des curriculums québécois et suisses romands : une étude comparative préliminaire. In F. Best, A. Bonin & Y. Tugaut (Eds.), *8e biennale de l'éducation et de la formation. Résumés des contributions* (pp. 142-143). Lyon: INRP - APRIEF.
- Giglio, M. (2006b). The Music Education of seven cantons in the French-speaking part of Switzerland: a comparative study. In M. Baroni, A. R. Addessi, R. Caterina & M. Costa (Eds.), *9th International Conference on Music Perception and Cognition. European Society for the Cognitive Sciences of Music* (pp. 1400-1404). Bologna: Bologna University Press.
- Giglio, M. (2006c). *Musical Externalisation in the New Curriculum in France, Quebec and French-Speaking Switzerland*. Paper presented at the European Conference on Educational Research, 13th to 16th September 2006, University of Geneva.
- Giglio, M. (2010). *Actividad creativa en contextos escolares de educación musical: formas de colaboración entre alumnos y acciones del docente. Desarrollo de secuencias pedagógicas y observaciones*. Unpublished Ph.D. thesis, University of Neuchâtel, Neuchâtel.
- Hewitt, A. (2008). Children's creative collaboration during a computer-based music task. *International Journal of Educational Research*, 47(1), 11-26.
- Hickey, M. (2002). Creativity Research in Music, Visual Art, Theatre and Dance. In R. Colwell & C. Richardson (Eds.), *The New handbook of research on music teaching and learning* (pp. 398-415). New York: Oxford University Press.
- Hinde, R. A., Perret-Clermont, A.-N., & Hinde, J. S. (1985). *Social relationships and cognitive development*. New York: Oxford University Press.
- Kratus, J. (1989). A Time Analysis of the Compositional Processes Used by Children Ages 7 to 11. *Journal of Research in Music Education*, 37(1), 5-20.
- Kratus, J. (1991). Growing with Improvisation. *Creativity in the Music Classroom. The Best of MEJ* (pp. 49-56). Reston, VA: Music Educators National Conference
- Kratus, J. (1994). *The ways children compose*. Paper presented at the Proceeding of the 21th World Conference of the International Society for Music Education, Trampa. New Zeland: Uniprint The University of Auckland.
- Levi, R. (1991). Investigating the Creativity Process: The Role of Regular Musical Composition Experiences for the Elementary Child. *Journal of Creative Behavior*, 25(2), 123-136.
- Mayer, R. E. (1999). Fifty years of creativity research. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 449-460). Cambridge, UK: Cambridge University Press.
- Miell, D., & Littleton, K. (2008). Musical collaboration outside school: Processes of negotiation in band

- rehearsals. *International Journal of Educational Research*, 47(1), 41-49.
- Miell, D., & Littleton, K. (Eds.). (2004). *Collaborative Creativity: Contemporary perspectives*. London: Free Association Books.
- Moran, S., & John-Steiner, V. (2004). How collaboration in creative work impacts identity and motivation. In D. Miell & K. Littleton (Eds.), *Collaborative Creativity: Contemporary perspectives* (pp. 11-25). London: Free Association Books.
- Morgan, L., Hargreaves, D. J., & Joiner, R. (2000). Children's collaborative music composition: Communication through music. In R. Joiner, K. Littleton, D. Faulkner & D. Miell (Eds.), *Rethinking collaborative learning* (pp. 52-64). London: Free Association Books.
- Perret-Clermont, A.-N. (1980). *Social interaction and cognitive development in children*. New York: Academic Press.
- Perret-Clermont, A.-N., & Giglio, M. (in preparation). *Un cadre pour créer et apprendre: du silence à la parole de l'enseignant*.
- Perret-Clermont, A.-N., Pontecorvo, C., Resnick, L. B., & Zittoun, T. (2004). *Joining society: Social interaction and learning in adolescence and youth*. Cambridge: University Press.
- Sawyer, R. K. (2008). Learning music from collaboration. *International Journal of Educational Research*, 47(1), 50-59.
- Sloboda, J. A. (Ed.). (2000). *Generative processes in music : the psychology of performance, improvisation, and composition*. Oxford: Clarendon Press.
- Tartas, V., & Perret-Clermont, A.-N. (2008). Socio-cognitive dynamics in dyadic interaction: How do you work together to solve Kohs cubes? *European Journal of developmental psychology*, 5(5), 561 – 584.
- Tartas, V., Baucal, A., & Perret-Clermont, A.-N. (2010). Can you think with me? The social and cognitive conditions and the fruits of learning. In C. Howe & K. Littleton (Eds.), *Educational Dialogues: Understanding and Promoting Productive Interaction* (pp. 64-82). London: Routledge
- Webster, P. R. (1977). *A Factor of Intellect Approach to Creative Thinking in Music*. Unpublished Ph.D. thesis. The University of Rochester.
- Webster, P. R. (1991). Creativity as Creative Thinking *Creativity in the Music Classroom. The Best of MEJ* (pp. 25-34). Reston, VA: Music Educators National Conference.
- Webster, P. R. (1992). Research on creative thinking in music: The assessment literature. In R. Colwell (Ed.), *Handbook of research on music teaching and learning* (pp. 266-280). New York: Schirmer.
- Young, S. (2008). Collaboration between 3-and 4-year-olds in self-initiated play on instruments. *International Journal of Educational Research*, 47(1), 3-10.