

by Lisa M. Gruenhagen

Developing Musical Creativity through Reflective and Collaborative Practices

How can we help our students learn to think in musical ways? Here are some ideas.

Abstract: This article focuses on developing musical creativity through reflective and collaborative practices in elementary music. Studies on reflective practices reveal that students of any age are able to reflect knowingly. Researchers who have examined thinking, creativity, and musical understanding have discussed the importance of teaching practices that encourage collaboration and developing shared understandings through performance and reflective practices. This article examines student work in elementary music and describes strategies that support the development of independent, creative, musical thinkers. Suggestions for engaging students in reflective and collaborative practices that support the development of musical creativity in the elementary music classroom are included.

Keywords: collaboration, creativity, independence, musical thinking, performance, reflection, understanding

Before I had known how to play the Little Fugue in G Minor, I had to know how to read notes from the staff. My part was hard and easy. It was hard because I had to count the beats before hitting the instrument. It was easy because I had to only hit 2 bars, which were D and A. I had taken out some bars so when I had to play that note, I could see it easier. I also learned how to play my instrument by the sound of the bars. If I did not know where it was I could listen

to the sound of the bar when I hit with the mallet. I felt that my part was very important because it was kind of like the background of a song.

—Tony¹

Tony and his sixth-grade music class peers were completely immersed in the comprehensive unit on form in music when they learned to play the theme of the Little Fugue

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in G Minor by J. S. Bach on recorders. Previously, the class listened to several different recorded versions of the piece, created individual listening logs, engaged in lively reflective conversation and analysis about what they had heard, and collaboratively created a listening map. After they learned the theme on recorders, students were given the option of choosing which instrument part they wanted to learn to play from the accompanying arrangement for Orff instruments, thus self-selecting their collaborative working group. With scores in hand, they began working on their parts. I visited each group, listening in on the ways in which they were discussing, learning, and teaching each other the parts; asking questions; and offering instructional support as needed.

After the students had learned their parts, I asked them to write a reflection based on the prompt “What process did you use to learn your instrument part?” Tony’s response reveals his thinking processes and how he solved this musical problem. His reflection also reveals his emerging understanding about the nature and function of the bass xylophone part as the structural foundation in this particular arrangement—an understanding that might not have been revealed if he hadn’t had the opportunity to engage in collaborative conversation, step back and reflect on his actions, and write them down. I also observed Tony’s peers teaching him how to properly count measures of rest before his entrance. In her work on cognitive development in social context, educator Barbara Rogoff stated that as students “collaborate and argue with others, they consider new alternatives and recast their ideas to communicate or to convince. In these activities, children advance their ideas in the process of participation.”² Later in his journal, Tony wrote positively about that learning experience and the musical insight he gained from his peers.

This article describes the power of reflective and collaborative practices in cultivating children’s musical thinking and creativity in the elementary music classroom. The vignettes and student work

included here are drawn from a long-term teacher research project I designed to examine the effects of the addition of reflection and collaborative projects in several elementary music classes.

Children’s Musical Thinking and Meaning Making

There has long been interest in children’s musical thinking and the ways they ascribe meaning to their work. Children’s individual reflections and conversations on their engagement with music and during collaborative music-making experiences reveal their wonderings and imaginings, musical thinking and understanding, and musical creativity.³ In a study that examined how students react to their work through writing and conversation, investigators Joseph Walters, Steve Seidel, and Howard Gardner stated that their interest in student reflection grew from their “continuing consideration of working artists as a model for educational practice.”⁴ They noticed that during the act of painting or composing, these artists were adept at stepping back from their work to reflect.

Studies of notebooks and sketchbooks reveal how artists continuously engage in reflective activities alone and with peers. Stepping back is an important element in creating at which time myriad ideas, questions, and decisions emerge, such as “Have I accomplished what I set out to achieve in this or these works? What kinds of surprises have there been for me in the creation of these works? Am I satisfied? What do I do next?”⁵ These reflections can occur through conversation or writing and blend well into classroom activities, providing valuable information about student thinking and learning. Stepping back slows the problem-solving process, allowing students time and space to reflect on their work. Indeed, educator Margaret Barrett stressed that opportunities be provided for children “to generate ‘multiple representations’ of their thinking”⁶ while researcher Pamela Burnard advocated for encouraging children “to talk about, reflect upon and write about (in reflective journals) their

musical experiences in order to help make meaning of their learning.”⁷

Teaching with a focus on the main principles within the discipline and allowing students opportunities to explore, experiment, create, and reflect both mirror important aspects of the way expert musicians work to solve problems. Author and teacher-educator Jackie Wiggins, who for years has studied children’s reflections and collaborative musical creativity, stated in her discussion on compositional process in music that “environments for composing that are most in keeping with composers’ ways of being will have the greatest potential to enable success.”⁸

Research on student reflection shows school-age students “can reflect knowingly and that those reflections underscore the significant metacognitive effort that students can bring to complex tasks and long-term projects.”⁹ These reflections become visible milestones that can be revisited by students as they plan and track their development. During the mid-1980s, the Assessing Projects and Portfolios for Learning project focused on portfolio assessment in the elementary grades with the aim of uncovering the kind of learning taking place in project-based classrooms. This research team was eager to determine whether younger children’s reflections would reveal as much about their work process and learning as for older children, and indeed this was the case. After analyzing a substantial body of student work across multiple schools and classrooms, the researchers determined that children as young as kindergarten age “could participate sensibly in reflection activities.”¹⁰ Not only were younger students capable of insightful reflections on their work, but also, that ability grew over time. Similarly, Burnard found that “all children, irrespective of musical backgrounds, have the potential to think explicitly about music experiences.”¹¹

Reflective and Collaborative Practices

The educator Panagiotos A. Kanellopoulos suggested “studying children’s thinking about musical thinking might

be important (a) for the ways we, as teachers and musicians engage with children, (b) for the ways in which we foster musical creativity, and (c) for the development of multiple understandings of music, its perception, and its making."¹² My desire to incorporate reflective and collaborative practices into my teaching encompassed all three of those reasons with the express goal of helping my elementary music students to develop an even deeper understanding of music while fostering their musical thinking and creativity through their classroom experiences as musicians. I realized the positive power of stepping back and reflecting on my own work as a musician, both individually and collaboratively, and this became the driving force behind my instructional planning. I wondered: How would elementary students' musical understanding be affected if they too engaged in such reflective and collaborative practices?

I examined the work of one fourth-grade, one fifth-grade, and two sixth-grade music classes. The fourth- and fifth-grade classes averaged fifteen students each and were part of a small suburban independent day school in the northeastern United States that served children grades preK–5. I met with both music classes for thirty minutes twice a week. Part of a large suburban public elementary school in the mid-Atlantic region of the United States, the two sixth-grade music classes averaged thirty-three students each. The school served a diverse student body, grades K through 6, with approximately a fifth of the students participating in the English for Speakers of Other Languages Program (ESOL) and approximately a fifth of the students receiving free/reduced-priced meals. I met with each sixth-grade music class once a week for forty-five minutes.

For the two sixth-grade classes, I designed separate units that focused on form in music. One of these units used the second movement of Symphony no. 94 ("Surprise") by Franz Josef Haydn to specifically study theme and variations while students in the other unit studied

the Little Fugue in G Minor by J. S. Bach. Both sixth-grade units took place over the same ten-week period. The fourth- and fifth-grade classes participated in an introductory unit on jazz music. This unit took place over a ten-week period in both classes during the second year of my study.

The students in each unit were first introduced to the music through active listening, reflective discussion, and analysis and learned to play the main theme on recorders. Accompanying the performance-based musical experiences in which the children regularly engaged—singing, moving, listening, playing instruments, improvising, and composing—were a variety of reflective and collaborative practices that included designing idea webs around the unit topic; small- and large-group discussion on concepts, topics, recordings, and student performances in class; visually and graphically representing the music individually and in groups through repeated listening; individual and group reflection on projects and presentations; written music journal responses to prompts or questions; and individual reflections and collaborative conversations on student improvisations or compositions. In each unit, musical experiences ranged sequentially from introductory to guided to culminating, with each designed to carefully build on the previous experiences. Ongoing feedback, reflection, and assessment offered in diverse ways by multiple people (peers, self, music and classroom teachers) served to support and scaffold the development of students' musical creativity and understanding.

In addition to the main theme, students learned to play accompanying parts on Orff barred instruments within their self-selected group. They also collaborated in small groups to research the style, genre, and historical period of the music and to study the lives of the composers, groups, ensembles, or performers. In the fourth- and fifth-grade jazz unit, students were specifically introduced to the blues and blues chord progression as a developmentally

accessible form that they learned to play on Orff barred instruments. As a culminating experience, students learned to improvise over that progression while their peers accompanied them.

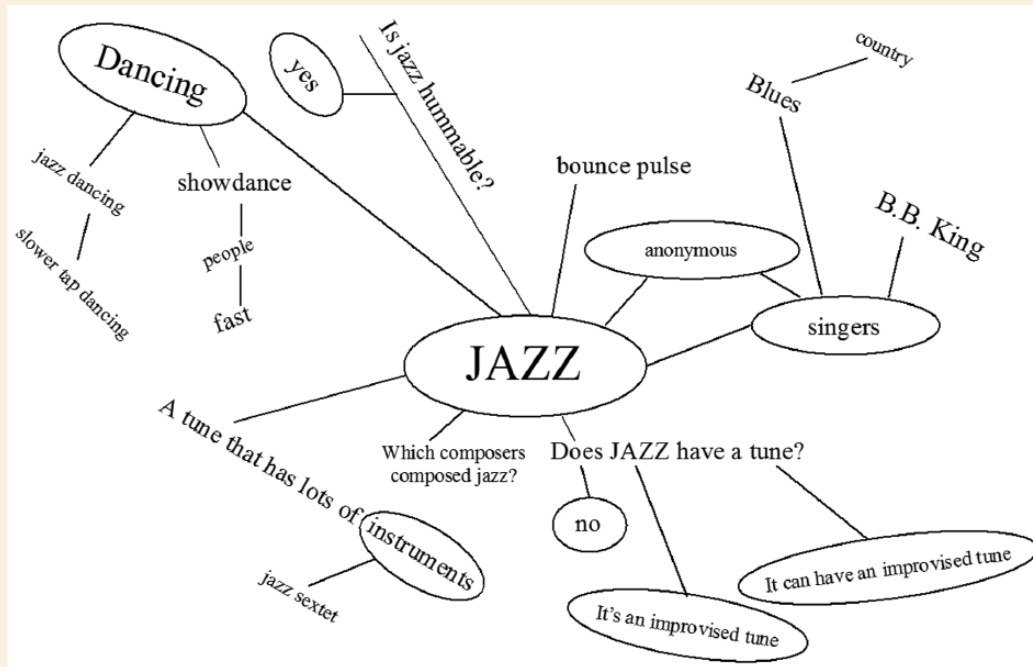
For the sixth-grade Haydn theme and variations unit, I designed introductory reflective experiences that included finding theme and variation in our daily lives and creating a working definition of this term, which we then revisited and revised multiple times in the middle and at the end of the unit. I then moved my students through more complex experiences that asked them to reflect on, analyze, and compare and contrast other musical works that incorporated theme and variation. Next, they analyzed prominent works of visual art that also illustrated theme and variation, such as Picasso's *Bull*, to compare the shared strategies and techniques musicians and visual artists incorporate as they create an original work. As a culminating experience, students in small groups collaboratively composed a theme with variations and wrote reflections on each version throughout the compositional process, recording their ideas and creative thinking processes that led to the choices they made and why. Throughout this entire set of experiences, students continued to practice their instrument parts in their section groups in preparation for a culminating performance and recording session of the arrangement of the second movement of Haydn's Symphony no. 94 ("Surprise").

Students' Emerging Understanding

Analyzing my students' work revealed three primary observations. As they reflected on their experiences through writing or conversation, they *identified problems and worked to find ways to solve them*. Similar to what Walters, Seidel, and Gardner reported, my students also revealed how they "grappled with complex problems" during these long-term creative projects that consisted of many interconnected layers:¹³

FIGURE 1

Student Problem-Solving Map



I played the xylophone. First I memorized the first few notes. Then I played it to see if it sounded right. It is hard for me to play the notes and look at the sheet at the same time. I had to focus and concentrate to learn my part. Sometimes I played the notes too fast and sometimes I played the notes too slow, but I had to practice to make it right. I didn't learn my part by myself lots of people helped me.

My students also *generated their own questions*. They revealed what they knew and understood along with challenges they wanted to overcome. Figures 1 and 2 are two examples of idea webs completed as an introductory brainstorming session during the fifth-grade class. In the first example (see Figure 1), the students piggybacked off each other's responses by asking or answering questions that later became catalysts for further investigative group work.

The second example (see Figure 2) reveals a group with less experience that, after struggling to complete this

task, asked one brilliant question: "What is Jazz?" I posted their question on the classroom wall, making it the overarching through line of our entire unit—one we revisited often.

Finally, student reflections revealed their struggle to "understand, articulate, and bring to bear the criteria by which they judge the quality of their efforts," illustrating the *standards of quality* they set for themselves.¹⁴

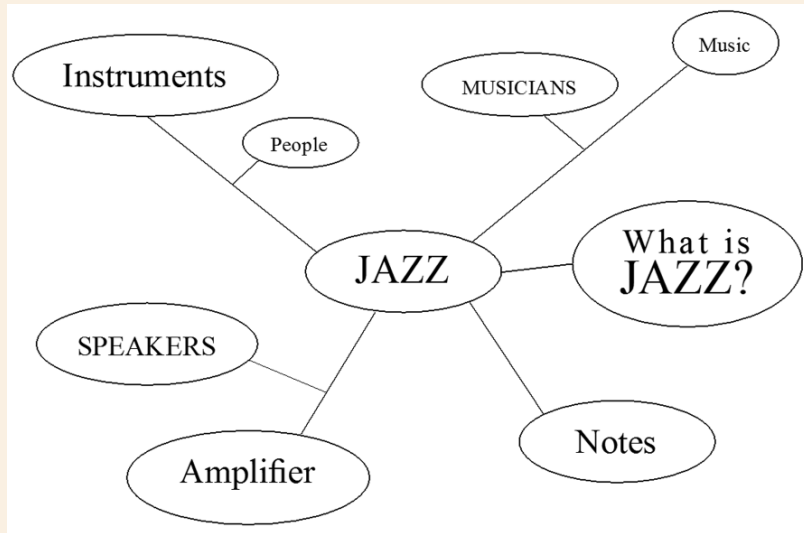
I looked at the first measure and I looked at each note in it. I said the note names to myself while fingering it on the recorder so I know I can do the music. After I was familiar with the notes, I played it slowly on recorder and played it maybe 2–5 times until I was pretty good. I went to the next measure and repeated it the same way as I did before. When I got through the whole piece of music, I played the whole entire thing. If I struggled, I looked at that measure, and fingered it then played it till I understood the notes very well (almost perfectly). I would play the whole piece over again

till I memorized it pretty good or when I can play it with ease . . . I prefer a piece of music without the note names. We had the choice of playing an instrument, I picked recorder instead of the others because I was still having a little problem with it and I wanted to get better.

To foster student reflection and self-assessment, it's critical to step back and pose musical thinking questions that empower children working in groups the freedom to explore, create, and take responsibility for their learning. It is important to provide students opportunity to talk about their own ideas and consider other's ideas and perspectives. The ideas and issues children think about and the ways in which they think about them are most important. Group work undertaken through creative endeavors "provides opportunities for children to confer meaning on their creativity, to connect and interact in ways that uniquely develop a social and musical sense of self."¹⁵ Indeed, Rogoff noted

FIGURE 2

Student Map Describing Jazz



the importance of shared understanding, stating “individual creativity occurs in the context of a community of thinkers.”¹⁶

Reflection + Collaboration = Creativity

Planning experiences that are intriguing and challenging without overwhelming children or dampening their creative spirit can be a daunting task. Those who work with younger children must be keenly observant so as to notice when children discover problems of interest and then nurture their journey as musically creative individuals. Engaging children in reflective and collaborative practices embedded in authentic musical experiences that are modeled and guided by the teacher over time can assist in these efforts. Asking students questions such as “What does that tell you?” or “What is the connection?” or “What did you learn and how do you know you learned it?” along with asking them to explain why assists students in making sense of their musical experiences by pulling ideas together and making connections. Inquiry and questioning play critical roles in cultivating thinking skills and deep understanding.

Designing musical problems for students to solve extends inquiry work and encourages students to think for themselves as they search for answers. As part of their inquiry work, students should have opportunities to plan and make choices. During planning, children must identify goals and consider options—what they will do, how will they do it, how much time they have, and what kind of help they will need. Planning in this case goes beyond simply making choices; it involves making choices with intention and purpose.¹⁷ Students must make decisions and predictions, recognize problems and propose solutions, and anticipate results and reactions. Reflection is involved in each of these processes, and students should be encouraged to go beyond simply reporting what they did. Provide them time to reflect on questions such as (1) “What was the process you used to learn this?” (2) “What kinds of decisions did you have to make?” (3) “Why does this work or why didn’t this work?” and (4) “What would you do the same (or differently) next time?” Thinking together in this way helps students to become more aware of their learning and encourages them to take ownership

while developing deeper understanding, social problem-solving skills, and appreciation for the work in which they and their peers engaged.

Making reflection an ongoing activity and presenting opportunities for students to reflect in different ways is key to keeping students engaged and interested in providing genuine responses. While my students reflected through the more traditional ways of collaborative conversations and written journals, choosing not to audio record their reflections, many teachers are making use of tech-driven tools and strategies to foster ongoing student reflection. To encourage and document reflections, a variety of media including audio interviews and blogs could be incorporated into instruction. For example, a teacher might conduct audio interviews with each student group at the beginning, middle, and/or end of a unit of study or do informal interviews with individuals to capture the nature of students’ developing understanding. Students could interview each other as well. Another way to document student thinking would be to set up a video camera in a private corner or practice room. In much the same way many music teachers do for student playing assessments, have each student take a moment from their group work to record an update on their personal progress or their response to a specific reflection question provided by the teacher.

Student groups could also create weekly written or video blogs to report on their group’s ongoing process, questions, solutions, and overall progress. Roles could rotate so that everyone has the chance to reflect and report. Blogs are a familiar mode of communication to students, and in addition to naturally fostering reflection, they also support purposeful planning and the development of reading, writing, and communication skills. Blogs can also provide a digital portfolio of student work that reflects growth over time—a personal archive that students may visit at any time. Perhaps you can imagine other emerging technologies that would support the development of musical

creativity through reflective and collaborative practices? If you are familiar with such programs and apps, I encourage you to contribute an article of your own that would further the discussion on creative pedagogy.

Through modeling how expert musicians think and work, music educators can foster an atmosphere that encourages active student reflection, problem solving, generation of questions, and articulation of standards of quality. By implementing the strategies suggested here, the power of reflective and collaborative practices in cultivating children's musical thinking and creativity is evident as students become musicians who create meaning for themselves and others. To best illustrate this point, here is a final reflection from Sarah, a sixth grader who participated in the Haydn unit that focused on form. She wrote, "Humans are like theme and variation because you grow and change but you are the same person."

NOTES

1. Pseudonyms were used for all students to protect privacy.

2. Barbara Rogoff, *Apprenticeship in Thinking* (New York: Oxford University Press, 1990), 169.
3. Margaret S. Barrett, "Constructing a View of Children's Meaning-Making as Notators: A Case-Study of a Five-Year-Old's Descriptions and Explanations of Invented Notations," *Research Studies in Music Education* 16 (2001): 33–45; Pamela Burnard, "Investigating Children's Meaning-Making and the Emergence of Musical Interaction in Group Improvisation," *British Journal of Music Education* 19, no. 2 (2002): 157–72; Patricia Shehan Campbell, *Songs in Their Heads: Music and Its Meaning in Children's Lives* (New York: Oxford University Press, 2010); Panagiotis A. Kanellopoulos, "Children's Early Reflections on Improvised Music-Making as the Wellspring of Musico-Philosophical Thinking," *Philosophy of Music Education Review* 15, no. 2 (2007): 119–41; and Jackie H. Wiggins, "The Nature of Shared Musical Understanding and Its Role in Empowering Independent Musical Thinking," *Bulletin of the Council for Research in Music Education* 143 (1999/2000): 65–90.
4. Joseph Walters, Steve Seidel, and Howard Gardner, "Children as Reflective Practitioners: Bringing Metacognition to the Classroom," in *Creating Powerful Thinking in Teachers and Students: Diverse Perspectives*, ed. John N. Mangieri and Cathy Collins Block (Orlando, FL: Holt, Rinehart, and Winston, Inc., 1994), 291.
5. *Ibid.*
6. Barrett, "Constructing a View," 43.
7. Pamela Burnard, "How Children Ascribe Meaning to Improvisation and Composition: Rethinking Pedagogy in Music Education," *Music Education Research* 2 (2000), 22.
8. Jackie Wiggins, "Compositional Process in Music," in *International Handbook of Research in Arts Education*, ed. Liora Bresler (Dordrecht, the Netherlands: Springer, 2007), 466.
9. Walters et al., "Children as Reflective Practitioners," 292.
10. *Ibid.*, 294.
11. Burnard, "How Children Ascribe Meaning," 22.
12. Kanellopoulos, "Children's Early Reflections," 136.
13. Walters et al., "Children as Reflective Practitioners," 291.
14. *Ibid.*
15. Burnard, "Investigating Children's Meaning-Making," 169.
16. Rogoff, *Apprenticeship in Thinking*, 198.
17. Ann S. Epstein, "How Planning and Reflection Develop Young Children's Thinking Skills," *Young Children* 58, no. 5 (2003): 28–36.