Music Teaching and Critical Thinking: What Do We Need to Know?

by Ann R. Small

"If Bach or Bernstein had attempted to compose an *1812 Overture*, would either have been better equipped than Tchaikovsky to do so?"

What do you need to know to answer that question?

An appropriate answer to the first question requires the knowledge of certain facts and the ability to analyze those facts to make an informed judgment. An appropriate response to the second question requires a higher level of intellectual response: A person must recall known facts, analyze the first question defining its important issues, and formulate a series of right questions that will lead to an appropriate answer. The first question stimulates one level of critical thinking about music history facts and their application to a problem; the second question stimulates a deeper level wherein one is invited to think through the *process of thinking through* a problem to a reasonable conclusion. Both questions stimulate a higher level of thinking than "Who wrote the *1812 Overture*?", although that, too, is an important question.

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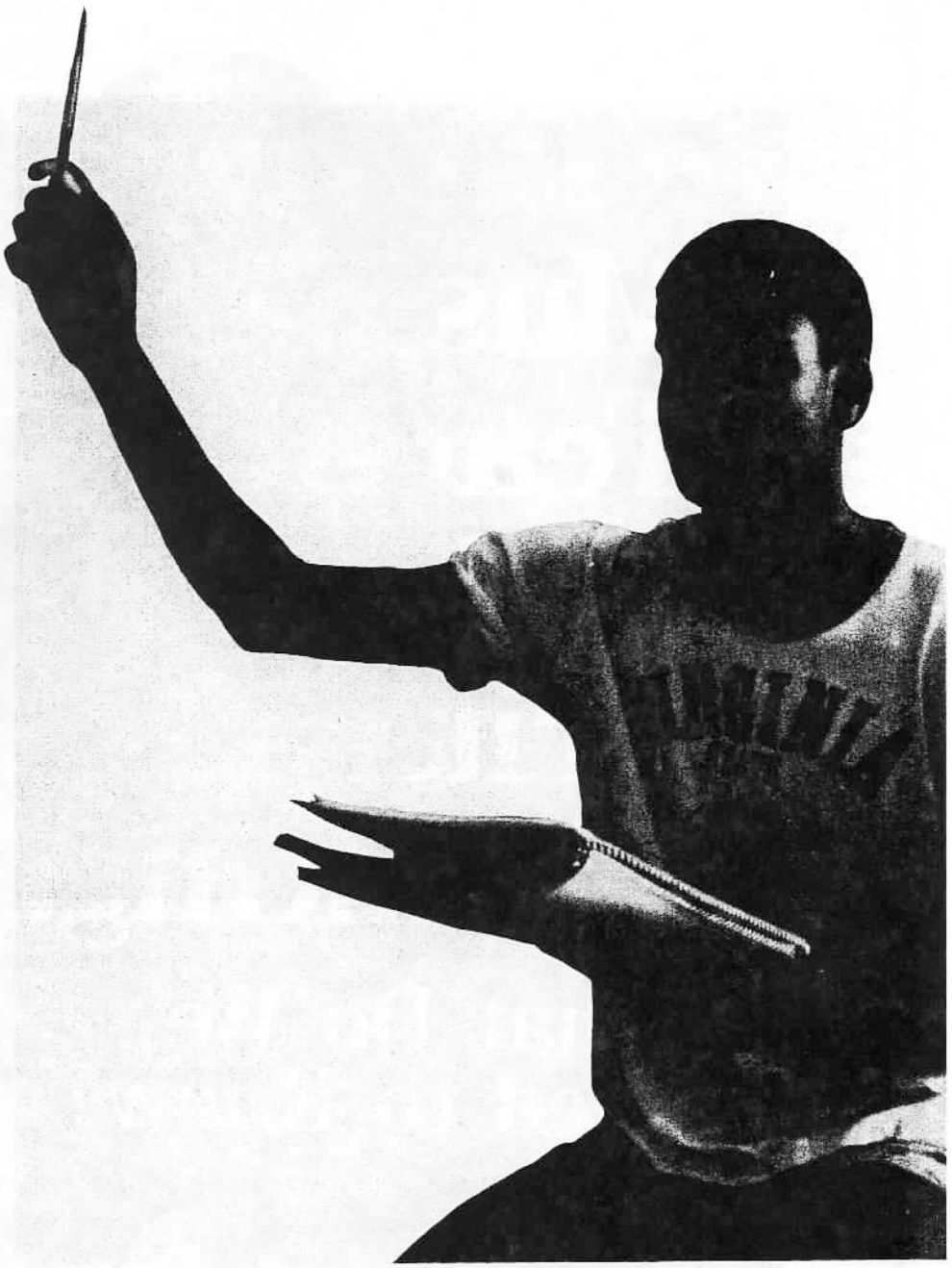
A new wave

Critical thinking has captured the attention of education reformers throughout the United States. The music education profession, along with other disciplines, has acknowledged the critical thinking movement and is addressing it in workshops, courses, and professional literature. Lee Pogonowski's article in the February 1987 issue of *MEJ* is one example of professional concern.[1] Who can doubt that students with disciplined thinking skills better perform, analyze, interpret, create, even enjoy music? A citizenry that carries critical thinking into the arts most likely will live richer, more complete, indeed happier lives. It is just as likely that unchallenged biases about music may result if a musical environment offers little opportunity to think about the performance of music, the effect of music, and music itself. The development of musically sensitive consumers and performers of music can be enhanced measurably if students are challenged to think significantly in their music training.

Some teachers, however, feeling uncomfortable with the imposition of another curricular trend, may

1. Lee Pogonowski, "Developing Skills in Critical Thinking and Problem Solving," *Music Educators Journal* 73, no. 5, February 1987, 37–41.

secretly wish they could get on with their traditional music programs. The rationale of the critical thinking movement makes sense, but teaching high-level thinking skills can be a tall order when added to the present responsibilities of teaching musicianship, music literacy, and aesthetic response to created sound. In the first place, critical thinking is a broad topic, not easily and cleanly defined. Additionally, it is a challenge for the best adult thinkers to find activities for teaching the skills of an abstract concept to many age levels. Music teachers who are compelled to include this discipline in their music curricula will need a variety of ideas for approaching the task. An uncomplicated look at some of the characteristics of critical thinking and some practical suggestions for teaching students to develop thinking skills can make a sophisticated concept understandable and workable for music teachers and those they teach.



Classroom context

How does critical thinking fit into music teaching? In seeking definitions and examples of critical thinking in musical settings, it is important to realize that this kind of thinking can occur in many ways. Pogonowski chose the analysis, synthesis, and evaluation levels of the [Benjamin] Bloom Taxonomy as one model for teaching thinking skills to music students.[2] There are other cognitive activities that good teachers have encouraged for years, though they may not have identified their techniques as those specifically designed to teach critical thinking. One such activity occurs in music studios when students are asked to perform self-prepared pieces. In fulfilling this requirement, students must interpret the musical score, execute psychomotor skills, and apply acceptable stylistic interpretation. The ability to define a problem, gather pertinent data, interpret the data in a rational unbiased manner, and reach a reasonable conclusion is one way to practice critical thinking. The self-prepared piece results from this approach. While this particular definition of critical thinking is true, it is limited. Keeping a broad perspective seems important, so it may be better to suggest some qualities of critical thinking that can be applied to musical situations.

1. *Defining the musical problem.* What exactly and eventually do we want to know? In the opening question, do we want to know "Who is Bach or Bernstein or Tchaikovsky?" Probably not. Many students already know these people from their music study. Knowledge of these composers' relationships to their times (for example, how nineteenth-century Russians felt about the 1812 war and retreat of Napoleon's army from Moscow), and of the instrumental resources available to them might help students clarify the definition of the problem.

2. Pogonowski, 39

2. *Identifying the "point."* Knowing what is (and what is not) related to a given subject is necessary for rational decision making. (It is common to hear adults argue points that are unrelated to the problem at hand.) Bach's large family probably would have little bearing on his ability to write an overture such as this one composed by Tchaikovsky in 1882. Bernstein's historical perspective, however, might be an advantage and certainly is related to the point.

3. *Recognizing underlying assumptions.* It is important to identify those points that are taken for granted. As students "think about thinking" in this way, they learn to limit their conclusions to the premises of their assumptions. One assumption that may exist in seeking a solution to the opening question is that it is possible for anyone other than the original composer to write the composition better than its author. Some would say it was impossible. In another example, music teachers frequently hear students say, "I don't listen to the words, I just feel the beat." Inherent in this statement is the assumption that it is indeed possible to respond to only certain elements in music while ignoring others.

4. *Detecting inconsistencies.* Inconsistencies in assumptions and points of view are sometimes obscure, and learning to recognize them is an important aspect of developing critical thinking skills. "Practice makes perfect" is a belief based on the assumption that doing something over and over increases proficiency. Those who have thought critically about that statement, however, will concede that only perfect practice makes perfect. Practicing the wrong technique over and over will make a performer very good at playing or singing badly, which is hardly a musician's idea of perfection.

Teaching critical thinking

There are several practical techniques music teachers can use to help students develop thinking skills.

1. *The teacher should structure an atmosphere of cognitive challenge.* Alternative solutions to musical problems can be presented or discovered with appropriate guidance. Music students can be taught to expect friendly criticism of ideas and thereby are encouraged to increase their factual knowledge and learn to reason from monological (one way of looking at an issue), dialogical (two ways), or multilogical viewpoints.[3] The student's present musical knowledge (correct or incorrect) and tastes can be applied to a problem, while the teacher challenges with other viewpoints or encourages other students to do so. Inaccurate facts can be corrected.

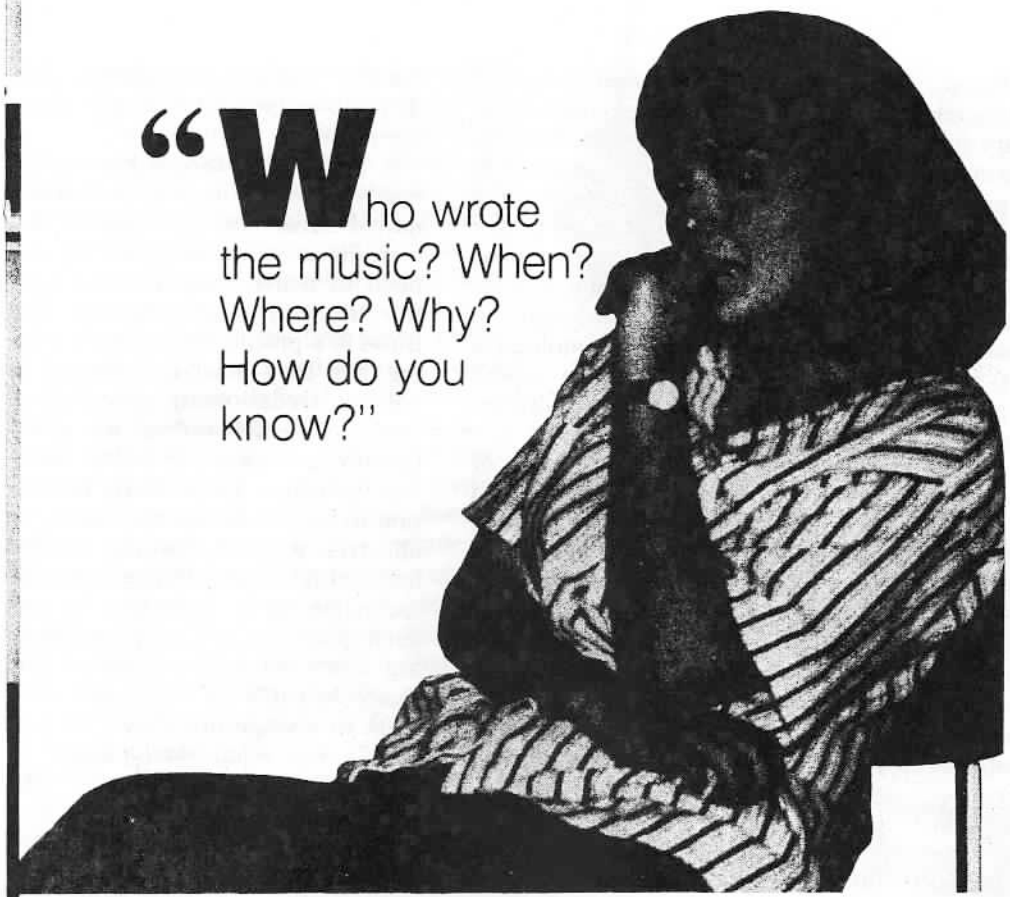
Almost every schoolchild studies Handel's *Messiah* as an example of oratorio. A teacher can choose one performance of the work, for example, the Colin Davis recording to generate a class discussion on appropriate tempos, stylistic features, and size of ensemble. At that point the student has heard the composition from one point of view (a monological approach). Comparing the Davis recording to the same aspects of performance on a Robert Shaw recording would provide a dialogical approach to discussion. Adding Richard Westenburg's recording would afford students an opportunity to discuss performance practice of Baroque oratorio from a multilogical viewpoint, an exercise suitable for upper grade school children. Through guided exchange the student's body of musical knowledge and values may be increased, corrected, and refined, and the student can begin to learn a process of musical decision making based upon reason. When students reach conclusions after unbiased consideration of more than one way of looking at a problem they can better present a reasonable defenses for their conclusions. The process has yielded much more than a musical experience. Students have thought critically about the music.

2. *The teacher should plan a specific incident of intellectual dissonance.* Most educators agree that learning is stimulated best by the need to learn. Students (not only the teacher) must perceive that there is a problem that needs solving, and they must feel a need to solve it. Occasionally providing alternative answers that are intentionally inadequate and that deliberately cause momentary frustration to the music learner can be an effective way of creating needed intellectual unrest. When using this technique, it is important to ask such questions as, "Did the listening guide let you say what you really heard?" or "Did you ever want to change an answer or say, 'That's not what was played' or 'That's not what I meant!'?" The waving hand along with "But ... but..." can be a perfect setting for thinking critically if the music teacher *always* follows these incidents with opportunities for adequate alternatives and intellectual consonance. Music experiences should not result in a sense of unresolved frustration.

3. *The teacher should help the student develop a repertoire of questions to activate the reasoning process.* Learning to think critically means, in part, learning what questions to ask oneself to find relevant answers to problems, musical or otherwise. Helping students think critically requires that a teacher sometimes work backward from a musical solution and formulate questions that will lead a student stepwise in the student's thinking to the same or a different conclusion. Model questions that lead to higher and higher levels of thinking are familiar in the Bloom Taxonomy.[4] "Who?" "What?" "Where?" and "When?" are good questions to establish factual bases from which to reason. "How?" and "Why?" acti-

3. Richard Paul has suggested that most subject matter in the social sciences and humanities consists of issues that can be approached dialogically, if not multilogically. Session on Critical Thinking, Meeting of the American Association of Higher Education, Chicago, 1985.

4. Benjamin Bloom, ed., *Taxonomy of Educational Objectives, Handbook I: Cognitive Domain* (New York: David McKay Co., 1956).



vate the reasoning process itself. A question such as "What do you need to know to find the answer?" elicits an unlimited number of questions that might be relevant to finding the answer to a question about the day's listening activity. "What do you need to know to determine whether or not Gould's 'American Salute' is a statement about the Vietnam War?" Students can be guided to start with the "Who? What? Where?" questions—"What is 'American Salute'? What theme does it contain that suggests war? Who is Morton Gould? When did he live? When did he write 'American Salute'? When was the Vietnam War? How can this composition possibly be related to the Vietnam War? How can it not possibly be related? Why do you think Gould wrote the piece? How can you find out why he wrote it?" Pertinent questioning can lead to correct or, at least, reasonable solutions. Learning to ask "How?" and "Why?" is particularly important in learning to think critically.

Questioning need not be limited to discussions about existing music literature. Questions that lead students to tasteful and accurate (or reasonable) interpretations of self-prepared music can cause students to intellectually examine their own performances as well as the performance of others. "Who wrote the music? When was it written? How were ornamentations treated in that period? How do you know? What are your sources of information? Are they reliable sources? If the piece had been written a hundred years later, would you perform it the same way?" Critical thinking can be stimulated also by questioning when the music activity is a creative one: "Here is an eight-measure phrase with measures five and six left blank. Select a rhythm pattern from the following alternatives that will create tension in those measures. What questions should you ask yourself before making your selection?" ("What rhythm elements are considered tension-building? Do those elements exist in my choices?")

4. *Critical thinking should culminate in a sense of success.* Students who have given rigorous thought to any kind of musical challenge should feel a sense of satisfaction about their thinking. This does not mean necessarily that they are satisfied with their answers (there may be no right or perfect answers), opinions, existing knowledge, or skills, but they should feel good about the intense use of their minds. Music teachers should be careful to ensure that distinctions between right and wrong answers and disciplined thinking are clear to students and that good thinking is rewarded as much as appropriate answers.

Critical thinking is an intellectual endeavor that music educators can applaud enthusiastically. Contemporary music education activities in the classroom, rehearsal room, private studio, and on the concert stage provide an impetus for teaching critical thinking. Music teachers who have learned to define musical problems, isolate the "point," recognize prevailing assumptions, and detect inherent inconsistencies are well on the way to teaching their students to do the same. Setting the stage for cognitive challenge in the classroom environment is important, and structuring an event to cause intellectual unrest puts the students on course toward higher level thinking. A well-developed repertoire of questions to activate the reasoning process can help students reach satisfying conclusions and feel good about significantly using their minds whenever they participate in music. Musicians who are critical thinkers probably will become better performers, critics, composers, and teachers of music, and musical consumers who are critical thinkers will most likely listen to them.