

**Student Achievement as a Criterion for Assessment of Music**

**Teacher Effectiveness**

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# **Student Achievement as a Criterion for Assessment of Music Teacher Effectiveness**

## **Abstract**

Decision makers in the United States are currently embracing the challenges of assessing teacher effectiveness. Driven by increasing evidence from the research literature that suggests that teacher efficacy plays a large role in student achievement and the fact that Race to the Top fund regulations stipulate that student achievement must be a “significant” part of teacher evaluation systems, it is likely that music educators will have assessment of student achievement become a factor in their professional lives soon. The purpose of this paper is to articulate a plan for the valid and reliable assessment of student achievement in music that might be used as a criterion for assessment of music teacher effectiveness. The plan includes a scheme for changing attitudes toward assessment, a method for making the music studied in schools relevant to students who encounter music outside of schools in their lives everyday, and a framework for high quality music assessments. This framework stipulates that high quality assessments in music should be: (1) developed in conjunction with standards, (2) grounded in discipline-based actions describing how individuals encounter music, (3) implemented in a series of assessment tasks, and (4) utilized to position students for success in the discipline by providing diagnostic information to teachers.

## **Keywords**

Student achievement, assessment, music teacher effectiveness

The quality of instruction students receive is the single most important factor in predicting student achievement. This statement is supported by meta analyses of both qualitative and quantitative studies that suggest that "... policy investments in the quality of teachers may be related to improvements in student performance" (Darling-Hammond, 2000, p.1). Assessing quality instruction, however, has remained elusive; but decision makers in the United States are embracing now, more than ever, the challenges of assessing teacher effectiveness.

Teacher evaluation is not a new phenomenon in the attempt to reform education in the United States. In the years following the Industrial Revolution, schools became larger; and unions started to exert their influence, setting specific criteria for advancement in the profession. In the 1950s, a record number of students entered U.S. colleges and universities. When the U.S. won the race to the moon in 1957, teachers in the United States enjoyed a relative respect that they have yet to regain. Then came the *A Nation at Risk* report (National Commission on Excellence in Education, 1983), which purported that what American children know and are able to do as a result of their schooling was not adequate to compete for jobs in the next century. "One of the primary results of *A Nation at Risk* was the effective schools movement," Markley (2004) commented. "Teacher evaluation gained a new importance as the effective schools movement spread across the United States" (p. 2). One study (Sullivan, 2001) found that classroom observations were, by far, the most common source of teacher evaluation data at the turn of the twenty-first century.

Classroom observations as the primary measurement tool for teacher effectiveness was criticized, however, as the Standards Movement of the 1990s gained momentum. Mari Pearlman (2002) describes the classroom observation discontent as follows:

With the standards movement of the late 1990s came increased expectations for student performance and renewed concerns about teacher practice. Driven by politicians, parents, and, notably, teacher unions, school districts began an analysis of teacher evaluation goals and procedures. The traditional model of teacher evaluation, based on scheduled observations of a handful of direct instruction lesson, came under fire. ‘Seventy years of empirical research on teacher evaluation shows that current practices do not improve teachers or accurately tell what happens in classrooms’ (Peterson, p. 14). Not surprisingly, in this climate, numerous alternative evaluative practices have been developed or reborn. (par. 12)

It is in this climate of searching for “alternative evaluative practices” that teachers and decision makers are now operating. Why specifically, though, at the start of the 2011–2012 school year in the United States, is there such an emphasis on teacher evaluation systems in general; and why now are music educators being drawn into the discussion? According to the National Association for Music Education (NAfME, 2011b), “The issue is being brought to the front burner by talk of the reauthorization of the Elementary and Secondary Education Act and Race to the Top Requirements [RTTP]” (par. 1). The criteria for evaluating teacher preservice candidates championed by the Interstate Teacher Assessment and Support Consortium (INTASC, 2011) and teacher accrediting institutions such

as National Council for the Accreditation of Teacher Education (NCATE, 2008)—teacher skills, knowledge, and dispositions—are certainly mentioned frequently as criteria that contribute to teacher effectiveness and, therefore, need to be assessed. It is evident, however, that part of the content of a music teacher evaluation system will involve the extent to which students demonstrate what they know and are able to do—student achievement. This is due in part to increasing evidence from the research literature that suggests that teacher efficacy plays a large role in student achievement (Hanushek & Rivkin, 2010), but primarily from the fact that RTTP fund regulations stipulate that student achievement must be a “significant” part of teacher evaluation systems (U.S. Department of Education, 2010). (It should be noted that RTTP is a \$4.35 billion United States Department of Education competition designed to spur reforms in state and local district K–12 education.) Thus in states that have secured RTTP funding, teachers’ salary increases, tenure, and dismissal decisions may be based on measurement tools that rely heavily on student test scores. The threat of dismissal or the promise of bonus dollars based on students’ performance scores certainly constitutes *high-stakes* assessment.

The term *high-stakes* has a number of connotations that are quite controversial. Indeed, some of these connotations strike fear and consternation in the hearts and minds of music educators. For example, *high stakes* may call to mind a single, defined state-mandated test. “State testing to document Adequate Yearly Progress (AYP) in accordance with NCLB [No Child Left Behind] is called ‘high-stakes’ because of the consequences to schools [and of course to students] that fail to maintain a steady increase in achievement across the subpopulations of the schools (i.e., minority, poor, and special education students)” (Center for Public Education, 2006, par. 7).

Music educators in the United States have lost their jobs because administrators felt the need to require students to have more math or language arts instruction rather have them enroll in music or arts courses. Another negative connotation of *high stakes* assessment involves direct consequences for passing or failing, i.e., something is “at stake,” as when students who fail to reach a cut score on a high-stakes reading test are not allowed to take elective arts. Because of RTTP regulations and decision makers’ desire for accountability, music educators in the United States likely will encounter *high-stakes* assessment in the future. This assessment likely will include evaluation of student achievement scores, but these scores should be only one factor among a series of other indicators in music educators’ “efficacy portfolio.” The purpose of this paper is to articulate a plan for the valid and reliable assessment of student achievement in music that might be used as a criterion for assessment of music teacher effectiveness.

### **Setting the Stage by Changing Attitudes**

To begin, if the music education profession is to embrace student achievement as one criterion for teacher assessment, then attitudes toward this assessment must be changed. Applying a theory for attitude formation (Fishbein & Ajzen, 1975), the framework for the assessment must contain design principles that address the beliefs of music educators that are the basis for negative attitudes towards assessment. Among the beliefs that foster music educator’s negative attitude toward assessment are the beliefs (1) that assessments have failed to engage the students in discipline-based activities that are authentic, interesting, and significant, and (2) that there is a disconnect between music instruction, music assessment, and musical life in the real world.

Many of our colleagues who characterize music assessment as the “root of all evil” are not diametrically opposed to testing as a part of the learning process. They are opposed to tests that contain items that are easy to design (some multiple choice items, for example), but do not represent something interesting and significant about the discipline. (I recently encountered a 5<sup>th</sup> grade general music worksheet from a series book during a student teaching observation that asked students to select what color (white, yellow, purple or pink) best represented Beethoven’s mood while he was composing his *Fifth Symphony*!) Asking students to identify the note names of pitches written on the staff for the C major scale is not an activity in which many young adults will engage as they encounter music in their adult lives. What is needed is a framework for assessment that contains exciting, authentic tasks that involve students in applying musical knowledge and skills as evidence of being engaged in higher levels of critical thinking.

### **Making Music Studied in Schools Relevant**

Secondly, whether some of our colleagues recognize it or not, there seems to be a large discrepancy between musical encounters in the real world and musical encounters in the classroom. Then too there is often a large gap between the learner’s experiences in the classroom and the content of assessments. Those who recognize these gaps will certainly have a negative view of assessment as not being relevant. Music learning experiences in the classroom, music assessment content, and real world musical encounters must be aligned. Certainly, for too long classroom music learning have relied almost exclusively on learning to sing or to play an instrument and to be able to understand notation in the United States. The National Music Standards (Music Educators National Conference, 1994) call on us to be more comprehensive in our approach to classroom music experiences. Perhaps if we design a framework for music

student achievement that aligns closely with how students will interact with music when they encounter it in their adult lives, a more positive attitude toward assessment in music will be fostered. For example, rather than just learn to sing the correct notes in a song (assessed individually in quartets with backs to the class), we should be focusing on asking students to attend a local concert in the community (or listen to a recording) of a song that has similar stylistic characteristics and compare their singing to that of the other performing group. The assignment might be extended to ask students to work with a small group of 4-6 students to arrange a variation of several phrases and perform it for their classmates. Students could actually engage in self-assessment for parts of this assignment, making it much more realistic to the musical encounters they might have as adults.

All of this seems to beg the question: What is significant and meaningful about music? Certainly what we do to promote creativity and critical thinking, for example, is not the sole province of the arts; but can we show through assessment data that music and arts study does indeed contribute to these important Twenty-first Century Skills (2004). Yes, in time and with focus on research in this area, it seems possible to support this claim. What's important for students to know about music and to be able to do with music that can be applied not only in the workplace beyond school, but in the everyday lives of students who read newspapers, make value judgments about products in the marketplace, watch movies, listen to iPods, vote, and try to repair their homes? Let's figure out what this content is and present it in authentic, musical ways that constitute a series of valid musical assessments.

### **Toward a Framework for High Quality Music Assessments**



It goes without saying that these “music student achievement assessments” must be “high-quality music assessments,” i.e., valid and reliable. There are several principles that should provide a valid framework for these music student assessment items that could assist in implementation. Student assessments in music should be: (1) developed in conjunction with standards, (2) grounded in discipline-based actions describing how individuals encounter music, (3) implemented in a series of assessment tasks (not a single test), and (4) utilized to position students for success in the discipline (as opposed to identifying those who have failed to demonstrate minimum competencies in the discipline) by providing diagnostic information to teachers.

### **Assessment & Standards**

Assessment and standards go hand in hand. In some ways, this principle seems contradictory to the way many curriculum models present the process of curriculum development (Tyler, 1950; Taba, 1962; Walker, 1990). First, goals and objectives are established based on the needs of students and the needs of society in general and the community in particular. Then the teacher designs learning experiences in which content identified in the objectives is presented using certain instructional strategies and learning materials. Finally, assessment occurs to see if the objectives have been realized. In the operational curriculum, however, the teacher should be thinking about how students will demonstrate skills and understandings (assessment) from the moment he/she begins to write the objectives.

In the United States music educators have formulated a series of goals (the nine content standards of the National Standards [MENC, 1994, p. 3]) and objectives (the achievement

standards [MENC, 199, p. 13-26]) that have established minimum competencies at grades 4, 8, & 12. Several years ago a committee, chaired by Paul Lehman, was appointed by the National Association for Music Education (NAfME, formerly MENC: The National Association for Music Education) leaders to determine if these standards should be updated. Among its findings, the Committee concluded that what are needed are specific grade-by-grade minimum competencies, at least in pre-school through grade 8 (Lehman, 2008, p. 28). Perhaps these competencies could take the form of ten levels rather than naming specific grades because districts may begin music instruction at different times and combine grades for music instruction in non-traditional groupings. This will be no easy task. Politically, it will require music professional organizations and societies (Orff, Kodaly, American Choral Directors, etc.) to come together and compromise on what minimum competencies will be expected at each level. As the competencies are being developed, the corresponding assessment tasks should be designed concurrently. NAFME is currently one of the leading organizations in the National Coalition for Core Arts Standards (2011a) that has taken on the task of revising the National Standards for Arts Education in the United States. The goal of this group is to have a draft of the new Standards available for review sometime next year.

### **Discipline-based Actions**

If the student music assessment tasks are to be authentic, then they should be grounded in engaging the students in processes by which they will encounter music in their lives. The NAEP Assessment in Music of the 1990s was designed in a framework of performing, creating, and responding tasks (Persky, Sandene, & Askew, 1998, p. 3). How do students interact with music?

They perform it; they create it; they respond to it. These actions would seem to provide an excellent framework for the assessment content.

The problem is that they are costly to design and to administer. The 1997 version of the NAEP assessment used all three of these processes to assess eighth grade students. The assessment designers found ways to assess individuals' music making when using notated music or improvising, for example, by using wireless microphones to capture individual students music making within a group and electronic keyboards to measure improvisatory skills. Unfortunately, the 2008 version was limited to only assessing 8<sup>th</sup> grade students' ability to respond to music using a multiple-choice format (Shuler, Lehman, Colwell, & Morrison, 2009, p. 12).

We must find cost effective ways to design assessments that utilize creating and performing as well as responding. With the help of technology, it is possible to not only assess the creative product, but to view the individual's creative process as well. Teachers are already utilizing *Smartmusic* (2010) software and hardware to record individual students' music making in group settings for assessment outside of class time.

### **A Series of Assessments**

A third principle essential to the implementation of high-stakes music assessment involves committing to a series of assessments to occur throughout the year, rather than one summative assessment. Perhaps the assessments would be organized in a series of 3-4 modules that could be administered in any order to allow maximum flexibility for the teacher to deliver instruction within the time, space, and material limitations of a particular building or district. This would

take away the negative connotations of a high-stakes test given only once with “high-stakes” consequences. i.e., failure to pass from grade to grade.

### **Assessment for Success**

Finally, it is important that students and teachers feel that assessment of student achievement in music is not punitive. In the United States, students’ parents spend significant amounts of money to have their children’s athletic and musical skills assessed by established athletes and musicians in summer camps, for example. They want their children’s skills to be diagnosed so that the instructors might lead them in activities and guided practice designed to foster growth and improve the requisite skills needed to participate at more advanced levels of the activity, resulting in more meaningful and rewarding experiences for their children. Why should there be different expectations for music in schools during the academic year?

If designed appropriately, the music assessment can be written to serve a diagnostic function so that teachers can help guide students to success. It should always provide accurate information as to the level at which the student is performing. With this information in hand, the teacher can modify objectives and design learning experiences that will lead to growth for the individual student.

### **Summary**

Student achievement assessments in music need not have negative connotations. These assessments do not need to be one-time tests divorced from the excellent music making and learning that is occurring in some classrooms and that will be a prevalent part of students’ adult

lives. Assessment of student achievement in music should be about fostering growth in musical knowledge and skills in the individual for a lifetime of enjoyment, creative fulfillment, and self-understanding. It is both possible and necessary.

What does not seem possible at this point in time is to pretend that U.S. decision makers' cry for accountability in education will be silenced. The research literature is showing that there is a correlation between quality teaching and student achievement. The federal government of the United States is willing to invest in state and local school districts to ensure that quality teachers are recruited and retained in the profession. Quality teaching and student learning are occurring in the discipline of music. Let's use assessment to help "make the case" that "for today's students to succeed tomorrow, they need a comprehensive education that includes music taught by exemplary [quality] music educators" (Butera, 2010, par. 3).

## **References**

- Butera, M.B. (2010). Press release: Capitol Hill rally emphasizes urgency of supporting school music. Retrieved from <http://www.nafme.org/news/view/press-release-capitol-hill-rally-emphasizes-urgency-of-supporting-public-school-music-programs/>
- Center for Public Education Content Search. (2006). A guide to the No Child Left Behind Act. Retrieved from the Center for Public Education website: <http://www.centerforpubliceducation.org/Main-Menu/Policies/A-guide-to-the-No-Child-Left-Behind-Act->

- Council of Chief State School Officers. (2011). Interstate Teacher Assessment and Support Consortium model core teaching standards: A resource for state dialogue. Washington, D. C.: Author.
- Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy Analysis Archives*, 8, 1. Retrieved from <http://epaa.asu.edu/ojs/article/view/392/515>
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Hanushek, E., & Rivkin, S. (2010). Generalizations about using value-added measures of teacher quality. *American Economic Review*, 100(2), 267–271.
- Lehman, P. R. (2008). A vision for the future: Looking at the standards. *Music Educators Journal* 94(4), 28.
- Markley, T. (2004). Defining the effective teacher: Current arguments in education. Retrieved from [www.usca.edu/essays/vol112004/markey.pdf](http://www.usca.edu/essays/vol112004/markey.pdf)
- Music Educators National Conference. (1994). *The school music program: A new vision*. Reston, VA: Author.
- National Association for Music Education. (2011a). Core standards group meets at NAFME headquarters to discuss 21st century skills.. Retrieved from <http://www.nafme.org/news/view/core-standards-group-meets-at-nafme-headquarters-to-discuss-21st-century-skills>
- National Association for Music Education. (2011b). NAFME recommendations for music teachers: Teacher evaluation. Retrieved from <http://www.menc.org/resources/view/music-education-advocacy-central>

The National Commission on Education. (1983). *A nation at risk: The imperative for educational reform*. Washington, D.C.: The United States Department of Education.

National Council for the Accreditation of Teacher Education. (2008). Unit standards in effect 2008. Retrieved from <http://www.ncate.org/Standards/NCATEUnitStandards/UnitStandardsinEffect2008/tabid/476/Default.aspx>

*Partnership for 21<sup>st</sup> Century Skills*. (2004). Retrieved from the Partnership for 21<sup>st</sup> Century Skills website:

[http://www.p21.org/index.php?option=com\\_content&task=view&id=254&Itemid=120](http://www.p21.org/index.php?option=com_content&task=view&id=254&Itemid=120)

Pearlman, M. (2002). Overview of teacher evaluation. In J. W. Guthrie (Ed.), *Gale Encyclopedia of Education*. Retrieved from

<http://www.answers.com/topic/overview-of-teacher-evaluation>

Persky, H. R., Sandene, B. A., & Askew, J. M. (1998). *The NAEP 1997 arts report card, NCES 1999-486*. Jessup, MD: U. S. Department of Education.

Shuler, S., Lehman, P., Colwell, R., & Morrison, R. (2009). MENC's Response to the 2008 NAEP and Recommendations for Future NAEP in Music. *Music Educators Journal*, 96(1), 12-13.

*Smartmusic 2010* (Version 10.1) [Computer software]. Eden Prairie, MN: MakeMusic, Inc.

Sullivan, C. (2001). Rewarding excellence: Teacher evaluation and compensation. Alexandria, VA: National School Boards Association.

Taba, H. (1962). *Curriculum development: Theory and practice*. New York: Harcourt, Brace, & World.

Tyler, R. W. (1950). *Basic principles of curriculum & instruction*. Chicago: The University of Chicago Press.

United States Department of Education. (2010). Race to the Top Executive Summary. Retrieved from <http://www2.ed.gov/programs/racetothetop/executive-summary.pdf>

Walker, D. F. (1990). *Fundamentals of curriculum*. San Diego: Harcourt, Brace & Jovanovich.