



Measurement and Evaluation

Authentic Assessment and Portfolios: What Do They Measure?

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“Portfolio” is used as the organizer for these papers as it has taken on a generic meaning for all types of authentic assessment—sort of like Xerox for a photocopy and Polaroid for instant pictures. The writers in this bulletin, however, are not limited to a strict definition of portfolios.

It is imperative that the Measurement and Evaluation SRIG initiate a systematic discussion about these generic portfolios and their place in music education as the mission of each SRIG is to advise the profession on matters pertinent to its specialty. Formal evaluation procedures have never been a high priority among music teachers but evaluation is an important component of the educational present focus on authentic assessment.

To what extent should the music education profession be concerned and informed about the evaluation component of educational reform is the critical question.

Members of this SRIG have long attempted to extol the possible benefits of systematic evaluation in the improvement of music teaching and learning but are changes now warranted? We know that music teachers are strong advocates of many forms of evaluation. For example music teachers emphasizing performance have always employed evaluation in their teaching and evaluation has been a serious and crucial part

of other facets of music education even if it has not been systematic. My use of the term "formal evaluation" distinguish those evaluation activities that do not occur in the normal flow of music teaching. The setting aside of time for final examinations or the giving over of a class period for the express purpose of administering a test are examples of "formal" evaluation procedures.

Because evaluation is so pervasive in music education there is likely to be confusion about any changed definition of evaluation, its purpose, procedures, and uses. We can perceive this change in the general literature on education where authentic evaluation and portfolios have climbed to the top of the charts and the perception seems to be that all classroom subjects can build on the music educator's experience in evaluation. I get the impression from reading this literature that portfolios will cure any education maladies in the same manner that vitamin C was touted to be of assistance in preventing and curing the common cold. Actually the claims for portfolios exceed any claims for vitamin C, that was a poor analogy; authentic assessment ranks with the invention of the phonograph and the computer as "stunning" breakthroughs in music teaching and learning. I have heard no claims for the lowering of cholesterol but portfolios are anxiety reducing. Although it is rewarding to be in the lime-light because of our experience in evaluation, the comparisons of evaluation procedures among school subjects is extremely crude. The advocates of authentic assessment could just as well have used for their comparison the

win-loss record of the school's athletic teams but I suppose that evaluation is a bit too authentic and likely doesn't portray the *academic dimensions* attributed, on occasion, to music instruction.

What one must realize is that the purpose of the evaluation and the interpretation of the data are more critical than the use of the technique itself.

Music contests, concerts, and festivals differ on many dimensions from authentic experiences because the context is different. The portfolios based on concerts and contests would contain different types of items than are present in the most authentic structures and any weighting scheme will likely have a different theoretical basis. The context is all important.

Context and Legitimacy

Because the context is so important in judging the worth of an evaluation procedure, the context of teaching and learning within the music education setting must be considered. This context is increasingly complex as the profession has been deeply involved for several years in a campaign for increased legitimacy and a portion of our professional efforts and even our educational objectives has been targeted at supporting the efforts of those individuals and groups championing that music is more than entertainment but is a curricular subject.

If you're moving, remember to send your mailing labels in.

Evaluation procedures can be expected to differ between curricular and noncurricular experiences and among programs stressing advocacy, collaboration, and/or direct musical instruction.

Theatrical license is more permissible in promoting advocacy evaluation procedures as the goal of advocacy is survival of some form of music education in the schools. I wince however, at some of the claims for authentic assessment in these advocacy goals but I accept them in the same manner as I accept the media's reports on Clinton's foreign policy (an oxymoron at best) knowing that public statements on foreign policy and maybe music education are made for bargaining purposes, to conceal important closed door negotiations, and are often not reflective of true beliefs and policies.

What is the purpose of Evaluation?

Making this distinction between advocacy efforts and curriculum efforts leads me to the primary question; *what is the purpose of the evaluation?* As you know, evaluation can have scads of purposes that range from evaluating having one's heart in the right place to providing indicators of what the student has learned and not learned. I remain partial to the use of evaluation for the improvement of instruction, but I know that purpose does not fit the layman's accountability perception of not only teaching but what evaluation is all about.

Types of Evaluation

I don't sense a concern on the part of music teachers or school administrators to wrestle with the issues of **summative evaluation**. Public performances satisfy any urges or itches parents and administrators have about the worth of the music program. The elementary textbooks that have been the basis for our curricula have not made summative evaluation very important in their philosophy. With or without textbooks, *participation* in music related experiences has been the primary objective in required music courses leaving us with little data on the musical accomplishments of our students. Our evaluation activities may have shunned multiple choice tests but the evaluation procedures in required music courses are no model for our own profession let alone other classroom subjects. To be sure, generally **authentic evaluation** statements are made—the kids don't seem to be able to sing as well as they should and/or their taste in music doesn't reflect nine years of mandatory instruction, but historically there have been few demands to document the number of students who can match pitch, hear a modulation, or make critical and discriminating comments about music objectives that meet any definition of authenticity. Further lack of interest in **summative evaluation** is that grades in music have not provided any energy to the evaluation movement. Pass and improv-

ing are the descriptor grades used in elementary schools; secondary school music courses tend to grade on attendance, behavior, and effort. I certainly don't have any teacher/parent notes in my collection of evaluation devices indicating that a student's perceptual structuring was developmentally delayed.

Although we do not employ evaluation for the traditional summative use, advocates of **authentic assessment** agree about the authenticity of music education's evaluation procedures. In instrumental music instruction, beginner through advanced, our evaluations consider both process and product; our concerts and contests are approached holistically and are quite authentic. Our evaluations employ tasks similar to the job descriptions of professional musicians, we don't use the normal curve or multiple choice tests, and every student is usually judged successful and is "passed" to the next grade.

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Richard Colwell

College teachers evaluate music instruction similar to evaluation in the public schools; their **summative**

evaluation of ensemble and private lesson experience is authentic with most students rated "successful." There is one nagging question, however. With these exemplary assessment programs, why don't we or the public take the assessment results seriously? Ensemble experience in college is required by NASM through the master's degree yet many colleges don't give grades for ensemble participation and/or don't count the evaluation in the student's grade average. College ensemble directors often use evaluation primarily as a means of control.

The crucial conclusion is that arguments about the worth of evaluation are seldom about the instrument or procedure itself, its how that instrument is used. Adopting any new or old evaluation procedure will have no impact in music education unless there is a change in the perceptions about music education itself.

Portfolios and the other authentic devices can measure anything one wants them to evaluate. A portfolio is a bit like an empty container and it is up to the teacher (and sometimes the student) to decide what should be included. I welcome portfolios and other forms of authentic assessment; I welcome any serious attention to the role of evaluation in music teaching and learning. I disagree with some of my friends, however, in that I don't see authentic assessment *replacing* any evaluation procedure that we have been using; authentic assessment and portfolios represent an additional and potentially powerful tool in our assessment repertoire. Statements about evaluation instruments and the use of evaluation data by

some of our leading spokespersons do make me queasy because the evaluation task is not a simple one. Bennett Reimer in reviewing research for the journal *General Music Today* discusses evaluation measures.¹ He states that the evaluation problem in research is pervasive and serious. One argument he presents is that "present aptitude and assessment tests are almost entirely based on a set of presumptions now considered highly dubious in research theory". He goes on to say that few of the tests used to evaluate basic research have anything to do with what cognitive psychologists are now suggesting we need most to know—"how students think, solve problems, understand, exercise creativity, internalize skills, make judgments, reflect about their learning, apply their learning in meaningful settings, connect learnings, go about discovering, set goals and subgoals, make predictions, set learning agendas and assess their success in achieving them." (p. 8) Reimer is correct in that present tests don't measure those abilities but Reimer is focusing primarily on the meta-curriculum; the curriculum that pertains to the entire process of schooling. He is not discussing outcomes of the direct curriculum of music instruction. His noble goal is to discuss aims for all of music and education where most teachers are more modest about their aims. He has challenged us in ways we've not been challenged and challenged us on our goals.

Reimer is not correct, however, that the data we have gathered gives us a skewed or irrelevant picture of what is happening in our programs. We've done a lot of goofy, sloppy things in evaluation but the reason we are cited by other disciplines within education is because our most important evaluations have been o.k. It's true we haven't attempted to evaluate those things that were not being taught; that's not the best way to spend one's evaluation resources unless the objective of evaluation is a philosophical one.

Testing has survived for good reasons; decision makers need a sound, fair, and reasonably efficient mechanism to

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help make difficult decisions about the allocation of opportunity.

Arts Propel is a term that is about as magical as the term portfolio. In Arts Propel the folios were not assessed during the first three years of the project. When they were, serious concerns were raised about their reliability, particularly discrepancies between judgments by the teachers and by evaluators external to the school system. Evaluation has not changed what students can do in Pittsburgh as 3/4 of Pittsburgh students (not just

music students) do not meet the standards of Lauren Resnick's *New Standards Project*. The music portion of Arts Propel provided us with scant evaluation data; the data were rich, however, in suggesting more effective *teaching* techniques. Two members of my department, Lyle Davidson and Larry Scripp were active in Pittsburgh and continue to work on Arts Propel issues—but what they do best is change how teachers teach and how teachers and students interact. Getting students to strive for the meta-cognitive objectives in their work is no simple task—lots and lots of in-service teacher training is necessary.

Teachers have liked the idea of using a portfolio device because they see it as low-stakes testing providing evaluation data primarily for the student or parent. The news media, however, use all evaluation data as high stakes data—an understandable idea on their part as the portfolio is being advocated as a *replacement* for high stakes standardized tests. We have just done away with life-time teacher certification in Massachusetts and teachers have to be recertified every five years. The basis for this recertification is to be a portfolio of professional development activities. Denying an experienced teacher continued certification is high-stakes business—one of my present fantasies (they used to be about non-fattening banana splits) is the courtroom scene the first time the state department finds a portfolio not up to snuff.

The British have used Records of Achievement (a type of portfolio) for 10 years and British teachers are still struggling with the concept. Scoring procedures haven't been a problem for the British because the ROA isn't considered a test instrument. If someone had not sold Americans on the idea that authentic assessment was a replacement for measurement but, rather as an addition; we could join the Brits and enjoy the improvement in attention to evaluation.

The portfolio work in Vermont was successful in getting teachers more involved in schooling and in teaching better. Teachers have spent more time teaching the first two subjects that required use of a portfolio—math and language arts—but they can't spend more time on all school subjects; observers have speculated that teachers may have insufficient time to teach and evaluate four subjects. This past year over 80% of the 4th grade teachers and 60% of the 8th grade teachers said they had difficulty covering the required four subject curriculum.³ Authentic assessment is not only time consuming, it is expensive, with the best estimate in Vermont is a fivefold increase in costs.

As I suggested, authentic assessment is context based which makes generalizations difficult. The contexts in music instruction that include band, choir, orchestra, and general music are quite different. Will assessment in these three contexts be comparable in terms of cognitive complexity, content quality, and content coverage? What if students made comparisons and judgments of Mozart's music in orchestra and that of

Mahler in band? There is almost an unending list of questions affecting the validity of these measures, questions that become increasingly important, the higher the evaluation stakes. For example:

- Is there a solution to the validity issues that arise from more cooperation in the classroom followed by *i n d e p e n d e n t l y - c o n - s t r u c t e d* portfolios?
- If parents assist in the construction of portfolios; how does the teacher in evaluating the portfolio account for the differing parental backgrounds?

My words of caution in using data from authentic assessments stem from experience.

- 1) Music teachers usually focus on classroom activities rather than student outcomes.
- 2) Music teachers have long been critical of the profession's past efforts to evaluate instruction and learning based on "authentic" contest results and the subjective evaluation obtained from end of year concerts.
- 3) With portfolio evaluation it is likely that teachers will focus on the more interesting activities that could be placed in the portfolio which would result in a narrowing of the curriculum.
- 4) We can also expect those students with low verbal intelligence to have difficulty on tasks that require speaking and writing about different performances; in fact the gap presently between races is slightly greater with authentic assessment than with traditional assessment.
- 5) If the evaluation mirrors what goes on in the classroom;

is that, by definition, authentic assessment? Is that what we want?

Anne Anastasia warned us that the classroom teacher should not be empowered to report the results of standardized examinations to students and parents; for her the task of interpreting the meaning of standardized scores required specialized training. I have long joshed about this caution suggesting how can we trust the education of our children to any teacher who cannot interpret test results? Now I have become the one concerned about how the data from authentic assessment will be collected and interpreted and how it will be used. *One type of evaluation does not fit all needs.* Music teachers still need specific diagnostic information about their daily teaching. Authentic assessment doesn't get at many of the skills and attitudes that we teach nor does it claim to.

The orange light should be on—as SRIG members and consultants to the profession, my advise to you is: don't promise more than you can deliver and don't promise something just because it seems to make sense. Teaching cognition is great but, Brewer, Vigilante, Slavick and others have conducted extensive research in the visual arts and their studies do not confirm that the critical and historical study of art significantly enhances student art production, cognitive ability, or higher order thinking skills.² More importantly *any, high-stakes evaluation requires reliability and knowledge of content quality, content coverage, cognitive complexity, meaningfulness, economic costs, efficiency, transfer and generalizability, fair-*

ness, and clear cut ideas about the consequences. With authentic evaluation, it remains essential that students know what is being assessed and the criteria and standards of what constitutes good performance before authentic assessment can be used to justify or evaluate our programs. With the present emphasis on evaluation and the reform of education, members of *this* SRIG have much to do.

1 Bennett Reimer.

"Thinking Globally a Research Agenda for General Music." *General Music Today*, Winter 1994. Vol. 7, No. 2. pp. 3-12.

2 Thomas Brewer. "An Examination of Two Approaches to Ceramic Instruction in Elementary Education." *Studies in Art Education*, 32, No. 4, Summer 1991, pp. 196-205; Amy Vigilante. *On Examination of the Effect of an Aesthetic Scanning Strategy in the Art Performances of Select Sixth Grade Students*, Ph.D. dissertation, Florida State University, 1989. Susan Slovik. *The Relationship between Cognitive Development and Teaching Methodologies in Art Education*, Ph.D. dissertation, Florida State University, 1993. Charles Dorn, *Art as Intelligent Activity*, *Arts Education Policy Review*, vol. 95 #2, Nov-Dec 1993, p3.

3 Winter 1994, p 13 CSE/ CRESST UCLA, Los Angeles

**Next Month:
A Look at Music
Portfolios in Secondary
Music Classes.
What Do They Measure?
by Thomas Goolsby
University of
Washington**

The Politics of Portfolio Assessment

by J. Terry Gates, Dept. of Music, SUNY at Buffalo, Buffalo Ny 14260

Where to begin...? First, when the question is "What do portfolios measure?" why talk about politics? Simply put, the political arena is the location of our problem right now. Second, when the talk is about politics, why stir up trouble in an already troubled area? Third, what can a quickie political analysis contribute to the discussion? I'll take up these issues in no particular order, and in doing so show that issues of validity, reliability, and usability of portfolio assessment top our list of things to do. But, today, politics vexes professional judgment to an extent that exceeds the usual flow of things in testing. I'll give a framework for thinking about these issues together and in combination.

Before all this, you need to know how I distinguish portfolio assessment from the two other major forms of achievement measurement: testing and assessment by observation — what we do when we judge music contests, etc. I identify four types of portfolios:

Right now, how we handle the validity, reliability, and usability issues of portfolios will be the measure of our place in the educational reform dialog.

4 Types of Portfolios

- **process** (what students collect while a course is going on),
- **product** (what they keep at the end of a course),
- **graduation** (what they present for a diploma),
- **presentation** (used mostly in job hunting).

The handout (see appendix) is applicable to the *teacher's* assessment of the *product* portfolio. The student assesses it, too. Notice that the categories of assessment are not the usual ones. They provide a framework and suggest rubrics for the teacher to use in assessing the student's own approach to learning the content. Portfolios can be rich in data that prepared performances and tests do not purport to reveal. Portfolio assessment adds to *but does not replace* testing or observation. Many disappointed and angry teachers know this — their overseers do not. More later, from Vermont.

Teacher's Role in Portfolio Assessment

The teacher's role in portfolio assessment is that of gadfly: the student should be challenged when he or she does a lazy assessment of the portfolio, or when the student misses a personal characteristic of importance revealed in the portfolio's contents. Having said this, there are some other things that can be measured well through portfolio assessment techniques, and your handout illustrates some of them. These techniques were

adapted from categories used a couple of years ago by Central Park East Secondary School in New York City in evaluating graduation portfolios. That's right — Graduation Portfolios. New York's state department of education is pushing for a version of this assessment program statewide. They call it AIM, the Assessment of Initial Mastery, mainly of work-place strategies (goal setting, planning, resource gathering, collaborative efforts, self-monitoring, mastery, using a systems approach to problem solving, reporting and networking, etc.). SCANS - (*Secretaries Commission Achieving Necessary Skills*) skills are the focus and New York Regents Portfolios provide one mechanism for delivering the goods.

Vermont is beginning to emerge from the rocky beginnings of their statewide portfolio development program (Schulz, 1993). Vermont teachers are being forced to develop portfolio scoring schemes that can be aggre-

gated across the state. They claim, rightly, that this use of portfolios will mask their best purpose: to improve learning. The struggle is political.

We should talk about politics, also, to admit some things to ourselves. I'm going to risk being politically incorrect. So, if I can quote someone else who noticed the same thing, I'll do so to keep myself out of trouble. Here's an ex-

(or state-full) of students...."

True enough. And also true of the portfolios in music...so far. We wish it were otherwise. If aggregated data would help us convince policy makers of the worth of our efforts on behalf of the children or society or posterity or whatever, we'd jump at the chance. Wilson urges caution, and so did Richard Colwell a moment ago. Wilson points out that portfolio assessment, and assessment in general, is not the magic bullet it seems to be. The way to fiscal nirvana is not gained directly, at least, through assessment. Teachers sense this false

motivation for testing. Wilson tells us why we have this hunch through identifying three clues that indicate policy makers agnosticism about assessment:

- (1) there is little financial aid for developing assessment programs,
- (2) there is little guidance from policy makers about data they would find worth gathering,
- (3) there are few indications about how assessment results would be used.

This is not true of other social interests from acid rain measurement in the forests of Maine to the number of spotted owls per square mile in Oregon. Other assessments have real-world consequences.

It's exactly at this point where we can learn something of the politics of measurement: Rachel Carson wrote *Silent Spring* as a jeremiad based on measurement. Measurement came first. *Complaint in the absence of mea-*

We should use the education reform pressure to our own advantage, by gathering data on the details of the music education process, and by improving the leverage we have on the time we share with our students, motivating more and more students to improve the quality of their own efforts.

ample: Brent Wilson (1993), Head of Penn State's Art Education Program, noted that assessment folks like Grant Wiggins and Robert Stake like the arts because we assess on the basis of students' handling of the subject matter rather than their handling of tests — authentic assessment. Big deal, we say. Wilson: "We claim with pride that 'we have been doing it all along,' and 'finally, the rest of education is catching up with us.' But is our pride justified? Perhaps yes; perhaps no." Wilson goes on to observe that **the portfolio process art educators use is focused ill-advisedly on grading individual students and not on its core purpose of helping the student with self assessment.** He characterizes art portfolio assessment as "informal and underdeveloped" and claims that the approach of art educators "makes it virtually impossible to aggregate portfolio scores in order to characterize the art achievement of an entire class

surement convinces only the already converted. Even advertisers don't trust their instincts like music educators do. They measure the effects of an ad to support their instinct that it will produce sales, and they do it with their fingers crossed on the basis of focus groups and other sampling techniques. Because of the dollars and careers at risk, this is high-stakes testing. It is on this point that I would add one more item to Wilson's list of clues that arts assessment is not destined for immediate importance:

(4) It is too hard to identify stakeholders outside of the arts education profession.

We can gather testimony from celebrities, but we need to test the effectiveness of

Until we can broaden the network of stakeholders in the importance of improved American arts to include the typical citizens in American communities we will not have the political base to turn things around.

such testimony on American moderates. Until we can broaden the network of stakeholders in the importance of improved American arts to include the typical citizens in American communities we will not have the political base to turn things around. Thanks to Jesse Helms and others, arts tree huggers and arts loggers have already been polarized. But, to save the spotted what...?

Like Wilson, I will not propose that we fling numbers at Jesse Helms, or at American moderates, either. Not yet. But here are some measurable assertions that should give American folks some reasons to listen:

(1) The balance of trade in

arts education is arguably a plus for us. That is, more people come to America to study the arts than go from here to other places. The economics of that should be studied.

(2) In national studies (the National Arts Education Research Center's 1991 report) virtually every category of music involvement for kids - bands, choruses, etc. - has shown stability or an enrollment increase in about 70% or more of the school districts polled.

(3) Enrollments in many higher education music major programs, piano performance, for example, are slipping and many report that the quality is slipping, too.

(4) In most American Standard Economic Statistical Areas (cities and their support-

ing markets) the arts are big contributors to, rather than detractors from, the local economy.

Symphony orchestra associations create jobs, for one thing. Any mayor would rush to the aid of a troubled 100-employee business in most other segments of a local economy.

What has all this to do with portfolio assessment? We have to be sufficiently politically astute to begin to gather some numbers that go beyond enrollments, equipment, and

economics. The stakeholders are us, right now; and, we have a stake in doing this thoroughly even though we don't feel the hot breath of the music police in the same way that the industrial polluters get caught by ordinary people sometimes. Wilson was right. The pressure we feel is not real in spite of its noise. We can busy ourselves with assessment for a few years and weather the storm of reform.

But we should not be so cynical about assessment, and here is the point of all this: We should use the education reform pressure to our own advantage, by gathering data on the details of the music education process, and by improving the leverage we have on the time we share with our students, motivating more and more students to improve the quality of their own efforts. Portfolio assessment techniques have provided a systematic way to accomplish this. There are many models, even in music. Nobody - nobody who does portfolio assessment suggests that others should do it the way they do. Perhaps. But we can't get to fiscal nirvana by libertarianism alone. If anyone besides the PACE project at Harvard is gathering information about portfolio assessment, please keep us posted. And, in the

portfolio assessment process, these notes include those of our own students.

Right now how we handle the validity, reliability, and usability issues

of portfolios will be the measure of our place in the educational reform dialog. (continued on page 10)

This SRIG newsletter and #17 consist of papers presented at the National Convention of M.E.N.C., April of 1994, Cincinnati, Ohio

JTG's Portfolio Assessment
Teacher's Evaluation

Name of student _____ Grade/home room _____

Project title _____

Assessed on (date) _____ Reviewed by _____

Viewpoint: demonstrates knowledge and understanding of subject content.

- Outstanding
- Good
- Resubmit when you have...

Connections: draws relationships between information and ideas used.

- Outstanding
- Good
- Resubmit when you have...

Evidence: finds and skillfully uses relevant data and project resources.

- Outstanding
- Good
- Resubmit when you have...

Voice: presents information in an engaging way, with audience in mind.

- Outstanding
- Good
- Resubmit when you have...

Conventions: appropriately uses discipline-based terms and strategies.

- Outstanding
- Good
- Resubmit when you have...

Relevance: identifies relationship of content to contemporary concerns.

- Outstanding
- Good
- Resubmit when you have...

Evidence

Recommendations for an improved portfolio:

We *must* boldly and enthusiastically sharpen this measurement tool, finding ways to make portfolios usable, shaping good claims for their validity, and really working at the reliability numbers...all within the framework of clear views of what portfolios really measure, the music learning process. We must express our caution about portfolios to others — they're not yet ready for prime time. But, remember, Richard Colwell turned on the orange light, not the red one. Let's look both ways and roar ahead!

Schulz, Elizabeth. (1993, September). Putting portfolios to the test. *Teacher Magazine*, pp. 37-41.
Wilson, Brent. (1993, July). Assessment issues in art education. Unpublished paper: Department of Art Education, Penn State University.

**Also Next Month:
"Portfolios In Student
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