

Rubrics and an Arts Integration Community of Practice

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Abstract

Seven educators participated in an online community of practice and through that community of practice learned about using rubrics to measure the impact of arts integration. This article describes the Arts Integration Community of Practice, including the requirements and procedures used to help educators design and use rubrics with students with disabilities.

Very little information is available to help teachers evaluate either the quality of art and artistic experiences of students with disabilities, or the impact of artistic experiences and arts integration on social, cognitive, and academic skills. A primary focus of our work was not simply the value of instruction in the arts (music, dance, visual arts, drama, and creative writing); rather we wanted to evaluate the impact of incorporating art instruction and activities in teaching specific academic content and skills. A goal of arts integration is to use the arts so that students can have direct experience, be involved in making decisions about their learning, and be engaged in academic lessons that are motivating (Corbett, Wilson & Morse, 2003).

In conducting this research, we were not able to rely on a well-defined and articulated body of previous knowledge as this is a topic that tends to be discussed in theoretical terms rather than being researched (Eisner, 2002). The existing research has not included measures of student learning and far more information is available about teachers' attitudes toward the value and impact of the arts in education than about empirical measures of such impact. In fact, teachers interviewed by researchers from *VSA arts* (VSA) over the past two years have expressed some reticence to consider such evaluation (Mason, Thormann, & Steedly, 2004a; Mason, Steedly, & Thormann, 2005). In summarizing the attitudes of teachers, Mason et al. (2005), indicated, "In some cases it seemed that teachers were tired of testing and looked to the arts to provide a respite from rigorous measurement" (p. 13). In the two years of focus-group and interview research that VSA recently conducted, teachers were quick to tell anecdotal stories about how the arts improved self-esteem and confidence, or even about how students with disabilities were able to focus better, add more details to their writing, and increase their vocabulary. However, these same teachers were only rarely able to support these assertions with systematically gathered evidence of improvements. Similarly, research by others (Deasy, 2002)

echoes these more general findings, with only a handful of studies providing empirical evidence of the importance of visual art, music, dance, creative writing, and drama on academic and cognitive learning in particular.

Many have argued that the arts have intrinsic value in and of themselves, and many arts educators agree that should be sufficient reason to teach the arts in schools. However, when schools are facing cuts in their arts programs and teachers are being told to focus on preparing students to pass state standards-of-learning assessments (von Zastrow, 2002), it would be useful to have knowledge about how and when the arts impact academic and cognitive learning. For these reasons, VSA, as part of its mandate to encourage the use of the arts with students with disabilities nationally and internationally, decided to investigate the impact of arts integration.

VSA's interest focused on developing a framework from which to better understand student learning in and through the arts, and on distilling the specific teaching skills and competencies that lead to successful arts integration. Toward these ends, VSA created a basic evaluation framework through surveying the field of existing evaluation literature, generating an evaluation framework, and exploring implementation of the basic framework in classrooms. The intent behind the framework was to create a general tool that could provide teachers and teaching artists alike a way to translate the often intuitive and ephemeral understanding of learning in and through the arts into something more tangible and concrete.

Purpose of Our Investigation

Finding that little information was available on either the impact of arts on learning for students with disabilities, or how to measure it, we searched for ways of measuring the impact of arts integration that could be used by classroom teachers and artists in the community who teach in schools, across a variety of situations. We sought a measurement tool that might build on

existing practices in schools. Because the arts have been used by teachers in instruction that centers on thematic projects or units, and because teachers often use rubrics to evaluate the quality of such projects, we decided to explore the possibility of using rubrics to measure academic and cognitive learning.

Developing Rubrics for Measuring Learning in and Through the Arts

In researching the potential for using rubrics, we found that in contrast to the lack of firm evidence regarding either the impact of the arts or scientific evidence supporting such use, many state standards of learning include both standards for demonstrating proficiency in the arts and for measuring the impact of arts integration (Pistone & Lowther, 2004). So borrowing from these existing rubrics, we designed a module to serve as a model for teachers to use in designing their own rubrics to measure the impact of arts integration.

These searches typically resulted in examples from educational websites that are known for their rubrics and lesson plans, or from state standards of learning. In preparing a background guide for teachers and artists, our objective was to either find or develop a model for using rubrics to measure not only the quality of arts products or performance, but also the impact of the arts' activity on learning. VSA was interested in presenting a number of examples of rubrics to teachers and asking them to use these to build rubrics that met their specific needs and circumstances.

From the NCEO materials, we reviewed specific outcomes and indicators for K–3, grade 5, grade 8, school completion, and post-school. With the academic and functional literacy domain for example, for grade 4, the indicators include statements of the percentage of students who...

- Use and comprehend language that effectively accomplishes the purpose of communication
- Demonstrate problem-solving and critical-thinking skills
- Competence in math to function in home, school, and community environments
- Competence in reading in home, school, and community environments
- Competence in writing to function in home, school, and community environments
- Competence in other academic domains (science, language, geography, social studies) to function in home, school, and community environments
- Competence in cultural domains (fine and performing arts) to function in home, school, and community environments.

From the NCEO categories, we decided to focus on four general categories that we thought were most relevant to the arts: communication, problem solving, academic and functional literacy, and cultural domains. As indicated by the NCEO, possible data sources for each domain include: performance on language tests; student contracts, portfolios, or performance records; teacher observation of students in academic environments; surveys of parents, teachers, and students; school district results on statewide assessments; rubrics; comparison of performance on tasks to rubrics; and analysis of teaching plans for domains. By grade 8, the performance indicators also include the percentage of students who need remediation in specific areas.

From this general background information, we developed an overarching conceptual rubric and numerous examples to assist teachers in developing their own rubrics to measure how the arts could be used to demonstrate learning as well as measuring the quality of the students' artistic performance or product. An example of one of the rubrics we shared with teachers is presented in Table 1.

Insert Table 1 about here

Studying How Teachers Develop and Use Rubrics with the Arts

Once we had developed a prototype, VSA arts conducted research on using rubrics to measure gains in the arts in two phases. Phase I involved informal dissemination and feedback with VSA affiliates and a phone conference with seven teachers who agreed to review the Guide and provide informal feedback. Phase II involved implementation of rubrics with a sample of seven teachers located in three states.

Phase I

A draft of the VSA rubric module (Mason, Thormann, & Steedly, 2004b) was disseminated to VSA affiliates and arts educators during Year 1. As a part of that dissemination, seven teachers from three states participated in a conference call that addressed strategies for evaluating the impact of the arts, and particularly the use of rubrics to measure academic and artistic progress. They were also provided important information for discussing the implications of the findings. These teachers clarified that while rubrics are used with state assessments, assessment of art ability or skill is not required, and that the arts curriculum is not specified in the assessments. They indicated that while most of them were not currently using rubrics to measure the impact of arts instruction and arts integration they viewed this as a worthwhile approach and would be interested in being involved in such research.

Phase II

We made slight modifications to the guide based on feedback received in Phase I and then designed a plan for implementing a rubrics program with seven teachers. The components of the program included the following actions:

- Distributing a condensed version of the rubric module with fewer examples.
- Selecting program participants to represent a stratified sample covering urban, suburban, and rural areas in various regions of the country and including teachers instructing various students at various grade levels, with various disabilities, and representing a range of ethnic, cultural, racial, and socioeconomic groups.
- Establishing a VSA Integration Community of Practice (CoP) that included an e-mail listserv, conference calls, and expectations for completion of projects with students using rubrics.

We selected the CoP methodology for its value in providing asynchronous communication and the ability to upload attachments that could include examples of arts lesson plans and rubrics, as well as the good fit of this approach with our purpose of exploring an approach that might later be replicated with a larger group of participants (Lave & Wenger, 1991; Wenger, McDermott, & Snyder, 2002).

Participants. Six teachers and one resident artist, including three males and four females, from the Southeast, Midwest, and Western United States, participated in the VSA CoP. The participants taught grades PreK–8, and included two special educators and one theatre-arts, one music, and one visual-arts teacher. One of the teachers taught in a resource room and another was a teacher of the Deaf and Hard of Hearing in a public middle school. Participants signed a contract agreeing to the requirements of the project (see next section) and, upon submission of their final documents, received a stipend of \$1,000 for their involvement in this project.

The level of support for this project within schools and districts, and the degree of collaboration, varied among participants, with one participant continuing to work in isolation in her school throughout the project, even as many of the participants experienced considerable

collaboration as planning was shared with general educators, music and art teachers, and special educators.

General expectations and procedures. Over the course of eight weeks, three conference calls were held with participants. The first one described the expectations for their involvement, the second was held midway through the project as a progress check, and the third focused on completing the requirements. Within six weeks after the end of the CoP, participants were to have submitted final surveys, examples of rubrics used with students, samples of student work, and permission forms signed by students and/or their parents or guardians that allowed VSA to display their art work.

General findings. All participants agreed that their participation in this CoP was a valuable activity, and when asked to rate on a scale of 1–5 (5 being high) whether they learned new information, the mean rating was 3.8. Participants agreed that the most useful part of the experience was developing and using the rubrics and that they were eager to recommend this approach and experience to colleagues. Table 2 includes related comments from participants. These comments highlight how highly they valued this experience.

Insert Table 2 about here

Implementation of the Community of Practice

Participant involvement in the online listserv occurred in several stages. In this next section we present the stages and examples of the dialogue from the CoP listserv.

1. Getting to know each other:

Participants were asked to begin by telling something about their teaching experience, including the subject matter, grade level, and types of disabilities taught, as well as where they were teaching, and what they hoped to gain from this experience.

“Personally I hope to come up with better ways to include ESE students in activities that involve regular ed students. I want these activities to be legitimately aesthetic for all participants.”

To break the ice, the teachers were also asked to provide an example of a lesson of arts integration that they used that went particularly well.

“One of my favorite lessons of my students is a simple idea that was presented to me by some teachers who had attended a conference together. You will need plain Xerox transparencies, an overhead projector, CD player and appropriate music, a screen is optional.... The students will draw and color on the transparency. You could ask students to draw a favorite place or season of the year...the more of the transparency that is covered the better. When the drawings are finished, dim the lights and start the music and overhead, place the transparencies on the overhead, and ask students to identify their own work. The artist then can stand in front of the screen and move to the music. ...[If a sheet is placed between the students and projector, this cuts down on the glare and students can move the sheet to make their artwork dance too.]”

“My students also love working with clay and we have been making bowls to donate to Empty Bowls for several years. I also enjoy working with draped clay because it allows us to be creative and efficient. In one class period of 45 minutes, students can create a vessel that is very creative...I always have students drape their clay inside of the bowl

so that when the clay dries and shrinks it will not crack. ...One great activity my students are always successful with is creating freeform clay slab bowls in the likeness of Dale Chihuly's work.... This is a no fail project. All students succeed because the shapes they cut out are free-formed and organic.”

2. Initial discussion of rubrics:

“I am trying to hone in on defining evidence better. In this description in my letter to Jennifer in some of the objectives, evidence of success is self-explanatory—raises hand, etc., but other objectives (respectful, appropriate, good working relationship, etc.) could be described according to IEP goals of each student and evidenced by teacher observation of student behaviors/actions. If anyone can help me, I'd appreciate that.”

3. Researcher providing clarification:

To an individual:

“In terms of the rubrics you presented, I would ask that you attempt a couple of modifications. I can see where, from the teacher's perspective, the items in your rubric are important, particularly if you are working with students who can be disruptive. ...I would ask that you consider how to better define evidence...Please compare your rubric again to the examples we provided and note that when we did refer to social skills such as cooperate, we put it in the context of a higher-level cognitive behavior (creating and problem-solving). See below: ‘Cooperates with others to create formal and informal theatrical works and to solve problems inherent in simple scenes (e.g., listens while others speak, sets goals, shows self-discipline, and meets deadlines.)’

“I would also request that you submit one rubric that focuses on the impact of music on academic or cognitive skills. Examples might be instances where you collaborate to teach a unit on Native American drumming as part of a history/social studies lesson or drumming and rhythm in relationship to a unit on fractions.”

To the group:

“So to clarify, our research objective is to work with you on how what you do through arts integration—tying art to academic work—impacts academic learning or cognition—including possibly student ability to generalize, conceptualize, analyze, synthesize, etc.

- The tool we want you to use for your research is rubrics... You can measure very small, discrete behaviors or larger behaviors with rubrics. The scope of what you do is up to you. I find your information on what you are doing to be very exciting, so stay with what you are doing, go with your strengths, and know that we should end up with an array of examples.
- You may want to use rubrics with an entire class or only a few students—so they can be modified to meet the needs of individual students.
- You can redesign the rubrics so that students understand the words and can evaluate their own growth.

Let’s all start with one project where rubrics will be used and sharing those. Katie and I will look them over and give you some immediate feedback.”

4. Discussion that shows learning that is evolving:

“Katie, this is a short outline of the lessons I plan on using. Let me know if they are ok to use. The rubrics will measure both art and academic knowledge gained.

Lesson One: Art and Science

This lesson integrates art and the study of birds together in a colorful drawing depicting the stages of a bird's life in springtime. Students will also learn the importance of leaving nature alone by not disrupting the habitat of birds.

Lesson Two: Fossil Plates/Relief Pendants

Students learn about the fascinating world of fossils as they create clay plates impressed with fossil designs. After the plates are fired, the students will then create a clay pendant with the relief of their fossil design.”

Example of Participant Rubric and Conclusion

As part of their participation in the Arts Integration Community of Practice, educators and artists submitted rubrics, lesson plans, and examples of student work. Table 3 shows a rubric that was used with Lesson Two above for fossil plates with fourth-grade students. That lesson was built around a science video on dinosaurs and began with an introduction to fossils. Students brainstormed words that described fossils and examined real fossils as they discussed how they were made. Figure 1 shows an art product from that lesson on fossils. As a part of evaluating student understanding of fossils, the teacher asked students three questions: "What are fossils?" "How are fossils made?" and, "How did you make your fossil look old?" For the first question, students supplied answers such as, "Fossils are like pieces of bone from dinosaurs that is what fossils are," and "A fossil is something that died millions of years ago." For the second question, two student responses were, "You made them by nature from the dinosaur bones drying and made fossils," and "with rocks." For the third question, two student responses were, "With clay and fake bugs and paints" and "You make it look old by shaping it."

Conclusion

More research and analysis is needed to understand the impact of inservice and professional development activities on developing and using rubrics. And more research is needed to better the relationship between using rubrics in a professional development activity and how teachers assess the impact of arts integration. However, the results of this preliminary work shows that educators were quite engaged in the Arts Integration Community of Practice, that they valued both the CoP and learning to use rubrics, and they were planning on expanding their use of rubrics. The participants also modified the approach we recommended in several ways, including modifications so that students could use the rubrics to evaluate their own work.

The next article in this series demonstrates more thoroughly how teachers used rubrics in their classrooms. We also describe what we've learned from these rubrics about gains in student academic and cognitive learning.

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Table 1. Rubric for Integration of Arts with English/Writing: Art Used to Express Understanding with Final Product

	Needs improvement	Followed directions with few errors	Followed directions; no mistakes	Some interpretation; advanced knowledge;	Showed Appreciation of topic; thoughtful	Evaluated impact of action/words
Adequate planning						
Quality of draft writing						
Originality, imagination, problem-solving						
Demonstrated comprehension						
Demonstrated knowledge of contextual factors (economics, social, political, psychological, cultural concerns)						
Completeness/thoroughness						
Elaboration, addition of interesting detail						
Use of art to enhance or complement meaning						
Technical aspects of writing/art						
Quality of final product						

Table 2. Evaluation Comments from Participants

Area of Evaluation	Comments
Student Learning	I found students learned quickly and retained more if I continuously quizzed and drilled each student as [he/she] worked, lined up, and as I passed out materials.
Rubrics	<p>I have to say that just being involved in this made me look at rubrics with a more critical eye and made me develop rubrics for projects for which I had not previously used them.</p> <p>I will use this to create portfolios within my class in the future.</p> <p>I am becoming more comfortable with the language and development of rubrics—this can only improve my contribution to other educational projects.</p> <p>I found the cognitive development rubric will be very useful in the future. It's a great way of assessing student growth. It's easy to use, read, and share with parents.</p>
Community of Practice	<p>I used the community of educators' responses to see if I was on track with what I was doing. I compared their rubric development with mine as well.</p> <p>Through direct questions of Katie or Chris, the conference call helped to clarify things I was unsure of.</p> <p>The group e-mails were useful, plus I picked up ideas from other participants.</p>
What Participants Learned	<p>I got better at putting together a rubric and being more cognizant of goals, methods, and special-education adaptations within my lesson. I improved my working relationship with homeroom teachers.</p> <p>The importance of modifying rubrics for students with varying levels/abilities.</p> <p>Students really benefit from seeing the rubric they will be graded on at the very outset of the project/assignment. It focuses them on what they actually have to accomplish.</p> <p>Creating rubrics helps ME hone in on what exactly it is I want the students to pick up on in a given unit.</p> <p>The project put me personally back on track with the big picture in education. I have always integrated my curriculum but never tracked actual cognitive growth.</p> <p>I found through this project that the teacher also learns and grows as well as the students. It is similar to growth I experienced through the National Board of Professional Teaching Process several years ago.</p>

Table 3. Rubric used with 4th Grade Lesson on Fossils

	Unsatisfactory, no evidence of understanding	Improvement needed, many errors	Satisfactory progress. Some technical errors	Demonstrated skills/knowledge with very few errors	Advanced ability, understanding, creativity
Technical aspects of art craftsmanship					
Information recall Can the student correctly answer questions pertaining to factual knowledge presented in the lesson?					
Use of art to display understanding of lesson.					
Process Comprehension Can the student explain and/or recreate the project with out teacher assistance?					
Evaluation Student's ability to critique own work.					

Insert Fossil Pic here