The Arts Make a Difference

It's time to stop thinking about the arts as fluff. They make schools better places to learn, and they raise student achievement.

Nick Rabkin and Robin Redmond

Two decades of efforts to raise standards, focus schools on academic fundamentals, and close the achievement gap have steadily eroded the place of the arts in public education. Amid growing concern that U.S. students are falling behind internationally and that U.S. schools are insufficiently rigorous, the arts compete for a place at the education table with subjects that appear to make more compelling claims for time and resources. Broadly understood as affective and expressive—not academic or cognitive—the arts survive at the margins of education as curriculum enrichments, rewards to good students, or electives for the talented.

But evidence is now emerging that shows that arts education can have powerful effects on student achievement. Moreover, these effects may be most profound for struggling students. Investigators who sliced and diced the massive National Education Longitudinal Study of 1988 (NELS: 88) database found a significant correlation, growing over time, between arts participation and academic performance. Gains associated with high arts participation were greatest for students in the lowest-socioeconomic-status quartile, those most at risk of academic failure (Catterall, Chapleau, & Iwanaga, 1999). A decade-long study of after-school programs for low-income youth found that arts programs attracted higher-risk students than sports or community service programs did and had far greater academic and developmental benefits (Heath, 1999).

Like so much data that fail to fit our assumptions about reality, these studies have been ignored in mainstream education. During the 1990s, however, some arts educators began developing new programs and practices grounded in the idea that the arts were cognitive and that arts study could have serious academic benefits. They stopped framing the arts as a competitor for scarce time in the school day. Instead, they asked how the arts could contribute to making schools work better, particularly for low-income and other struggling students. They aimed to improve student performance by making schools better places to learn. They began to practice arts integration, an instructional strategy that brings the arts into the core of the school day and connects the arts across the curriculum.
Arts-integrated programs are associated with academic gains across the curriculum as reflected in standardized test scores, and they appear to have more powerful effects on the achievement of struggling students than more conventional arts education programs do (Rabkin & Redmond, 2004). Standardized test scores of students in 23 arts-integrated schools in Chicago, Illinois, most serving low-income students, rose as much as two times faster than the scores of youth in more traditional schools (Catterall & Waldorf, 1999). A study of a Minneapolis, Minnesota, arts integration program showed that the program had the greatest effect on disadvantaged learners (Ingram & Seashore, 2003). Low-performing students in these programs consistently defied teachers' expectations as they found pathways to success through the arts that had eluded them in conventional classrooms. Many of these students went from being withdrawn or disruptive to becoming active and productive class members.

Gains in arts-integrated schools went well beyond the basics and test scores. Arts integration energized teachers and led to broader school changes. Schedules shifted to accommodate planning and sustained classroom attention to pursuing questions in depth. Parents became resources for student projects, and they came to school more often to see their children's work in performances or exhibitions. Teachers took on new leadership roles in planning and curriculum as their aspirations and morale rose. Art and music teachers became instructional resources for classroom teachers and the fulcrums of multiclass projects. Professional development deepened as teachers inquired into how arts integration works. Assessment strategies became less consumed by standardized tests and more attentive to student work.

**What Is Arts Integration?**

As artists and teachers begin working together, they often design lessons and units that connect subject matter to an arts project: Students might make a quilt, with each patch representing a key idea in the U.S. Constitution, or teachers might develop letter awareness by having students “dance” letter shapes. Sometimes curriculum is designed to make conceptual connections between an art form and another subject—between music and math, for example. Students might listen to a simple melody, follow the notes on a musical staff, count the times each note occurs, and graph the results. Later, they will come to understand that the musical staff is a graph itself, in which pitch or frequency is the $y$ coordinate and time the $x$ coordinate.

But these simple examples of arts-integrated instruction merely scratch the surface. Nick Jaffe’s K–8 students create, perform, critique, engineer, and produce dozens of original projects in music recording classes at a Chicago elementary school. Class typically begins by listening to music. One day, Jaffe plays “So What” by Miles Davis and asks students to respond to the music. One 7th grader doesn’t like it. “The sax solos sound like a mess, and the beat is weak,” he says. Another thinks “it’s like the jazz my mother listens to” and likes the bass. He wonders in what kind of room the piece was recorded. Another 7th grader hears “lots of reverb on the trumpet. It sounds like a big room.” A kindergartner seconds this, saying the room must be “huge.”

Jaffe usually spends 10 minutes covering technical or scientific content. First graders learn about sound waves and how the ear works. Seventh graders learn about standing waves and interference—or electromagnetism—and how a microphone works.
Students spend most of their time working on recording projects, alone or in groups. They plan and debate projects, considering as content themes from other classes, the news, or their lives outside school. They use inexpensive sequencing software that enables students with no formal musical training to manipulate rhythmic or melodic motifs. They write lyrics and rehearse. They improvise vocally and instrumentally, often using instruments they have not yet learned to play. A student “producer” directs other students as they perform. Some students work quietly, creating art for CD covers or maintaining the classroom/studio Web site. Jaffe gives the students enormous freedom during these periods. “They have a shocking ability to work effectively and listen well amid the cacophony in this open room,” he notes.

Teachers might expect such initiative and responsibility in classrooms for the gifted and talented, but Jaffe's class is not so labeled. His school serves low-income students, and a fair proportion of them are academically or socially troubled.

They consistently surprise him. According to Jaffe,

The majority of competent engineers and technical specialists are female students. Kids who have a terrible time collaborating end up directing complex productions, sometimes working with their “enemies.” Bookish kids end up singing or rapping. Students with social or emotional problems show amazing focus and intensity, taking on tasks they find most frustrating in regular classrooms. Students with writing difficulties spend hours writing lyrics. Problem students often show exceptional creative depth and come up with more sophisticated musical and artistic ideas than their peers do.

Jaffe tells a story about one of his students, an angry, sullen boy brand-new to the school. Introduced to a sequencing program by a 5th grade girl, the new student created a well-constructed four-minute percussion track by the end of his first day. Jaffe played the track for other students, who began to match it to their lyrics. In a single day, the new student had learned the basics of the sequencing program, that rhythms can be broken into beats, that sounds are placed on the beats to create melodic motifs, and that a song is an assembly of such motifs. He had collaborated with several students. “Most important,” Jaffe says, “he created music that was real”—it would become part of a piece that an audience beyond the classroom would hear.

**No Tech, No Problem**

Nick Jaffe's recording class may seem exceptional because few low-income schools have such resources. But arts integration also works without digital equipment and with low-tech art forms, as one student's experience illustrates.

Rafael was a student in a low-income elementary school in Chicago that infuses Mexican culture and the arts across the curriculum. He grew up speaking Spanish at home and on the street. He was a good student and spoke English well, but “I messed up on standardized tests,” he said. “I didn't like writing. It was so hard.” Rafael was particularly good in math, and he sensed that music and visual art developed his appreciation of the importance of detail.
In 7th grade, his class made retablos, Mexican folk paintings offering thanks in the form of a short illustrated narrative, with teaching artist Guillermo Delgado. Rafael's retablo was about a boy, a friend of his, who had lost two sisters in a tragic apartment fire the previous year. He wanted to tell the story of the fire and his friendship with the boy. His teacher encouraged him “to tell it from the heart, to write and rewrite it until it was just right.” The teacher's support—and the relationship between the painted image and the words that he was crafting—made all the difference to Rafael, who is now in college on a scholarship.

Rafael’s gains were not unusual at his school, which implemented the arts-integrated approach in 1994. The number of students at the school scoring at or above national norms in reading comprehension tripled between 1997 and 2002, and 20 percent more 8th graders than 3rd graders now perform academically at or above their grade level. At a more conventional school just two blocks away, more 3rd graders are working at grade level than 8th graders, a pattern far more typical of low-income schools (Weissmann, 2004).

The Power of Art

Pioneering artists and teachers in Chicago actively develop curriculum by identifying parallel processes in an art form or arts-related activity and a more traditionally academic activity, then crafting an elegant fit between these processes. For example, they might pair journal writing with sketching, reading literature with looking at art, and writing drafts with repainting (Burnaford, Aprill, & Weiss, 2001). The paired subjects engage the same cognitive processes: attentive observation, identification of meaningful detail, selection of appropriate representational strategies, and student reflection and self-critique. Setting these parallel processes in motion appears to generate a cognitive resonance between the two subjects, deepening learning in both.

Powerful social and emotional dynamics amplify this resonance. In arts-integrated classrooms, work more often clearly and meaningfully connects to students' own experiences and feelings. Students create a product for an audience that matters to them—not just their teachers, but also their schoolmates, families, and communities—and they internalize motives to do well. They use freedom productively and responsibly. They develop aesthetic standards and experience a sense of accomplishment.

In harnessing the arts to other subjects, arts integration turns the curriculum toward work that does not merely reproduce knowledge, but uses knowledge in authentic intellectual ways. This kind of work is interesting and meaningful, promotes higher levels of engagement, raises students' intrinsic standards, and motivates students to invest the energy that learning requires of them (Newmann, 2000).

Cognitive Science and the Arts

Recent developments in cognitive science and neuroscience help explain the power of the arts. These developments have shown that “the mind is embodied”—that brain and body make up a single, fully integrated cognitive system. Scientists have found that most thought occurs on a level well below our conscious control and awareness and involves the processing of a continual
stream of sensory information. We consistently represent the abstract through metaphors that we associate with physical experiences and emotions. We speak, for example, of numbers going “up” and “down” or of ideas “flowing” from person to person.

Physical sensation and emotion are essential components of the mind, as integral to thought and learning as logic is. In fact, logic may not be possible without them (Damasio, 2003; Lakoff & Johnson, 1999). It is ironic, then, that the arts are frequently dismissed as “merely” emotional, not cognitive. Their emotional content is part of what makes them cognitively powerful.

**Arts Integration as Policy**

One fall day, we watched 4th graders in a low-income inner-city school drawing portraits of one another in a lesson that was part of a unit on descriptive writing. The students were focused and excited. Rich writing and art covered the classroom walls and showed evidence of real learning and accomplishment. Most other classrooms in this school also integrated the arts with other subjects. The classrooms buzzed with intensity.

On the same day, we observed 4th graders in another school. They were bored and slumping in their chairs as they waited to read aloud a bit of advice that the teacher had asked them to write for their classmates. They mumbled, “Don't hit your sister,” and “Do your homework.” There was no student work on the walls, no evidence of learning. Instead, hallway posters reminded students of rules they must follow. “Stay in line.” “Don't forget your uniform.” One poster asked, “What is freedom?” The poster implied that freedom is a reward for self-control.

This second school closely aligns with dominant education policy, which assumes that struggling students will not reach high standards without a relentless focus on academic fundamentals, behavior control, and a plethora of testing.

The best arts integration programs are developing a strategy that is helping to close the achievement gap even as it makes schools happier places. These programs' successes demonstrate that this strategy is within reach of most schools, even those in the poorest communities. Most arts integration programs have developed in urban districts that have high concentrations of artists, cultural organizations, and arts schools. But successful integration programs have also been developed in rural North Carolina and Oklahoma schools.

What are their most salient principles and characteristics? The best programs

- Draw on the artistic resources of their communities, building sustained partnerships between schools and arts organizations and between teachers and artists.
- View student achievement and school improvement as pivotal to their mission—they are not only about advancing arts education.
- Engage artists, arts specialists, and teachers from all disciplines in serious inquiry about making powerful pedagogical and curricular links between the arts and other subjects.
- Use the arts as media to communicate content and as methods of learning through such practices as careful observation, inquiry, practice, creation, representation, performance,
critique, and reflection.

- Do not look the same in every school, but reflect each school’s particular strengths, interests, and available arts resources.
- Provide arts instruction both within the context of other subjects and as a subject in its own right.
- Raise funds from outside the school system to support their arts integration work, while persistently seeking higher levels of commitment from schools and districts.

Arts integration is not simple or easy work. The educators and artists who have developed it have worked with meager resources and have swum against a tide of stereotypes that keep the arts in the margin, despite their demonstrable and dramatic success in raising student achievement.

In every case, crucial financial support has come from private philanthropists, who are more inclined to take the risks involved in implementing new ideas than are school districts or state education departments. But private philanthropy cannot sustain these programs for the long haul, and it cannot expand them to reach all struggling students. Although higher levels of private support would be useful, these programs need unequivocal support at the federal, state, and local levels as well.

Districts and schools should expand successful arts integration partnerships and launch new ones. They should compensate artists working in these partnerships for their high levels of experience and skill and give teachers time to plan units and lessons with artists. Principals should lead school-wide planning to bring arts integration into all classrooms and use multiple art forms in the school. Preservice teachers should learn about arts integration, and arts classes should be required for teacher certification. Art and music teachers should learn to integrate what they know about their art forms with other subjects.

Arts education deserves far more than a meager $35 million line item in a federal education budget of some $70 billion. Integrated arts education should be the target of a healthy proportion of state and local education budgets as well. Why? Because these programs work.

References


Nick Rabkin (nrabkin@colum.edu) is Executive Director and Robin Redmond (rredmond@colum.edu) is Associate Director of the Center for Arts Policy at Columbia College Chicago, 600 South Michigan Ave., Chicago, IL 60605.

Copyright © 2006 by ASCD