

RUNNING HEAD: Arts Integration

**Arts Integration:**

**How Do the Arts Impact Social, Cognitive, and Academic Skills?**

Christine Mason, Kathlyn Steedly, and Mary Thormann

Christine Y. Mason, Ph.D. Educational Consultant and President, Mason & Associates, Senior Research Scientist, New Editions, Inc., McLean, VA

Kathlyn Steedly, Ph.D. Director of Evaluation and Outcomes, *VSA arts*, Washington, DC

Mary S. Thormann, Ph.D. Educational Consultant and President, Educational Links International, Inc., Washington, DC

**Arts Integration:****How Do the Arts Impact Social, Cognitive, and Academic Skills?**

To gain a better understanding of the role of the arts in social, cognitive, and academic learning for students with disabilities, we conducted 34 focus groups and interviews with teachers and resident artists in 16 states over two years. Participants enthusiastically described how music, visual arts, and drama have impacted individual children and youth. According to participants, through art activities students gained and demonstrated skills in problem solving, sequencing, following directions, teaming, communicating, planning and organizing, and self-assessment. Across a wide array of circumstances, teachers and artists alike portrayed the arts as giving students choices and opportunities to display both their talents and their knowledge.

### **Arts Integration: How Do the Arts Impact Social, Cognitive, and Academic Skills?**

What skills are being cultivated as young people engage in the art-making process? Why are these art-focused experiences a critical component of the educational experience? In what ways is student learning a function of sustained arts exposure? This article seeks to highlight the importance and complexity of embedded arts education (sometimes referred to as arts integration), and further distill what that means for students with disabilities.

With the emphasis on documenting academic achievement introduced with the No Child Left Behind Act, some states and districts have dramatically cut back their arts programs and significantly decreased funding for arts education; the number of art, music, and drama teachers; and the time allotted in schools for such activities (von Zastrow, 2004). Educators who value the arts are concerned about the long-term impact on student creativity, knowledge of the arts, and learning and achievement. Curtailing the arts is a 180-degree turnabout from previous trends of encouraging teachers to use a "project based" approach to education, by providing students opportunities to use the arts to demonstrate their understanding of specific content, often with

*Arts integration.* “Arts integration enable(s) students to be active, to experience things directly, and to express themselves in ways best suited to the students. (Corbett, Wilson & Morse, 2003, p. 17). 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 lessons that are motivating.

themes that span a number of academic disciplines. With the project-based approach, students might draw pictures, develop collages or multi-media productions, or even perform skits to demonstrate their knowledge of a particular theme in science, math, social studies, or the language arts. Today, however, with a focus on learning facts to

pass standardized tests, many teachers are foregoing more extensive projects and moving through textbooks at a more rapid pace.

Contrary to current trends to minimize arts instruction, recent data suggest that the arts can be particularly instrumental in increasing literacy. For example, studies conducted by the Annenberg Center for Applied Research and Educational Improvement in Minnesota found that “for students in grades three, four, and five, arts integration is significantly related to gain scores in reading” and that “arts integration is more effective for third grade ELL students and third grade students from low socioeconomic homes [ than for students in general]” (Ingram & Reidel, 2003, p.26). Furthermore, for students in third grade, their teachers’ involvement in interdisciplinary teaming with an artist made a significant contribution to student gains in reading. They found that “the more their math teacher integrates arts into mathematics lessons, the more students gain on the mathematics test” (p.29).

Additional support for the positive impact of the arts on academic and cognitive learning comes from a comprehensive meta-analysis of 188 studies conducted between 1950 and 1999 (Winner & Hetland, 2000). They found evidence of reliable causal links in three areas: listening to music and spatial-temporal reasoning; learning to play music and spatial reasoning; and classroom drama and verbal skills.

In *Critical Links*, a research compendium of 64 studies published by the Arts Education Partnership, Deasy (2002) asserts that the influence of the arts may be greater on the academic learning for students with disabilities and special learning needs, students living in poverty, and students learning English as a second language, than for the general population of students. Specifically, several small studies highlight the positive relationship between the arts and students from special populations. (See Table 1.) Note that while these findings are positive,

they are small-scale studies and more definitive research could be helpful to those trying to better understand the impact of arts integration.

---

Insert Table 1 about here

---

For those interested in the topic, questions abound about whether the time spent in the arts (music, visual arts, and drama activities) support learning efficiencies and cognitive development for students with and without disabilities. While there is growing evidence and support for direct, explicit instruction, does this necessarily imply that it is frivolous to spend time instructing students in the arts and expecting them to apply their knowledge and skills from art, music, and drama to express what they have learned? Data are also needed to reach conclusions about whether the arts are more or less valuable in working with certain age groups or populations.

*VSA arts*, as part of a project with its 50 state affiliates, conducted this research to establish some preliminary information about the value of the arts for students with disabilities. In an effort to better understand the breadth and depth of the work being undertaken by *VSA arts* affiliate organizations, *VSA arts* investigated the education-focused work of several *VSA arts* domestic affiliates as it relates to student learning in and through the arts. Specifically, this project examined the way in which the arts, as manifest in the work of *VSA arts* affiliate organizations, impact students' social, cognitive, and academic skill development.

*Key Questions*

*VSA arts* is an international nonprofit organization founded in 1974 by Ambassador Jean Kennedy Smith. *VSA arts* is creating a society where people with disabilities can learn through, participate in, and enjoy the arts. Currently five million people participate in *VSA arts* programs every year through a nationwide network of affiliates and in over 60 countries. Designated by the United States Congress as the coordinating organization for arts programming for persons with disabilities, *VSA arts* is an international organization dedicated to creating arts opportunities for students with disabilities, *VSA arts* is supported by its affiliate network in offering diverse programs and events and innovative lifelong learning opportunities at the international, national, and local levels ranging from training institutes and artist-in-residence projects to arts camps and emerging artist award programs.

Given the paucity of information about the impact of the art on the social, cognitive, and academic learning of students with disabilities, the current project began with a series of focus groups to gain information from teachers, artists, and *VSA arts* affiliate directors.. *VSA arts* conducted this project to better understand the impact of its 50 state

affiliates who operate a

variety of programs to advance the artistic skills of students and adults with disabilities.

The key questions addressed in Year 1 focused on:

- The levels of integration of the arts in academic subject matter.
- How teachers approached integrated (art-academic subject matter) instruction.
- The impact on students with disabilities in terms of academic achievement, cognition, communication, and student attitudes, social skills, and adjustment or coping.

- The influence of arts integration on the school climate and the approach to instruction within that environment.
- In Year 2, we structured focus groups and interviews to zero in on "how teachers and artists planned, implemented, and evaluated art integrated lessons, including the impact of the lessons on artistic skill development as well as academic and cognitive learning."

### *Focus Groups, Interviews, and Data Analysis*

Over two years, we conducted 34 focus groups and interviews in 16 states. We configured samples so that the focus groups occurred in various regions of the United States; in rural, urban, and suburban areas; in elementary, middle, and high schools and special education centers; and with teachers and artists instructing students with a wide array of sensory, physical, emotional/behavioral, cognitive, and learning disabilities. The majority of the participants were certified teachers; of those, approximately 50% had master's degrees in education. Participants also included administrators from the VSA arts affiliates, who coordinated the artist in residence programs, and had made the local arrangements for the focus groups and interviews.

Each focus group/interview lasted 60-90 minutes. In Year 1, we asked volunteers to discuss the value of integrated arts instruction. In Year 2, we asked volunteer participants to discuss how *a successful integrated arts lesson* was planned, taught, and evaluated. The focus group researcher also observed artist residencies, exhibits, and culminating events at several sites.

Proceedings of each focus group, conducted by an individual researcher, were audio-recorded and transcribed. Two independent researchers who were not staff members at VSA arts visually scanned the data for major themes using a grounded theory approach (Strauss and Corbin, 1994), (a) sorting data topically into topical categories, adding data categories as themes

emerged; (b) shifting focus group and interview questions slightly over time as patterns emerged; and (c) combining data across the sites. We compared results to recent studies to interpret the underlying implications of particular data and make recommendations for the next round focus groups. We also used the results from Year 1 to inform the research in Year 2 when we decided to narrow the focus of our questions. To verify the categories that had been developed in our visual analysis and provide quantitative numbers to assist in valuing the weight of specific information, we used *QDA Miner*, an electronic coding system.

### *The Impact of the Arts*

The stories of the focus group participants and interviewees provided considerable

One teacher explained how students use the new vocabulary that they've developed through art activities: "I have several who are quite amazing when they write because they use the vocabulary that we've been working on. And when we read books – I read every day to them –they always are quick to point out, 'trudge, we've heard that word five times today. That was one of our words three weeks ago.' They always pick out the words that are vocabulary words."

anecdotal evidence regarding the value of both including students with disabilities in music, visual art, and theatre activities and of integrating the arts into academic subject matter instruction. For students ages 3-21, teachers provided numerous examples of how the arts were used to introduce topics, study specific subjects, and

demonstrate knowledge and skills. Collectively, teachers provided examples of success for students with a wide array of abilities and disabilities, and across academic subjects.

In general, the comments from teachers reflected arts integration that was done under a "shrunk time-frame" and less than ideal conditions. When asked in a screening survey in Year

1 to describe the role of arts in day-to-day teaching, 48% of the focus group participants indicated that they used art daily, 21% indicated once a week, and 9% once a month. The best examples of arts integration were found in the early childhood and preschool programs, whose curriculum naturally incorporated music, movement, drawing, painting, and playing with clay.

When asked to describe the value of arts integration, participants frequently described:

- How the arts enhance self-esteem, confidence, and participation in group activities.
- The motivational and attitudinal benefits of incorporating the arts into academic learning.
- How the arts also help students find *appropriate* ways to communicate and to express anger, frustration, fear, confusion, and unhappiness.

---

Insert Table 2 about here

---

While the teachers tended to provide more information on the social and communicative impact of the arts, rather than the impact on academic and cognitive learning, the following examples highlight some of most prevalent themes related particularly to academic, cognitive, and social skills that emerged from the data.

#### *Opening Doors to Communication*

The teachers who participated in this project often spoke about the opportunity that engaging in art-making provided for them to learn about their students in ways that would not have otherwise been possible. Specifically, the arts also helped students find *appropriate* ways to communicate. The arts helped students express anger, frustration, fear, confusion, and unhappiness. The participants also described, how students communicated while engaging in art activities:

- In planning and performing a dance, students have to communicate with the other members of their group about how they are going to accomplish whatever the dance study is

targeting. There's an understanding of how you function within a group in a kinetic situation, the understanding how you use space when you're just one person in a big empty space, or when there are many people who are negotiating about how to use the space together.

- One early childhood educator stated, "If you ask kindergarteners to tell you about their pictures, they can go on and on. They love to and they want to tell everybody. We do the little critique when they share their work and talk about it."
- The arts also help students find *appropriate* ways to communicate, even the things that are harder to talk about. "Art is a vehicle for us to express all of our darkest stuff, too."
- For children with autism who lack impulsivity control, music seems to break through some communication barrier. One preschool teacher finds that children are able to follow simple directions to music such as stop, slide and stop, gallop and stop, and walk and stop. Theater seems to be the greatest use of that particular art form for students with self-esteem and social issues. Theater is highly collaborative and very much about relationships and how people interact.

### *Problem Solving*

When asked about how art facilitates problem solving, teachers discussed the relationship to sequencing and figuring out how to organize and improvise with the materials at hand. For example: sequencing is necessary to create art. Students need to think through what to do first, second, third, etc. Other examples:

- One teacher indicated, "in drama there is always problem solving, figuring out how to approach the action and the character, how to create the set, establish the mood, and learn the lines."

### A Butterfly Garden

When they [the butterflies] first emerge we bond with them in the classroom. We let them play around. They learn how to tell the difference between a female and a male. We observe their different anatomical parts. They have a proboscis, which is a straw like tongue that comes out and sucks the nectar. It works like a straw. And that's what is happening here.

...We started off making initial connections of the monarch and the science curriculum and the math curriculum and the social studies and then all of that. ...Math is not separate from science, it's not separate from visual arts, and it's not separate from all of these areas of the school system. They are all sort of now melded together for them so that research becomes a part of everything."

yourself.

- *"On those reference exams, you have to be creative problem solvers to do those tests.*

The kids who were the behaviorally disturbed kids at my school—we had five classes of those kids—those kids scored the highest, because they're great problem solvers, because artists are creative. These kids are creative; they can think how to get through a problem."

- An elementary teacher instead of always giving students paintbrushes, sometimes handed students other tools for painting and observed as the students figured out how to paint with other implements.
- One participant said, "Certainly in theater work with students one of the basic things was to get someone to step away from just what do you want, and who are you like and to think, "What would this character want?" The very act of portraying a character is a step towards critical thinking because it takes you outside

*Integrating Arts into Academic Projects*

A butterfly garden provided an opportunity to study the anatomy, habitat, and life cycles of butterflies as well as to plan for create a place of beauty. (See textbox on previous page).

*Planning and Flexibility*

To integrate the arts, teachers planned in a variety of ways:

- “It could be via e-mail, phone, coming in and sitting down talking about it, discussing what some of their ideas are, what they want to try. We really look at meeting the first night as the opportunity to make changes in our plans, so our descriptions of the programs are very general... we have certain things that we want to accomplish, but until you meet that group of ten, twelve, fourteen people, you really can't predetermine everything that's going to happen, so I try and help them think of what other projects they want to do, what are the supplies needed, what the approach is...”

In describing their planning, teachers provided several examples supporting the value of providing explicit, concrete directions to students and also making modifications or adding accommodations for students with disabilities with particular needs.

- “So a lot of that is us presenting things in a subtle kind of way. It's not ‘Here's your vocabulary lesson. Get to work.’ It's more of a ‘Here's your project. If you want to talk about the project, it's important that you learn and use the language of the project.’ So then they learn landscape architecture words or visual arts words or what's rebar.”
- “So I think what everybody does, is they set up their model of intervention. They all recognize that there are certain problems that are going on or that reading and writing need

improving, or that behavior needs improving, and they're all seeing stuff in their classrooms that they really want to find ways of helping kids address that.”

### *Evaluating How the Arts Influence Learning*

Across the groups, one stunning result, that may be indicative of the potential for arts integration, was reported: After 15 years of building the arts into the curriculum, one school had the highest state assessment scores in the district. A poet, literary artist, and visual artist were given credit for developing art skills and raising scores. The poet “makes the kids think differently.” In that strand of the state assessment, the school was 12 percent above the state standard.

At the present, it appears that teachers are doing very little *to address in a formal sense how the arts influence learning* for students with disabilities. In some cases, it seemed that teachers were tired of testing and looked to the arts to provide a respite from rigorous measurement. However, this appeared to be more a reluctance to measure one more thing than a disavowal of the importance of the arts. Below are some comments from participants that reflect the general tone of what we heard across the focus groups:

#### *General Discussion of Success*

- “Whether it's for attention or what, this was the first thing she had ever done in class; [she] got up and played. I think just having exposure to new things that [we] don't always have. I think sometimes people with disabilities don't always have the same opportunities we have to experience new things and be successful at it, too. That's the thing that you build in success right away, it's pretty easy, cue them where they need to be, and it's a success. That was a fun experience, and the most recent one.”

- “I think just looking for growth in any way, in my own self and in the participants, whether it's a new skill learned, or gaining some confidence from trying something new, or a greater ease in social interaction—any number of these things we would say would be success. To see it—I agree with you—sometimes it is not a tangible thing; it is a connection that you see in the response to the pride and work done, an overwhelming smile or a warm handshake, it might be a physical thing, or it might be the product that's created; it's hard to measure, but you feel it, and you know.”

### *Observing Students*

- “There really is an intervention that's going on, and it may not show up in a report card grade, but as we said before, the kids really have multiple and profound disabilities. Maybe the kids just don't go backwards anymore—maybe they're on a path that's not going forward, but that's dragging them back further and further—and now, at least you've intervened so that they are listening to music and using that to dance, so that their muscles aren't becoming more stagnant... Our problem is that they don't show up often on standardized tests.”

### *Self-Assessment*

- “We also did the abstract self-portrait, the doodle, and then we analyzed it afterwards, [asking] what colors did you choose, what shapes did you choose, how detailed was it. It's almost like they're doing a self-evaluation, like ‘wow, I used blacks and grays, I guess I was depressed that day.’”

### *Choices*

The arts engage students with disabilities in the acts of observation, rehearsing, weighing, and judging, all of which are essential tools for learning in general. As they decide how paint goes on canvas, what to say on stage, or how to format a poem is written, they are honing the

highly critical capacity of decision-making that will enable them to be active and independent members of society. The teachers with whom we spoke repeatedly mentioned that offering students choice and opportunity, within the context of creating art in this instance, prepared students to make better choices in the future.

- “I think there are so many people in the visual arts programs, that haven't always been given choices in their lives, and we really do try and provide them with either the full palette to choose from, or the correct balance of choices, so that there's definitely things that they can choose between, but yet not be so overwhelmed with the number of choices.”

#### *Reading Level and Academic Improvements*

- *Photography with old thirty-five millimeter cameras.* “Yeah, very old, and they [the cameras] were plastic. So [the students] had to figure out what was three feet, and what was six feet, and how to estimate that, and it was just incredible that this young man—who was the young man whose desk would go flying every day, who would have to be restrained, etc.—who very much got engaged, couldn't read, couldn't count, couldn't do anything, and then all of a sudden, this photography person comes in and he has to measure things in the darkroom, and he has to...and that was definitely the breakthrough. ... all of a sudden he wanted to learn how to count, he wanted to know how to measure, he wanted to learn how to write things down, and before that we couldn't reach him. His reading grade level really jumped. He was basically a non-reader. But she wanted him to label things, she wanted him to write about his picture, and so he had a reason to need to write, and a reason to need to count.”

#### *Independence*

- “I think for my class, the level of independence that they're gaining from art, because a lot of them are constantly [saying] I need help, I need help, I need help, and now they'll

ask, but they'll try by themselves, and they'll do it, which wasn't happening before. I think that's really great.”

### *Encouraging the Arts in Schools*

As reflected in a letter dated July of 2004 addressed to school superintendents, the then Secretary of Education Rod Paige wrote,

As I am sure you are aware, the arts are a core academic subject under the No Child Left behind Act (NCLB). I believe the arts have a significant role in education both for their intrinsic value and for the ways in which they can enhance general and academic achievement and improve students’ social and emotional development.

The teachers we spoke with valued the arts for both intrinsic and extrinsic reasons. While they were adamant in their beliefs that the arts need no justification, they also provided numerous examples of how students with disabilities benefited emotionally, psychologically, cognitively and academically from experiences with music, drama, and the visual arts. As educators continue to search for ways to enhance learning and academic achievement for all students, it could be very worthwhile to step back and reflect upon the role of the arts for all students and how best to approach this instruction.

### **References**

- Corbett, D., Wilson, B., & Morse, D. (2002). *The arts are an “R” too*. Jackson, MS: Mississippi ARTS Commission.
- Deasy, R. (2002). *Critical links: Learning in the Arts and Student Academic and Social Development*. Washington, DC: Arts Education Partnership.
- Eisner, E. (2002). *The arts and the creation of mind*. New Haven: Yale University Press.

Ingram, D., & Riedel, E. (2003). *Arts for academic achievement: What does arts integration do for students*. University of Minnesota: Center for Applied Research and Educational Improvement, College of Education and Human Development.

Strauss, A. & Corbin J. (1994). Grounded theory methodology - An overview. In N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of Qualitative Research*, (pp. 273-285). Thousand Oaks, CA: Sage Publications.

Von Zastrow, C. (2004). *Academic atrophy: The condition of the liberal arts in America's public schools*. Washington, DC: Council for Basic Education.

Winner, E., & Hetland, L. (2000). The arts and academic achievement: What the evidence shows, Executive Summary. *The Journal of Aesthetic Education*, 34, 3-4.

**Table 1. Results from a Meta-Analysis and Compendium of 64 studies (Deasy, 2002)**

Researchers	Results
Mentzer and Boswell	Poetry and movement, when combined, may contribute to engagement, development of creativity, and social and/or motor learning in children with behavioral disorders.
de la Cruz	In comparison with a control group, a creative drama program increased social skills across all four clusters of social behaviors of the students with learning disabilities in the experimental group.
Kariuki and Honeycutt	The writing skills of two students diagnosed as emotionally disturbed increased by two letter grades when listening to music.
Wilhelm	Reading skills of two seventh grade boys diagnosed as learning disabled and considered reluctant readers were strengthened as students practiced visual arts activities.

**Table 2.****Increasing Motivation and Improving Vocabulary and Writing**

Several teachers described how drawing both helps students prepare for writing while simultaneously increasing their motivation. When art is used, teachers also noted that students pay greater attention to detail in writing and are more likely to develop and use adjectives for description.

Book making projects, drawing, creating images can help a student work through a beginning, a middle and an end with an idea. It gives them something tangible in a character. It gives them an impetus to learn to write. It lets them pull things together, gives them something to start with.

*Vocabulary instruction* is supported in many ways through the arts. For example, the use of charades was found to be a successful way to enhance vocabulary acquisition and retrieval in one Florida school. The teacher said, “The students act out the word. It’s amazing how their vocabulary has increased.”

If students draw pictures, and they draw the story, they will include details in their pictures. *After this experience, the students write using much more detail.* If students are taught to use imaging, seeing the picture in their mind’s eye like they’ve seen it in a painting, then because their writing becomes more connected, it is improved.