NAEA

Learning in a Visual Age

The Critical Importance of VISUAL ARTS EDUCATION

About NAEA

The National Art Education Association is the world's largest professional visual arts education association and a leader in educational research, policy, and practice for art education. NAEA's mission is to advance art education through professional development, service, advancement of knowledge, and leadership.

Membership includes elementary and secondary art teachers, middle school and high school students in the National Art Honor Society programs, artists, administrators, museum educators, arts council staff, university professors, and students from the United States and several foreign countries. It also includes publishers, manufacturers, and suppliers of art materials; parents; students; retired art educators; and others concerned about quality art education in our schools.

NAEA publishes *Art Education*, *Studies in Art Education*, and other professional papers on art education; holds an annual convention; conducts research; sponsors a teacher awards program; develops standards for student learning, school programs, and teacher preparation; and co-sponsors workshops, seminars, and institutes on art education. For further information, visit our website at www.arteducators.org.

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Every day, American young people spend more than four hours watching television, DVDs or videos; one hour using a computer; and 49 minutes playing video games. In many cases, youths are engaged in two or more of these activities at the same time. Little wonder this era has become known as the "digital age," and Americans born after 1980 have become known as "digital natives."

Yet it might be equally accurate to refer to the current era as a *visual* age. Although many digital tools rely on sound and text, most disseminate images, and youths who spend a third of their waking hours in front of a screen are saturated with images. The ubiquity of images in young people's lives has transformed the way they learn and perceive the world. And their use of images has created a demand for new skills to enable all young people to make sense of the visual world.

The predominance of visual images and demand for new abilities has also transformed the workplace. In the "flat" world that the journalist Thomas L. Friedman describes in his influential book, *The World Is Flat*, aesthetics and creativity are just as important as technical knowledge in the new economy. "The secret sauce comes from our ability to integrate art, music, and literature with the hard sciences," Friedman says. "That's what produces an iPod Revolution or a Google. Integration is the new specialty. That is what we need to prepare our children to be doing."

These transformations place a premium on the types of abilities visual arts educators develop: visual-spatial abilities, reflection, and experimentation. They suggest that schools and their community partners need to strengthen visual arts education as a content area and to integrate the arts into other areas of learning to ensure that all young people become knowledgeable and skillful in the visual age.

Yet in a short-sighted effort to help make children competitive in a global economy, many schools have reduced visual arts instruction in favor of a greater emphasis on mathematics and science. These actions in some cases have resulted from accountability policies that measure school performance on a narrow set of abilities.

"In addition to giving our children the science and math skills they need to compete in the new global context, we should also encourage the ability to think creatively that comes from a meaningful arts education."

—BarackObama.com

Fortunately, leaders are beginning to recognize that these actions are misguided. As then President-Elect Barack Obama stated on his campaign website:

> In addition to giving our children the science and math skills they need to compete in the new global context, we should also encourage the ability to think creatively that comes from a meaningful arts education. Unfortunately, many school districts are cutting instructional time for art and music education. Barack Obama and Joe Biden believe that the arts should be a central part of effective teaching and learning.

What is visual arts education, and what does it provide? Why is it important, and what can art educators teach their colleagues in other disciplines? In 1977, the National Art Education Association (NAEA) issued a powerful statement of its values, entitled *What We Believe and Why*. The document outlines compelling reasons to champion art education for America's children as:

- sources of aesthetic experience,
- sources of human understanding,
- means of developing creative and flexible forms of thinking, and
- means of helping students understand and appreciate art.

The report states:

> Art is a rendering of the world and one's experience within it. In this process of making art forms, that world and one's experience with it must be tapped, probed and penetrated. The search is both inward and outward.

The report includes a sharp critique of the narrowness of schools and society that could have been written today:

> In the culture of the United States, and in particular the culture that pervades American schools, the overriding conception of knowledge and the dominant forms of conception and expression are linguistic. To know in America, particularly in American schools, is to be able to put something into words. This belief has skewed the curriculum in such a way that important forms of understanding are omitted, or neglected entirely, biasing the criteria through which human competency are appraised.

Learning in a Visual Age further emphasizes the centrality of visual art education in the visual age of 2009. It is the result of a year-long—and ongoing—conversation within NAEA that included discussions in board meetings, conversations with Association members, and a three-day summit of leading educators from across the nation (held in August 2008 in Aspen, Colorado). In this document we examine evidence about the capacities that art education develops in students and what it can prepare them to do. We explore what high-quality instruction looks like and take a look at some environments in schools and in other settings in which excellent visual arts instruction takes place. We conclude with recommendations for federal policy makers that will strengthen visual arts education to help ensure that all young people can thrive in the visual age.

"While students in art classes learn techniques specific to art, such as how to draw, how to mix paint, or how to center a pot, they're also taught a remarkable array of mental habits not emphasized elsewhere in schools."

— Lois Hetland and Ellen Winner

What High-Quality Arts Education Provides

Elliot Eisner, one of the authors of the 1977 statement, reiterated the case for the value of the arts at the 2008 Aspen summit.

"With the arts, children learn to see," said Eisner, Professor Emeritus of Child Education at Stanford University. "We want our children to have basic skills. But they also will need sophisticated cognition, and they can learn that through the visual arts."

What are the forms of cognition students can develop through the visual arts? Lois Hetland and Ellen Winner discovered an answer while studying five visual arts classrooms in two Boston-area schools for a year. "What we found in our analysis should worry parents and teachers facing cutbacks in school arts programs," they conclude in their 2007 book, *Studio Thinking*. "While students in art classes learn techniques specific to art, such as how to draw, how to mix paint, or how to center a pot, they're also taught a remarkable array of mental habits not emphasized elsewhere in schools."

These habits include observing, envisioning, innovating, and reflecting, Hetland and Winner state. "Though far more difficult to quantify on a test than reading comprehension or math computation, each has a high value as a learning tool, both in school and elsewhere in life."

These abilities develop children's intelligence, argues David Perkins, Senior Co-director of Harvard University's Project Zero. The practice of looking at art, he noted at the 2008 Aspen summit, requires thoughtful attention to what the artworks have to show and say.

And works of art connect to viewers' personal and social lives. Thus looking at art "provides an excellent setting for better thinking, for the cultivation of what might be called the art of intelligence."

In addition to developing students' intellectual capabilities, visual arts instruction also helps develop young people's sense of civic engagement. The arts stimulate or release imagination by bringing into existence an alternative "reality," notes Maxine Greene. In that way, young people can envision a world that is different from the world they know, and thus art education opens the possibility for creating new worlds, rather than simply accepting the world as it is. "We know that imagination reaches toward a future, towards what might be, what should be, what is not yet," she writes in a 2007 paper.

The artistic features inherent in new technologies also make possible new forms of social interaction. By creating a video and posting it on YouTube, for example, a young person instantly creates a new global virtual critical community, because viewers around the world can comment on the work and provide needed feedback. At the same time, the work creates an audience for future works.

Art education **opens the possibility for creating new worlds…**

How High-Quality Arts Education Can Prepare Students for the Future

The abilities that visual arts education develops are crucial. But in the No Child Left Behind era, higher test scores in reading and mathematics are the coin of the realm. There is little evidence that visual arts education yields better performance on standardized tests.

However, students learn a great deal in high-quality visual arts classes that is not captured on standardized tests. For example, as Hetland and Winner found, by teaching students to look through a cardboard frame called a viewfinder, teachers at Boston Arts Academy help students learn to *observe*—something naturalists, climatologists, writers, and doctors need to know how to do. In addition, visual arts teachers encourage students to form mental images and use them to solve problems—an ability that chemists and architects use to create models and that inventors use to think up new ideas. Learning to innovate is an important ability that standardized tests typically do not measure.

Outside of education, there is a growing consensus that these abilities are just as important as scientific and technical know-how for the 21st-century world young people are entering. "Corporate leaders in America believe that the success of America is going to depend on a flow of innovative ideas," according to Susan Sclafani, a former high-ranking official in the Bush Administration's Department of Education and panel member of the New Commission on the Skills of the American Workforce. "And, they believe the innovative ideas will come because students have the opportunity to engage in the arts."

Moreover, visual arts instruction also helps students learn to value diverse perspectives and cultures, something that is increasingly important in a global society.

Enabling students to be creative and appreciative of diversity in ways that will benefit them in the world outside of school requires skillful teaching. "Does visual arts learning offer a particularly good platform for developing creativity? I say yes," says David Perkins. But, he cautions, "The transfer of learning from art to other domains is no free lunch. It won't just happen. We have to help people to generalize from what they have done."

Perkins argues strongly that more research is needed to determine what makes the knowledge and skills developed through visual arts education transferable to other domains. Such research would help teachers identify the necessary "bridging moves" that enable students to generalize their knowledge and skills into other areas of learning.

What Excellent Visual Arts Teaching Looks Like

What does high-quality instruction in the visual arts look like? Researchers have begun to identify the characteristics of effective learning environments and the ways that teachers can engage students to develop visual arts knowledge, skills, and habits of mind.

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As skillful educators have found, teaching students to be creative is a deliberate process, much like teaching students to be literate or to be able to solve mathematics problems. It takes more than simply handing out materials; expert teachers break down the creative process to enable students to identify the problem, gather relevant information, try out solutions, and validate those that are effective.

In their study of exemplary art classrooms in the Boston area, Hetland and Winner and their colleagues found that teachers fostered a relationship with their students that was like that of a master craftsman with an apprentice. Teachers engaged in demonstrations and lectures to convey information; they created opportunities for students to work; and they encouraged critiques of the student work.

In the process, the teachers not only enabled students to develop their crafts and understand the art world, they also helped them see patterns, learn from their mistakes, and envision new solutions. In contrast to the conventional view that art instruction is focused solely on creating art products, the researchers found that skilled instructors engaged student thinking; they helped them understand the choices they and other artists make and the implications of such choices. Students are taught what high-quality work is and how to evaluate their work and that of their classmates against emerging standards.

For example, Hetland and Winner note:

> During class critiques, and one-to-one as students worked, teachers asked students to reflect: "Is that working? Is this what I intended to do? Can I make this better? What's next?" At Walnut Hill School, Jason Green questioned individual students almost relentlessly as they began a new clay sculpture: "What about this form? Do you want to make the whole thing? Which part of it?"

Perhaps not surprisingly, these techniques are similar to those found to be essential for high-level student learning in other subject areas as well. The National Research Council (NRC) report, *How People Learn: Brain, Mind, Experience, and School*, examined research on student learning and described the learning environments in history, mathematics, and science that produced student understanding in those disciplines.

The report describes effective learning environments in language that could be used as accurately to describe excellent visual arts classrooms. Effective learning environments are:

> learner centered in the sense that teachers build on the knowledge students bring to the learning situation. They are knowledge centered in the sense that the teachers attempt to help students develop an organized understanding of important concepts in each discipline. They are assessment centered in the sense that the teacher's attempt to make students' thinking visible so that ideas can be discussed and clarified, such as having students (1) present their arguments in debate, (2) discuss their solutions to problems at a qualitative level and (3) make predictions about various phenomena. They are community centered in the sense that the teachers establish classroom norms that learning with understanding is valued and students feel free to explore what they do not understand.

As that report suggests, effective teaching requires an environment that is conducive for learning. Such an environment includes a professional learning community in which everyone—including adults and young people—is continually collaborating and advancing their own knowledge and skills. It also includes multiple means of assessment to enable students to demonstrate their abilities in multiple ways.

Effective teaching requires a substantial amount of expertise. It requires teaching by a skilled and experienced professional with extensive arts content background, a range of pedagogical approaches, and the patience and persistence to turn small advantages and unexpected events into major breakthroughs in learning. It requires the teaching of an arts education professional who is a continual learner throughout his or her career, and one who is an active member of the art, education, and art-education communities.

Regrettably, some states downplay the skills required for effective visual arts instruction by adopting minimal certification requirements that underestimate the competencies teachers need in the classroom. In Florida, for example, a teacher can earn an endorsement in art by completing an online test. Yet it takes qualified professionals, with the ability to create effective learning environments, to understand art beyond the school and into the community and the contemporary world, and to engage students' thinking and understanding to help students learn in the ways the NRC study described.

How to Infuse the Arts into Learning Environments

The importance of the arts' ability to engage students should not be underestimated or understated at a time when nearly half of all students are not graduating from high school on time in major American cities. The research on the causes of the dropout problem portrays these students as failing to connect with anyone or anything before they vanish.

A growing body of research within the arts points to the conclusion that challenged and disengaged students are even more likely than other students to benefit from high-quality visual arts instruction. In addition to helping young people develop important knowledge, skills, and habits of mind, the arts have a great capacity to engage many students who otherwise would be alienated. Such a capacity is particularly important for English language learners, who might be able to engage early on with visual arts education in ways that motivate practice and create a context for development of skills in speaking, listening, reading, and writing. Such skill development in the context of making and looking at art that expresses personal ideas may ultimately be shown to benefit language use in subjects that require greater facility with English.

The potential for such advantages is enhanced when the arts are at the center of a school. Such schools can transform themselves into vibrant learning centers. As Steven Seidel, the director of the Arts in Education Program at Harvard's graduate school of education, put it in a 2005 essay: "When students, teachers and others (including administrators, parents, artists) gather around a work of art created by an artist or a student in the fourth grade and they strive to understand that work—what they see, what it means to each of them, what it makes them feel—they not only make sense of the work, they build community and understanding among themselves."

Olivia Gude helped stimulate such a conversation at Chicago's Charles Steinmetz High School. After reading about racial tension at the school, Gude, who is now a professor of art education at the University of Illinois at Chicago, approached the principal with her portfolio and an idea: to have Steinmetz students work together under her supervision to design and create a multi-racially themed piece for the school. The principal gave Gude the go-ahead, and after two years of work with over 100 students, Steinmetz High's foyer sparkles with intricately designed panels of glass-tile mosaic. Working with elementary school children, teens, and inter-generational groups in rural, suburban, and urban settings, Gude has created public art that represents school curriculum and community values. She wonders: "Why shouldn't every high quality school enliven itself with products of student creativity?"

The infusion of arts doesn't end when school is out. Excellent after-school programs abound that offer students opportunities to engage in visual arts challenges that are aligned with the school's curriculum. In Lawrence, Kansas, for example, the Van Go Mobile Arts program serves students from low-income families,

many with mental health and educational challenges. Under the program, students are paid to create commissioned artwork, such as designing and building public benches.

"The bench-building program helps kids understand that they are contributing to the community," says program director Lynne Greene. "They have a chance to be the 'giver,' rather than the receiver. Their self-confidence grows so much. They also feel more connected to the community, and we know that the more connected they are to the community, the more likely they are to develop as positive members of it as adults."

Museums, too, are critical to infusing art throughout a community. The high-quality materials produced by museums, the knowledge and skills of museum educators, and the museum collections themselves are extraordinarily valuable resources to extend learning far beyond the classroom. "The objects we hold in stewardship for our culture have many dimensions of significance and can participate in many aspects of the education enterprise—from the social studies teacher who wants to connect students with art depicting or made at the time of the Civil War, to the French teacher who 'takes her students to France' by visiting a museum to see French art, to the elementary school teacher whose students find the theme of community embodied and illustrated by art from across the globe," says Kent Lydecker, the Associate Director of Education for the Metropolitan Museum of Art.

Effective **teaching requires a substantial amount of expertise. It requires teaching by a skilled and experienced professional with extensive arts content background, a range of pedagogical approaches, and the patience and persistence to turn small advantages and unexpected events into major breakthroughs in learning . . .**

Ensuring Excellent Visual Arts Education for Every Student

How can every student have access to the kind of excellent art education that can develop their intelligence and produce the abilities that they will need in the visual age? To begin with, we need more information on what effective instruction means and what the effects of such instruction are for students. While the research that has been conducted so far is promising, the cumulative evidence remains inconclusive. We need to know more about instruction and its impact to inform policy makers and practitioners.

There have been too few studies of art education that have used experimental designs that some consider the "gold standard" in social science research. Almost ten years ago, Hetland and Winner led a team of researchers in conducting ten meta-analytic reviews of quantitative studies—conducted over the course of 50 years—that tested the link between various kinds of arts instruction and cognitive and academic achievement in a range of subject areas. They found that the claims of arts advocates exceeded the evidence from science.

Doug Blandy—the senior editor of *Studies in Art Education*, the field's leading research journal—has observed the field's turn away from quantitative and experimental research. Of 83 studies he had received in a year and a half at the journal, only a very small percentage have used quantitative or experimental methods. He suggested that doctoral students might not be aware of the value of experimental research or sufficiently prepared to conduct sophisticated quantitative or hypothetical studies.

"I found I could say things with color and shapes that I couldn't say any other way—things I had no words for."

— Georgia O'Keeffe

In addition to more quantitative research, there is also a strong need for other types of research, such as qualitative studies that show the characteristics of effective teaching and learning in rich description. And to achieve external validity, research on learning in the visual arts must be conducted in a wide variety of settings, both inside and outside of schools, including after-school programs and museum and community settings.

Arts educators agree about the need for additional research. In a survey of 372 members of NAEA, 89% of respondents said research about student learning, teaching, and curriculum was "highly important." Respondents were very concerned about research knowledge that would have a direct impact on the classroom.

Yet as researchers collect and analyze data about the effectiveness and impact of arts education, they would do well to heed Jessica Hoffman Davis's admonition: "We have been so driven to measure the impact of the arts in education that we began to forget that their strength lies beyond the measurable. The arts, like most really significant human behaviors, defy measurement."

Visual arts education has been shown to motivate students who might otherwise be at risk of dropping out of school…

Recommendations for the Federal Government

Bolstering the knowledge base about art education and strengthening practice for every student will require policy changes at the federal government level. To bring those changes about, NAEA recommends the following:

There is substantial evidence that high-quality education in the arts provides students with opportunities to develop a number of capacities that are not well addressed in other areas of the curriculum, such as visual-spatial abilities, self-reflection, and experimentation. In addition, visual arts education has been shown to motivate students who might otherwise be at risk of dropping out of school.

However, there is growing evidence that, despite the inclusion of the arts as a core subject, the implementation of the No Child Left Behind Act has led to an erosion of arts education in America's schools. A survey by the Center on Education Policy found that 16% of districts had reduced time for art and music instruction by an average of 57 minutes a week, or 35% of instructional time devoted to those subjects. The data also show that the loss of teaching time in the arts has been concentrated most in low performing and high-poverty schools.

1. Since visual arts is a core academic subject, the reauthorization of the Elementary and Secondary Education Act should require schools with Title I programs to maintain or develop programs in the visual arts, and should broaden measures of school progress to include learning in the visual arts.

While there is a growing recognition of the importance of visual arts instruction, there is a paucity of data on the extent and quality of arts instruction. The last U.S. Department of Education Fast Response Statistical Survey (FRSS) was conducted in 1999-2000; Congress has provided funding for data collection for a new FRSS in 2009. In addition, the last National Assessment of Educational Progress test of arts learning took place in 1997; an assessment of the visual arts was scheduled for 2008 and results will be released Spring 2009. Regular updates of both of these studies would provide much-needed continual data on arts education in the US.

2. The U.S. Department of Education must include the arts in all regularly conducted research and data collection regarding the core academic subjects.

There is a growing recognition that state assessments are inadequate to measure the full range of knowledge and skills students will need in the 21st century, and there is a growing consensus for additional support for the development of new, more comprehensive assessments of student abilities. Arts organizations, such as Project Zero, have been at the forefront of research on assessment.

3. The U.S. Department of Education should disseminate research on visual arts assessment to states and districts and should encourage states to demonstrate the extent to which they incorporate research on arts assessment in their plans for assessment redesign.

All teachers need additional support to enable all students to learn to high levels. Through Title II of the ESEA, the U.S. Department of Education currently provides $2.9 billion in state grants to support teacher quality, and through the Arts in Education program, the Department provided $37 million specifically for arts education. These funds could be used to maintain and strengthen professional development and to foster the integration of the arts throughout the curriculum.

4. The Title II program should encourage schools to form effective partnerships between visual arts teachers and teachers from other subjects to develop and advance arts instruction across the curriculum.

"Why shouldn't every high quality school enliven itself with products of student creativity?"

—Olivia Gude

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