

# Art Puts the STEAM in STEM

**P**rincipals know that transforming education means we first need to expand what is now a limited dialogue about accountability, measured by gaining proficiency on math and reading test scores. We know that educating children means more than that. Put simply, the fundamental purpose of education is to prepare children for the future, and their success depends not solely on whether they have mastered the basics. They are going to need to be experts in creativity—in how they approach the increasing complexity of a global society, how they solve problems, and how they design their lives. And there's no better time to unleash those powerful forces than in the elementary grades, when children are natural explorers, open to diverse sights, sounds, and experiences and eager to express their thoughts, hopes, and dreams.

Fortunately, it turns out that strengthening creativity and integrating arts instruction can also reap rewards in the tested subjects. The benefits of arts-infused education are undeniable: It increases student achievement; engages children more profoundly in learning; fosters the all-important 4 C's of 21st century learning—creativity, critical thinking, communication, and collaboration; provides teachers with innovative, effective classroom strategies; promotes a creative school culture that supports learning communities; and helps close the achievement gap. And according to “What School Leaders Can Do to Increase Arts Education,” developed by the Arts Education Partnership, “School principals play a key role in ensuring every student receives a high-quality arts education as part of a complete education.” In short, arts-infused education helps you reach and inspire students—and achieve meaningful results.

Because we believe in the power of arts-infused education, NAESP has teamed up with Crayola to help support it. Our Champion Creatively Alive Children grant program empowers principals, teachers, school leaders, and entire communities—providing inspiration, knowledge, and tools that can unlock imagination and originality in every child. (Visit [www.naesp.org/creativity](http://www.naesp.org/creativity) to read about the program and how principals have successfully integrated the arts.)

## The Many Benefits

Arts education is important in and of itself—as a means of extending human understanding and building an appreciation of aesthetics. Beyond that, integrating the arts into other subjects is proving to be an extremely effective strategy that not only makes students well-rounded people, but also helps to equip them to succeed in the future. Researchers have linked arts education with improvements in reading and mathematics skills, as



well as critical thinking and problem-solving. In fact, to the question of data and achievement, studies have shown that children actively engaged in the arts are likely to have higher test scores than those with little to no involvement.

Students need strong cognitive capacities as well as a grasp of the fundamentals. It is undeniable that they need to develop STEM skills—facility in science and mathematics, and technical and digital skills. But they also need to be able to design, to bring new ideas that create solutions to complex problems. Perhaps more than anything, experience in the arts teaches one “to see,” which is fundamental to innovation and creativity.

Arts integration models, the practice of teaching across classroom subjects in tandem with the arts, have been yielding some particularly promising results in school reform and closing the achievement gap. Most recently, cutting-edge studies in neuroscience have further developed our understanding of how arts strategies support crucial brain development in learning.

## The Whole Child

We all feel the urgency to transform the educational experience for students, personalizing learning opportunities in ways that work best for individual learners. Beyond specific measurable outcomes, integrating arts into the curriculum enhances a series of personal characteristics that we attribute to productive people and citizens. For example, arts integration has been shown to enhance students' motivation to learn, bolster self-confidence, encourage creative expression, and advance social skills such as collaboration, tolerance, and conflict resolution. All of these are cited as indicators of the impact of arts education on student learning and development.

Delivery of our highest values of education depends on more students in American schools—especially those in underserved schools—having the benefits of a comprehensive education that includes the arts. We agree with the findings of the compelling President's Committee on Arts and the Humanities report, *Reinvesting in Arts Education*, which documents that the process of making art—whether it is written, performed, sculpted, photographed, filmed, danced, or painted—prepares children for success not simply as artists, but in all walks of life.

There are countless thrilling moments between a child and an educator, but perhaps none more so than when a child's creative spark ignites, lighting a creative path forward that can last a lifetime. 