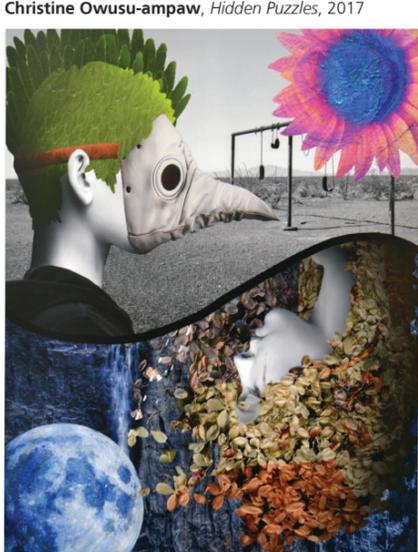




Christine Owusu-ampaw, *Hidden Puzzles*, 2017



Elsa Guzman, *Lichtenstein reimagined*, 2018



Erica Cisneros, *Two of Me*, 2017



Tiffany Watson, *Emoji x Pop Art*, 2018



Samiya Huntt Davis, *Unseen*, 2017



Dandara Rimbaud, *Coil Construction*, 2016



Katherine Kagel, *Kate*, 2018



Dylan Aristide, Seiji Fezo, Carmen Lee, Jonathan Lin, Qi Ling Huan, and Tiffany Watson, *Experiments in Abstraction*, 2018



Hayley Sanchez, *Terracotta Coil Vessel*, 2017

Here's why art class is the most important subject in school

In a test-driven, results-oriented public school system, the art department costs money. Supplies don't come cheap, nor do teachers' salaries. Is art just a class that allows core content teachers a bathroom break or preparation time? Is it a moderated block of time for students to express themselves, have fun, and blow off some steam? The short-sighted and ill-informed will answer with the affirmative. They fail to understand something very important.

Art teachers know that when we grid, measure, and draw, we apply principles of geometry. When we make sculptures, we use engineering. When we mix colors, we reveal information about physics. When we create illustrations for stories, we learn about literature. When we review the styles of art from Da Vinci to Banksy, we teach history. When we write about art, we strengthen our communication skills. When we create works of art, we solve complex visual problems in creative ways.

The solution to failing schools is right under our noses, and has been for a long time. Research, studies, and evidence support it, but schools and state governments largely fail to act on this information, because to them it seems counter-intuitive. Worse yet, when school budgets are stretched, the programs that get cut are the ones that should be strengthened: the arts. Art class is not to be confused with craft time or follow-along busy work, but a rigorous, focused, inter-curricular program taught by a certified arts instructor. Studies show that schools that implement STEAM programs—science, technology, engineering, art, and mathematics—outperform schools that focus on STEM alone. Art is an important key to student success. The positive impact of art creation and art study has been demonstrated in several research-based studies, which measure the effects of arts-making from childhood through the senior years.

Arts in Youth Education

A group of studies compiled by The National Assembly of State Arts Agencies and the Arts Education Partnership show compelling connections between the arts and various academic, social, and cognitive achievements.<sup>1</sup> One 1998 study by James Catterall identifies correlations between arts participation and academic achievement in US schools.<sup>2</sup> Utilizing data from 25,000 secondary school students as they advanced from grade 8 to grade 10, the study found that students who participated in the arts also performed better on standardized tests, exhibited greater dedication in school, and had more positive associations with community service. Since access to the arts is often indicative of higher

socio-economic status, the study sample was restricted to the poorest quarter of students. The results of this study indicate that participation in the arts—more than parental education or family affluence—demonstrates a strong correlation to positive student behaviors.

It doesn't end there. In the group of studies, theater and dramatic play are linked to the development of literacy skills, comprehension, and the improvement of narrative writing—something that makes sense if you think about how many people comprehend more through active, rather than passive learning.<sup>3</sup> Students who take music classes tend to have higher standardized test scores, possibly due to links between math, rhythm, patterns, and ratios.<sup>4</sup> Students who study dance demonstrate improved measures of abstract thought and creative thinking, as thinking through movement lends another dimension to critical engagement.<sup>5</sup> Visual arts have been shown help students with learning disabilities become more active readers by interpreting texts into visual forms.<sup>6</sup> Finally, participation in the arts has been shown to provide an important source of motivation for students who contemplate dropping out of school.<sup>7</sup> Controlling for population and socio-economic status, student dropout rates have been shown to go from an average of 22% in schools without art programs down to 4% in schools with art programs.<sup>8</sup> Clearly the educational benefits from the arts are wide ranging.

Learning through the arts is one of the key ways for humans to develop curiosity, creativity, and problem-solving skills. When educational institutions emphasize test performance in so-called "core-subjects," creativity and innovative thinking suffer.<sup>9</sup> According to a NASA creativity test designed by Dr. George Land that was administered to over 1 million adults, only 2% of the US adult population have the creative skills needed to solve our most pressing issues.<sup>10</sup> Following these dismal results, Land and NASA adapted and extended the test to 1,600 children. The results are shocking. The study showed that 98% of 4 to 5 year olds scored at a "genius" level on the creativity test, where only 2% of adults performed at this level on the same test. In fact, as children aged from 4 or 5, to 10, to 15, their performance on the same test routinely diminished. As Land explains, roots of these results are tied to a strong emphasis on convergent thinking in US schools, which is focused on finding a singular answer based on evaluation, judgment, and criticism. Divergent thinking, on the other hand, is more playful and imaginative, inviting many possible "right" answers and, incidentally, it activates more areas of the brain than convergent thinking. Art education is one of the very few disciplines where these skills are honed and taught, yet it is the first program to be cut from

school budgets, and in some cases, is not even offered in the first place.

Arts in Early Adulthood

Creative skills developed throughout youth and young adulthood have direct connections to achievement as individuals enter college and start their careers. In 2009, Catterall published a book revealing the impact of the arts on the same cohort of students from his aforementioned 1998 study a decade later, at age 26. The young adults who were of low socio-economic status and had been engaged in the arts had higher rates of college enrollment and completion, higher rates of employment and higher level employment, and were both more likely to volunteer and were more likely to vote, than their peers of similar socio-economic status who were not engaged in the arts.<sup>11</sup> And the benefit doesn't end there. According to a 2008 study of business leaders, 73% report that creativity is the number one skill they hire for, which perhaps is not surprising, given the fast-paced and challenging times that we live in.<sup>12</sup> Many confuse arts education with vocational programs for future career-artists, but the truth is that skills in the arts are not only transferable, improving performance across multiple fields, but are relevant at all stages of life.

Arts and Aging

Practicing the arts even has a positive impact on older adults. A 2014 study led by neurologists in Germany indicates that both art appreciation and art making help the brain develop more neural connections, but that making art results in significantly greater cognitive gains.<sup>13</sup> This conclusion was based on an experiment in which two groups of fourteen adults from ages 62-70 engaged in a ten-week workshop that met for two hours each week. One workshop, led by an arts educator, featured hands-on arts creation that focused on developing each participant's skills and creativity, while the other, led by an art historian, focused on arts appreciation, analysis, and critique. Testing for psychological resilience both before and after the arts interventions, the studies concluded that training in visual arts production "enhances functional connectivity [...] of the parietal and frontal cortices," a finding that was not present for the art evaluation group. The lead scientists, in part, attribute these improvements to "a combination of motor and cognitive processing," in addition to what they call "a personal integrative experience [...] in which the participant is emerged."<sup>14</sup> The multifaceted modes of cognitive engagement present in creating art are evidently beneficial to our brains' functionality.

Advocacy

With such tangible benefits, it's confounding that only 7% of high schools across the United States require art education.<sup>15</sup> In large part, this of course is the result of a combination of budgetary restrictions and a dogged faith in the value of standardized testing.

From the perspective of an art educator, a significant piece of arts advocacy is the education of our colleagues, administration, communities, and government officials about the necessity of arts education in accessible and quantifiable terms. This is essential to create new advocates. As a community of creative people, it can be hard for art educators to be vocal when the initiation of debates might not be a strong suit, or when educators are so overwhelmed with day-to-day responsibilities of running classes. When art teachers talk to outsiders about how creative, fun, and full of self-expression art education is, those same outsiders might confuse these terms with frivolity and excess. But if instead art teachers explain that art education is about problem-solving, divergent thinking processes, making connections within core subjects like math, science, and literature, and that our students score significantly higher on important assessments like the SAT, these audiences will tend to see things differently.

Does art's connection to so-called core content make art explorations any less artful or any less expressive? No. It means that the art educators not only reinforce, but add important connections and layers of depth to the work of their educational colleagues. Does this mean that crafts are of no value? No. Crafts have connections to cultures, social studies, and history. They can be a rich source of learning when we make these connections in a meaningful way by incorporating reading and writing skills, and teaching about the cultures and history behind the crafts to which students are exposed.

The solution to failing schools is right under our noses. It's up to us to act upon what we've learned.

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James Kagel, Fashion Icon: Ricky from Trailer Park Boys, 2018



Min Zu, Radical, 2017



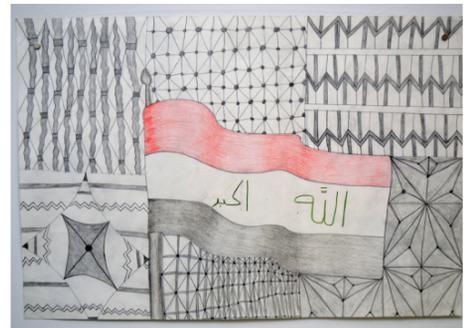
Yaileen Vivar Santos, Fashion Designs Zine, 2018



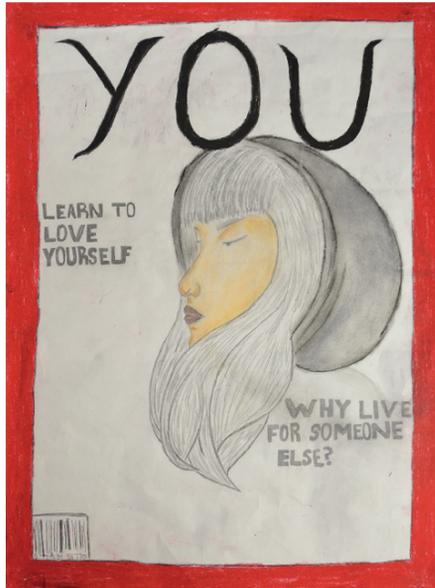
Kimberly Rios Bravo, Flower Road, 2017



Sarah Rodbell, #NeverAgain, 2018



Safaa Ali, Untitled, 2017



Rayna Ledgister, Love Yourself, 2018



Raven Anderson, Tropical, 2018



Miguel Gonzalez, Untitled, 2017

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Footnotes

- 1. The National Assembly of State Arts Agencies and The Arts Education Partnership, Critical Evidence: How the Arts Benefit Student Achievement (Washington, DC: 2000).
2. J.S. Catterall, 'Involvement in the arts and success in secondary school,' Americans for the Arts Monographs 1, no. 9 (1998): 1-10.
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7. The National Assembly of State Arts Agencies and The Arts Education Partnership, Critical Evidence: How the Arts Benefit Student Achievement.
8. Americans for the Arts, Encourage Creativity: Teach the Arts (facts, figures, action), October 7, 2014, YouTube video, 00:03:17,

- accessed April 19, 2018, https://bit.ly/1vNnWGb.
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15. Americans for the Arts, Encourage Creativity: Teach the Arts (facts, figures, action).

Cover images from left to right:

Jason Maldonado, Jason's Life Collage: Bling Bling, 2018; Jessica Ye, My Morning Experience, 2018; Aaliyah Alfred, Old/young reflection, 2018; Star Aja Livingston, Lewis Colley, 2018; Ariadys Morillo, Raizes de Los Recuerdos, 2017; Caralyza Carter, Chasing Demons, 2017; Spencer Miller, Splat, 2017; Raisa Ratri, Escaping Reality, 2017; Jose Alvarez, The Final Frontier, 2018; Qing Qing Ruan, Painting based on Fragmented Images, 2016; Malik Braswell, The Gusto Show, 2018

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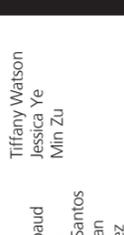
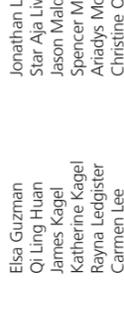
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Qing Qing Ruan
Hayley Sanchez

Jonathan Lin
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Jason Maldonado
Spencer Miller
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