

## Creativity, Innovation and the Power of Arts in Education: One Path Forward

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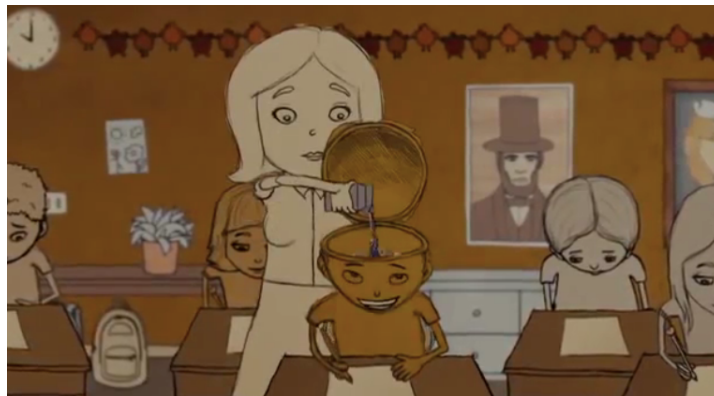
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### **Introduction - Setting the stage**

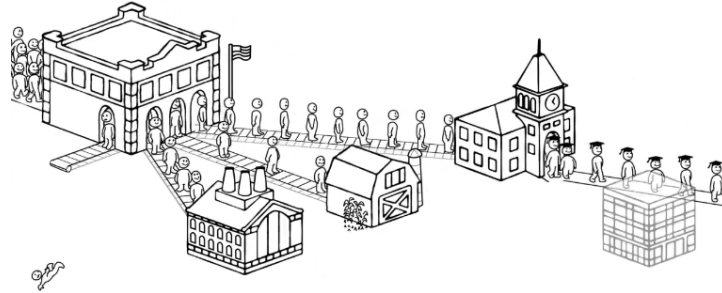
In this talk when I say “we” or “our” I am referring to the education system I know best-- that of the United States. Nevertheless, I hope my examples have relevance in this international context.

We talk a great deal about innovation in education. To be sure, there have been some important innovations over the last 50 years. We recognize that pre-school education is an important indicator for healthy child development; we claim to understand that children learn at different rates and that not all children learn the same way; we no longer believe that memorization is the best way to learn or that regurgitating facts from a textbook for the weekly test will allow children to “own the word,” or to use the Freirian term - “conscientização” (Freire, 1970). Research from the National Academy of Science assures us that learning by doing is a more effective method of teaching than learning by rote (Freeman et al, 2014). So why do so many schools still look the way they did in the 19<sup>th</sup> century or even 20<sup>th</sup> century? As we entered the 21<sup>st</sup> century, many education groups came together to proclaim that the most important attributes, or what I call habits of mind, children could learn were: the skills of effective communication, collaboration, critical thinking, and most importantly, creativity.

But in reality, so much of education, particularly education for poor children, still assumes that all learning must be poured into children’s heads by the all-important teacher (Stamm, 2014).



We continue the factory model of education that was popularized during the Industrial Revolution (2Revolutions LLC, 2012). That system of education sent young people to, “one of three main places: the factory, the farm, or the university. We always lost some kids, but this model provided a middle class life for most people and also economic growth” (2Revolutions LLC, 2012).



However, over time, the economy changed. Farm jobs diminished and office jobs became more commonplace. College graduates always had better access to economic opportunity, but there was also a path straight from high school to the workplace. But then office work changed and it got harder to get an office job directly from secondary school. Eventually, that path disappeared. College became the main path to opportunity. We started sending more young people to college, but we didn't change the overall system (2Revolutions LLC, 2012). College for all became the new call or mantra. However, critical thinking and action about the innovations necessary to support large numbers of diverse and non-traditional students going and to and graduating from college have been very sparse.

We continue to teach in discreet bite size increments. Our curriculum is a mile wide and an inch thick. Very little in a young person's day involves actually making or doing. And arts learning or creativity has too often been eliminated in schools in the name of budget cuts. In fact, since 2008, less than half of the students in urban schools receive any regular arts education classes (Kraehe, Acuff & Travis, 2016). We have become obsessed with ranking and sorting our children and schools—all based on high stakes test scores—and this has further caused school systems to abolish arts classes in favor of double English and double Math classes (Baker, 2012). And we wonder why so many young people have become disengaged from school. Of course, in our private schools and many of our more well-resourced public schools, joy, discovery, playfulness, and genuine problem solving of real issues is central to learning. This is as it should be. But a world in which only some get this kind of education and most do not means we are

giving the best of our society and resources to those that already have the most. And that is a recipe for disaster.

### **The Challenge**

We face a central challenge: how to better prepare young people for an uncertain future where progress and opportunity—social, economic, racial and environmental—cannot be assumed. Education, according to Pellegrino and Hilton, contributes to “the common good, enhances national prosperity and supports stable families, neighborhoods and communities” (Pellegrino & Hilton 2012, p.1 introduction). I emphasize that, in order to prepare students for the future, an educational approach that incorporates creativity and arts-based learning is critical to developing resilient, adaptive citizens who can build the stable families and communities of the future. As many scholars, like James Catterall, Eliot Eisner and others, have argued, the arts uniquely help young people with complex problem solving. *Learning in the arts requires the ability and a willingness to surrender to the unanticipated possibilities of the work as it unfolds*. Consider that statement. Unlike so much of school curriculum where correct answers and rules prevail, in the arts, judgment - not rules - are what counts. Problems can have more than one solution and questions can have more than one answer (Catterall, 2009 & Eisner, 2002). Too much of our emphasis in schools today requires us to regurgitate facts that others have told us. Art-making often involves surprises, risk-taking, and being vulnerable to the unknown.

I believe that if we can embrace creativity and the power of arts learning we have the opportunity to build schools and classrooms that will nourish our young people to be thoughtful and compassionate citizens, ready to take their places in a democratic society. I believe this even more strongly now given the meanness and harsh rhetoric that is happening in the United States. Our schools need to be places where we can recognize our individual and collective dreams, and where we can help them come true.

Futurist thinking has garnered a great deal of attention in the workplace and in conversations about the economy. Mainstream education has not kept pace. Even though the new education mantra is innovation, little has actually changed in too many of our classrooms. We have used innovation to tinker around the edges of what already exists—to change the seating, but not to redesign the room.

### **Looking to the Future Through Creativity**

As we entered the 21<sup>st</sup> century, a consortium of organizations came together to form The Partnership for 21<sup>st</sup> Century Learning (P21). Founded in 2002, the goal of P21 is to bring together organizations from

three seemingly different worlds - business, education, and policy-setting – to ensure that all learners develop the knowledge and skills necessary for succeeding in the 21<sup>st</sup> century. The consortium posits that The 4Cs: Communication, Collaboration, Critical Thinking and Creativity are the central skills and dispositions that all students must master to be successful in our increasingly complex world (Partnership for 21st Century Skills, 2010). An education centered in creativity and the arts may be a way to help our students gain these skills. I would also add a fifth C: Courage. In the school-based examples discussed later in this paper, it is evident that students also developed a strong moral center to complete academic and artistic tasks. This is courageous.

In their seminal book, Hetland et al (Hetland et al, 2013) describe a series of eight studio habits of mind that they observed in various schools and programs with strong visual arts curricula. They identify the habits that artists—and arts teachers—tend to employ. One can easily see the links to the “C’s” described by the Partnership.

1. **Develop Craft:** Learning tools, materials and artist’s practices.
2. **Engage and Persist:** Learning to pursue topics of personal interest; develop focus, ways of thinking to persevere.
3. **Envision:** Picturing, imagining what cannot be observed.
4. **Express:** Creating works that convey ideas, meaning or emotions.
5. **Observe:** Learning to view visual, audio and written resources more critically.
6. **Reflect:** Learning to think and converse about one’s work and processes of making.
7. **Stretch and Explore:** Learning to stretch beyond perceived limitations, explore and learning from errors or accidents.
8. **Understand Art World:** Learning about art history and artistic practices and engaging the arts community.



These habits are not necessarily linear or hierarchical. We could imagine them in a circular fashion too.

You do not learn #1 and then #2, etc. Think about the first habit: development of craft. This involves learning about technique, understanding artistic conventions and the

use, practice and care of materials as well as the organization of studio space. Habits #2-7 are what I look for when I enter into any classroom. How are students working through difficult material? (And I am not looking for all the ways in which teachers exhort students to be gritty!) What evidence is there that there is ample time to imagine, to express, to carefully observe, to reflect and to explore. These are dispositions I want to see in all classrooms. We need these in all academic disciplines, but we might see these habits first in arts classrooms. The final habit, #8, refers to learning about art worlds beyond the classroom such as art history and artistic communities of practice such as galleries, curators, and critics. While the research to describe these habits was done in arts classrooms, these habits can be a blueprint for all classrooms. When I have shared these studio habits with science teachers, they immediately make the connection to their own field and particularly the ways they teach the discovery of the scientific method. Current research suggests that the development of artistic habits of mind supports students' interests in innovation (Winner, Goldstein & Vincent-Lancrin, 2013). This is fundamentally important to maintaining engagement in classrooms, and assisting with the learning process overall.

The Hetland research is further supported by studies made by Elliot Eisner. This research demonstrates how the arts help students develop flexibility, expression, and the ability to shift direction (Hetland et al, 2013 & Eisner, 2002). Arts learning is not just an “emotive” discipline but one that requires deep reflection and intellectual rigor (Hetland et al, 2013, p. 7). In my own work (Nathan, 2009), I describe how we teach the arts not so that students will get better at other subjects such as math; rather, we teach the arts because they are necessary for enabling a student to reach their maximum personal development. When a student can develop positively and feel success in school, that experience can be channeled into more academic arenas. The adage “success begets success” actually is true. In my experience, as our students develop these studio habits of mind, which are learned through the arts, they tend to achieve more success in school and in life outside of school. Moreover, students who are able to experiment, create, and think innovatively demonstrate more flexible thinking and thus have an easier time trying to solve problems—especially when the work is hard! Additionally, the arts are a critical part of a young person's education because they are vehicles for instruction about tolerance, diversity, and the importance of human understanding.

At the Boston Arts Academy, the school I founded in 1998 and directed for 14 years, we talked about four habits that are connected to Hetland and Winner's work. This makes sense since much of their research was done in our school.

BAA specifically teaches a set of four dispositions towards learning. These habits of mind we call the Habits of the Graduate. They are: *Refine, Invent, Connect and Own* (Boston Arts Academy, n.d.).

The terms, and the way they are taught and used, mirror much of the deeper learning literature and also reflect theories underlying a growth mindset. The habits are not taught or used in a particular order, yet the power of these dispositions allows students to become more independent, self-aware and confident learners. Students learn to ask a series of questions as they practice these habits.

### Boston Arts Academy Habits

<b>Refine</b> Have I conveyed my message? What are my strengths and weaknesses?	<b>Invent</b> What makes this work inventive? Do I take risks and push myself?	<b>Connect</b> Who is the audience and how does the work connect? What is the context?	<b>Own</b> Am I proud of the work I am doing? What do I need to be successful?
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In order to *Refine* a piece of academic or artistic work, you must possess both resiliency and persistence: “have I conveyed my message? What are my strengths and weaknesses?” Although sometimes the process of *Invent* happens alone, it is often an outgrowth of collaboration. Through working deeply with others, new ideas can emerge. Students ask: “what makes this work inventive? Do I take risks and push myself?” *Connect* and *Own* link to the ability to communicate and to both give critiques and be critiqued. To better understand *Connect* students ask: “who is the audience and how does the work connect? What is the context?” And for *Own*: “am I proud of the work I am doing? What do I need to be successful?” These habits align easily with the same habits required for the 21<sup>st</sup> Century workforce. The ability to interrogate the habit of “own” reflects our students’ moral courage and is, in fact, a courageous act.

The literature on imagination also supports the importance of creativity and the arts in education. In social-emotional studies, imagination involves the ability to envision a productive future, and take the necessary steps to become the person you want to be in that future (Killingsworth and Gilbert, 2010). Young people who are immersed in an education system that values and promotes creative and critical thinking will rise to demands that they did not think possible.

Imagination is the faculty or action of forming new ideas, or images or concepts of external objects not present to the senses (Imagination, n.d.).

We can all use our imaginations to generate a brilliant idea that is satisfying to us, but to hold value and be considered original it must be perceived by others to be creative. Creativity is the use of imagination or original ideas to make something (Imagination, n.d.).

Over my many years as a school leader and teacher, my colleagues and I discussed the importance of both imagination and creativity. We experimented with many different curricular innovations to expand students' opportunities for creative and critical thinking. As will be discussed later, the development of a curriculum based on "STEAM," or science, technology, engineering, arts and math, illustrates our desire to allow students to make meaning of their academic education through various artistic explorations.

I share two scholars' definitions of creativity. Their work has been foundational to my own explorations.

### **What is Creativity and Why it Matters**

Architect and author Kyna Leski describes creativity as, "...a storm that slowly begins to gather and take form until it overtakes you—if you are willing to let it" (Leski, 2015 p. 3). And later, "...the quality of making, inventing, or producing—rather than imitating—and it's characterized by originality and imagination" (Leski, 2015, p. 29). In this way, Leski depicts creativity as a form of problem solving. Many dancers I've worked with connect to the idea of a storm and choreographing. Leski also talks about "unlearning," and she quotes the Greek Stoic philosopher Epictetus who observed, "It is impossible for a man to begin to learn that which he thinks he [already] knows" (Leski, 2015, p.12). Artists and scientists both work with data—to support an intuition but also to spark and then support further speculation and "unknowing" (Leski, 2015, p.12). Unlearning allows for a fresh perspective, "With preconceived notions, you simply confirm. With a truly open mind, you make discoveries because you are open and aware" (Leski, 2015, p. 20).

Philosopher and psychologist Mihaly Csikszentmihalyi (*Me-high-Cheek- Sent-me-High*) characterizes this creative processes as a state of *flow*—which he describes as a state of concentration or complete absorption with the activity and situation at hand (Csikszentmihalyi, 1990). *Flow* is another term for the sense of being *in the zone* or *in the groove*. Incidentally, people tend to be most happy in this flow state where they are neither too challenged (a source of anxiety) nor too bored (Csikszentmihalyi, 1990).

Csikszentmihalyi describes flow as, "being completely involved in an activity for its own sake. The ego falls away. Time flies. Every action, movement, and thought follows inevitably from the previous one,

like playing jazz. Your whole being is involved, and you're using your skills to the utmost" (Csikszentmihalyi, 1990, 2004). While Csikszentmihalyi doesn't use the precise word creativity, I believe his definitions echo Leski's description of creativity. He describes how when, "a person's mind or body is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile" (Csikszentmihalyi, 2004) wonderful moments and outcomes can occur. Musicians, actors, painters all can describe this state of flow—so can athletes. As a potter, I totally understand the idea of flow. When I'm throwing mugs or bowls or vases, nothing else is in my mind, and my body is totally absorbed. Every fiber of every muscle is at work as I center the clay and pull up the sides of the object. I am only vaguely aware of sounds or movement around me. My concentration is complete. I am in "the zone."

I will argue today that schools that truly embrace these approaches of storms of creativity and flow are more likely to graduate students who will be successful in today's complex and uncertain world.

### **Examples from classrooms**

First I will describe Ms. Schibuk's 7<sup>th</sup> grade science class at Conservatory Lab Charter Schools (CLCS), as it is an excellent example of executing STEAM-based curriculum. This elementary school has 440 students, from ages 4 through 14, or pre-K-8<sup>th</sup> grade. The essential question for study was: What is the future of the Earth's climate? The goal was for students to deepen and extend their knowledge of science through art-making and arts-based collaborations (Schibuk, 2017). To begin this unit of climate science, students visited with artist Nathalie Miebach to understand how she uses sculpture and music to illustrate patterns in climate science data. Miebach does more than create artwork that is a response to themes and threats of climate change: she creates sculptural and musical pieces that use codes and systems to model real data sets with visual and auditory patterns. She works with scientists and with musical composers alike as she tries to bring aesthetic values and understandings to climate science<sup>1</sup>. Students were delighted, and amazed, with her work. Ms. Schibuk's overarching goals were: to cultivate the Next Generation Science and Engineering Standards of developing and using models, to analyze and interpret data, and to engage in argument from evidence. The challenge for students involved selecting a single concept or phenomenon from their studies that they would want to communicate through artwork. The classroom had to function like a studio or makerspace. In her own description of the project, Ms. Schibuk notes, "Students had a clear goal, an authentic audience and deadline approaching, and knew what resources were available to them" (Schibuk, 2017). The authentic audience was not just parents and

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<sup>1</sup> <http://nathaliemiebach.com/>



community members coming to view students sculptures. Ms. Schibuk had also arranged with a community art gallery for students to show their work in a professional space. As she notes:

While [some may say that] taking time for this type of project might come at the expense of additional content standards, there is a considerable payoff in engagement. Leveraging non-traditional community partnerships in the arts helped to engage students who have not typically felt connected to or engaged in their science classes. Some of the students [who] have most struggled to engage in science were the [same] students who ended up staying late after school for several days in order to continue working on their projects, and who dragged their entire families to the gallery show opening on a beautiful Saturday in May. In addition, the numerous opportunities for student voice and choice throughout the project (groups, scope, data, materials, etc.) allowed students to take ownership over their work and feel like artists and experts, and not just students. (Schibuk, 2017)

Ms. Schibuk understands that creativity - and art making - is central to 21<sup>st</sup> Century competencies. Creativity shares the stage with flexibility, critical thinking, collaboration, cross-disciplinary thinking, and even the development of courage. These are skills, along with content knowledge, that must be incorporated into all classrooms. However, as previously described, day-to-day practice tends to favor the attainment of content knowledge, and pushes to the background the development of creativity in most classroom settings. Creativity cannot be mastered without content knowledge. In other words, one cannot be creative about *nothing*. Students (and a 21<sup>st</sup> Century workforce) must learn to incorporate a *both/and* approach to learning and working. Creativity must take center stage alongside facts and figures. Creativity is a muscle that must be exercised—consistently and over time or it will atrophy.

The idea of student ownership and voice is also something practiced in the music classrooms at CLCS. All students at CLCS, which as I said, is a preK-8<sup>th</sup> grade school, or ages 4-14, study orchestral music every day. The issue of a permanent home for the school has preoccupied the school's board and leadership for almost twenty years. I know this may sound strange in your context but facilities are an issue in many urban schools. The school is located in an inadequate space, and the students and teachers struggle with these conditions-- hallways too narrow to pass while holding an instrument, no gym for physical play, no dedicated music rooms, no library - and the list goes on. Using the poetry of Maya Angelou, "Still We Rise" two of the resident artists (music teachers) worked with students in grades 4-6<sup>th</sup> (9-11years old) to give them the opportunity to write, improvise and then perform music about their

worries about not having adequate facilities and feeling, literally, homeless. Here is an excerpt that showcases the students' work.

What is fascinating about this school—and these students—is that they are using the study of classical music as a way to develop student voice and a sense of agency. I want to stress that engagement does not mean a singular focus on popular culture. For these students music—and classical music—which is an art form that is not necessarily part of their cultural heritage—has become a way of telling their stories—both the fun parts and the ways in which they are challenged. It is not common practice for an orchestra to collectively write their own music. Nor is it common practice for an orchestra to have discussions about creative decisions made in a piece they are currently rehearsing. These practices are virtually unheard of in the context of an elementary or middle school music classroom (Barrett, 2017).

Across town at Boston Arts Academy, Boston Arts Academy Director of Dance, William McLaughlin, describes an approach that he uses in teaching dance called “Embodied Research.” He describes it this way:

An inquiry-based process, involving the physical response to stimuli. Stimuli might be in the form of text, music, visuals or movement. Participants respond to the stimuli through gestures, which then become movement studies or phrases and finally a fully choreographed dance.  
(Coalition of Essential Schools, n.d.)

McLaughlin has worked with his dance students to develop a piece called “Speak.” This dance grew from an exploration of themes that cast members, mostly young men of color, faced growing up in urban America. The student dancers spent early rehearsals sharing stories and experiences about difficult or important moments in their lives such as: the death of a relative, being assaulted by a gang member, a tumultuous break-up of a relationship, or becoming homeless. As students recounted these stories, other dancers responded through gestures. These movement phrases became the basis of the longer piece. The production is set to excerpts from speeches by Martin Luther King Jr. and Robert F. Kennedy, as well as the music of Daniel Bernard Roumain. The instrumentation, which is both lyrical and haunting, is a counterpoint to the emotional speeches of the two famous leaders. The percussive action on stage is tense, wildly chaotic and then symmetrical. The dancers' athletic movements are often in sharp juxtaposition to the text of the speeches. The result is a riveting experience that is both familiar and current since the original stories are universal, yet the piece also carries historical memory and inquiry given the

biographies of the two authors. The audience is asked to hold dualities of present day and history, which creates a certain discomfort and level of inquiry: *has anything changed in our world?*

I recount the nature of the dance “Speak” not as a dance critic but to provide an example of the ways in which young people can work to tackle content knowledge through their passions and talents. In speaking with the young participants, they revealed how this way of training - as a dancer - had such meaning for them. A dancer must both own material and connect that material to self and others. The process prepared them for a life of work, creativity and problem solving. Furthermore, the training in this particular piece, and others like it, allows young people to comment on the realities of today’s world and, through movement, suggests how to make changes. The entire cast has committed to dance as a way to keep violence at bay and to bring beauty into the lives of their communities. As young people, they have developed assets that they know are appreciated by others. The experience gives them a special sense of confidence and agency in their worlds. They perform the piece often for others. The dancers speak about how learning skills such as dance have opened doors and opportunities for all of them, and has given them tools of resilience against despair. For these young people, dance is a way of both understanding the world and contributing to its improvement. Agency, as an education outcome, especially for these at-risk youths, is a significant and lasting achievement given the social and economic challenges they will face as young adults. (Nathan, 2017)

One of the student dancers reflected poignantly about his skills and disposition learned through dance at BAA:

I work as a driver for the elderly with the bus service. I know how to listen. I know how to be compassionate. Of course, that’s the kind of person I am, too. But it’s also what I learned as a dancer. You have to listen to others. You have to understand what the choreographer wants you to feel. It’s not just a movement. It’s also a feeling. I bring that to my work with the disabled and the elderly. I love what I do. And I’m good at it. Maybe you’d call it empathy. (Personal communication, 2016)

Another BAA dance student spoke about his ability to confront racism and violence, and how, as a dancer he can contribute to the long and ongoing struggle in America for racial justice:

As an African American male, every time I hear those words that [RFK] says about Martin Luther King being shot, I just freeze inside. This is today. That is why #blacklivesmatter is so important. We haven't come so far really. I'm at risk just being a black male.. I want people to understand that racism and violence will destroy us. We have to make changes. I can start. (Personal communication, 2016)

Another BAA graduate talks about how his education in the arts, prepared him for both college and for his current job as a civil engineer:

Being an artist means lots of practice and lots of risk-taking. It has never been easy. That's the same way I approached my [what I studied in college] and my job search. Civil engineering which is my job is all about sitting down and working out problems. I knew how to buckle down from being an artist. (Personal communication, 2016)

This student then goes on to explain his emerging theory of art and success, which clearly anticipates a future of work very different than the one most students are educated for:

Since art is constantly changing, it makes artists well-adaptable to different situations. As an artist, you never know what can be thrown at you...and in my field and in my job, it's the same thing. You have to believe you can keep learning and doing new things. And sometimes you have to go off the grid to discover what's new. (Personal communication, 2016)

In his own words, this graduate is essentially describing a “growth mindset,” which is a term many educators recognize today (Dweck, 2006).

McLaughlin, the BAA choreographer and teacher, explains how the development of an adaptive, growth mindset is inherent in dance and the embodied research he brings to his choreography:

So much of our daily lives just use one small part of our brain—usually that part that we call the rationale part—but in dance, as in most art, we are accessing something else. Of course, we have to have beautiful technique. But we are accessing emotion and finding ways to bring people—the audience—to inquire with us—and not just through thinking, but through emotion. The piece is

both deeply emotive and an intellectual journey. We have to do both together. (W. McLaughlin, personal communication, November 1, 2015)

I believe that connecting to others through emotion and allowing an audience to be swept off its feet holds promise for solving intractable problems - a position that admittedly challenges the priorities that have led educators for the last century. Rational thinking and thought are useful, but it is also important for teachers and students to harness and respect the power of movement, art and creativity to help us all better understand complex issues. Perhaps by going “off the grid,” as my student said, these young men will grapple with issues at a deeper level and have more creative and flexible solutions. That is the hope that art inspires. Art helps us solve problems both big and small, and in ways that other disciplines cannot. Art helps us look around corners or over obstacles and see what wasn’t there before. Art, too, gives these young men, who didn’t come from communities with abundant resources, opportunities to experience and influence the world in unique ways. I have witnessed how their artistic skills translate into a world where work and economic stability are inherently uncertain, especially for marginalized populations, and increasingly, for the rest of us. As another student said to me, “How do I use my art to educate society and to effect change in humanity?” or “How can I use my craft to eliminate issues such as ignorance, hunger, poverty?” (Personal communication, December, 2015). I realize that those are questions that can take an entire life to answer. Art is one of the most effective and humane weapons to fight injustice and corruption. Art is the true expression of the human being. Art is the key that unlocks the world of the artist, and the artist’s response unlocks a world that mirrors society.

## **Conclusion**

In the United States, we are still experiencing an unhealthy emphasis on high-stakes testing. As I discussed earlier in this talk, I believe this will only increase the kind of uninspired teaching we have seen for decades here and elsewhere. In an increasingly complex and uncertain world, we need to ensure that our young people graduate from high school having learned to walk, metaphorically speaking, in one another’s shoes. We must learn to embrace languages, cultures, and movements that are foreign to our own culture and perspective. We cannot afford to have differences become impediments to change. We must learn to express important life connections through drawing, painting and sculpting. As teachers it is our job to help young people critically perceive the way they exist in the world - and not the world as a static reality - but a reality in the process of transformation. To quote Freire again from his seminal book, Pedagogy of the Oppressed:

It is only when the oppressed find the oppressor out and become involved in the organized struggle for their liberation that they begin to believe in themselves. This discovery cannot be purely intellectual but must involve action; [and I would add creative action] nor can it be limited to mere activism, but must include serious reflection: only then will it be praxis. (Freire, 2017, p. 65)

Even in an era of Trump, I remain hopeful. In large part my hope is derived from the deep belief that when our schools and classrooms can be filled with art making and a true emphasis on innovation and creativity, our young people will learn to collaborate and communicate well, and often across differences of language, culture, social class, gender and race. An increasing number of jobs require social skills like patience, persistence, and the ability to practice and pay attention in a changing environment. In many urban communities, especially those ravaged by high unemployment and violence, students are missing positive examples of work and beauty. An education in the arts and creativity can provide profound examples of beauty and give students the opportunity to write a new script for their lives—literally and figuratively. An arts education offers a way to enter the world more energetically, flexibly, and confidently. As we think about a new path forward in education, may we invest more closely and carefully in the role that creativity and true innovation can and should play. I hope that my examples today have provided evidence of the power of arts in education to provide young people, and adults, with the opportunities to transform themselves, their communities and, if I can be so bold, even the world.

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