

**If the point of education is developing intelligence and the capacity for creative problem solving and communication, do the CCSS get us there?
By, Niel DePonte, President, DePonte Education and Entertainment LLC**

The Common Core State Standards document (CCSS) states:
[College and Career Ready] students are engaged and open-minded—but discerning—readers and listeners. They work diligently to understand precisely what an author or speaker is saying, but they also question an author’s or speaker’s assumptions and premises and assess the veracity of claims and the soundness of reasoning.

Being a discerning reader of the CCSS, I love the idea of being *career ready*, it sounds great. But I am left pondering the question, “To which careers are we referring?” I agree that the CCSS, if met, would actually allow for a graduating senior to be ready for virtually any field.

But there is a catch. In my opinion, there isn’t enough time from Kindergarten through 12th-grade for a student to develop mastery in any discipline, craft, artistic or athletic pursuit...with the obvious exceptions of language arts and math, the primary subjects of the standards themselves.

The focus on the use of language and numbers as important tools for expression within an educated society is understandable. But what of experiencing creative processes using other tools? What of practicing critical thinking with other tools? What about the sensory tools available to students?

For example, why not teach students to see deeply when looking at a piece of artwork? Yes, of course they would need language to discuss what they saw, but what if they chose to dance their reaction? Would this form of expression be any less valid than an essay? Not to me. It would not, however, give the student the appearance of being college and career ready according to the CCSS. What if that career choice was professional dancer?

Where is the one standard that matters in every grade: “The student will learn to enjoy school, get to choose areas of study aligned with their particular interests, have the opportunity to pursue those interests, (and I will add for the CCSS devotees in the audience), *and receive training in ELA and math that relate to that particular interest and via that particular field of study*”?

Significant dropout rates exist in every city across the country, yet the CCSS standards ultimately only apply to those who make it through all 13 years of school. Are we somehow endorsing potentially driving kids away from school by a continued hyper-focus on standardized testing to which the CCSS will likely lead, even though CCSS authors have yet to state their assessment model?

The result could very well be a two-class society, the educated and the substantially less educated, and potentially continue a growing class division between the rich and poor. Is this really what we want our public school system to be about? Is our ultimate national goal to catch Finland, Singapore and South Korea in our test scores?

I hope not. I hope we can offer greater choice and opportunity for students to learn language and math skills through other subjects that are far more inclusive than the ones the CCSS mentions, even having given a cursory nod to history, science, and social studies.

I hope we can someday make our national education goals more student-centric and more individualized, respecting the diversity of talents and intelligences, and the history of free and creative expression of the individual and their ideas, that has always been at the forefront of American creativity and productivity.

The CCSS train has left the station and we apparently have little choice but to get on board. But what are we going to do to maintain the rest of our curricular options for kids and respect the multiple intelligences that children bring to the classroom? That's a question artists and art teachers need to keep in the forefront of the CCSS discussion.

In my personal assessment of the Common Core State Standards document (CCSS) it occurs to me that, for all its merits, the CCSS presumes that somewhere along the way, creative processes and critical thinking skills will be learned as a result of following the CCSS. I'm not sure that is true, but I *am* sure that those skills are practiced and illuminated by thinking like an artist thinks when making art.

We are soon to leave the Knowledge Age and enter the Innovation Age, if we haven't already. In the 21st century creativity and innovation will be the skills most highly valued in students graduating from our colleges and universities. It is undeniable that there will be an increasing demand for skills in science, technology, engineering and math, the "STEM" skills. And, if you believe the CCSS, the English language arts (ELA) and mathematics skills it promotes at the K-12 level will be essential for college preparation and career readiness.

But I believe that students who excel in the skills of creativity and innovation, and evidence a talent for synthesizing disparate kinds of data and concepts into new and unique outcomes, will be the most prized workers of all, whether they enter the workforce after high school, college, or graduate school.

This is why we must integrate the arts into the current movement of promoting various alphabet-soup-titled approaches to education reform. Whether you believe that the CCSS is the way to create a better educated and "career ready" populace, or that a STEM based education should be our national mandate, I personally believe that changing STEM into STEAM by adding the A for ARTS is the best acronym of all.

Having said that, I also believe we must reframe arts education in a new and vital way. In the Innovation Age we must shift our arts education syllabus from one that is only *performance* focused to one that is also *creativity* focused. Students need to experience the *creation of new work* through the arts because the arts train the mind in sensory awareness and the ability to think flexibly and creatively, as both a problem finder and a problem solver.

The act of making art and thinking as an artist thinks in order to do so, is a comprehensive exercise in problem finding, problem solving, and ultimately in developing the necessary skills to realize the execution of a solution.

In their book, *Studio Thinking*, Ellen Winner and Lois Hetland discuss the “Habits of Mind” that are developed in an arts studio that are critical to innovation in all disciplines. These habits are to: Develop Craft, Engage and Persist, Envision, Express, Observe, Reflect, Stretch and Explore, and to Understand the World of the Discipline itself and its Communities.

It is highly conceivable that the critical thinking processes associated with these habits can be transferred for usage in non-arts disciplines for purposes of innovation.

Without the engagement-activity of making art while studying art, or the engagement of the learner in the “making” of *something* while studying a particular discipline, the relationship of data and concepts to which the student is exposed to real-world activities is lost.

Worse, the likelihood is that most data and concepts taught in a completely didactic mode will soon be lost to the learner while the opportunity for transfer of said data and concepts to a *new* experience is just about nil.

The beauty of changing STEM to STEAM is that while solving a purely STEM based problem generates an answer that obviously requires thinking, solving an arts-based design challenge makes thinking visible, and therefore trainable, as one observes the creative process at work through sketches, multiple drafts and studies, and, ultimately the finished work.

To train our students to think as an artist thinks when making work, to follow the creative triangle of *reflecting* on the challenge at hand, *acting* by taking the first steps toward a solution, and stepping back to truly *see* what you have done, and then repeating the process, is why STEAM is better than STEM as we look to create a 21st century educational paradigm that fosters creativity and teaches us to ask and to answer the best questions of the Innovation Age.

Isn't the ultimate goal of all education developing intelligence and the capacity for creative problem solving and communication, rather than the recitation of disconnected facts that so often passes as proof of an education, or worse yet, of intelligence?

Do we learn arithmetic for the sole purpose of being able to repeat certain algorithms on command? No. We learn it to be able to use it as a tool to serve some purpose. If we are to be an *intelligent* society then we must accept what educator Howard Gardner once said:

"Intelligence is the flexible use of knowledge for the purpose of creating an effective response to a problem or a challenge that will benefit society."

Therefore the question arises, should developing language and mathematical expertise be the primary focus of our public education system? And does the CCSS lead to the type of intelligence that Gardner alludes to in the quote above? Is it the only, or even the best way to get there?

I believe that the point of all education is to teach for the flexible and creative use of knowledge through real world inquiry and project based education. I believe wholeheartedly in the idea of *making new work*, i.e. creating a product in any discipline, to train the mind. Now in creative problem solving specifically, I support:

- using strategic, disciplined thinking to perceive and analyze the elements of the task at hand;
- exploring and forming connections between these elements;
- experimenting with potential solutions - skillfully using the tools of your profession to transform or vary the ideas of others (learned through collaboration) or to create something completely original; and ultimately
- composing an outcome through one's creative efforts that is viable, effective, useful and, hopefully, inspirational to the receiver of that outcome.

For when the outcome is inspirational, a creative response to that outcome may be fostered in the receiver, and a *cycle of creativity* perpetuated forever.

I am not saying that the CCSS does not allow for this type of creative problem solving. What I am saying is that it limits the disciplines through which creative problem solving can be taught and places an emphasis on the teaching of English language arts and mathematics that is out of proportion to the diverse interests of the student population and the overall career options of the society as a whole.

The advantage in transferring the type of creative and critical thinking that is found when making works of art to other disciplines goes well beyond striving for efficiencies in education or creating a superior workforce, assuming you teach for that transfer.

Its real value is found in creating a way of looking at the world: each opportunity; each problem; each encounter with another discipline or another human being in such a way that the promise of exciting revelations, deep learning, rich and textured interactions and opportunities for growth – along with the belief that one can generate creative responses to those opportunities – engenders both a love of knowledge and an unbridled enthusiasm for the thrill of discovery! This is how we keep kids in school.

Does the CCSS limit or promote developing a comprehensive intelligence suited to the challenges of the 21st century? By excluding the arts and marginalizing other disciplines, while overemphasizing language and mathematics, I find it wanting in many ways.

I would suggest evolving it, building upon the current CCSS to be more inclusive and allow for an appreciation of the other types of intelligences that students might bring to the classroom, while opening up possibilities for more creative thinking and a more expansive approach to developing intelligence in our students.