Teaching Beyond and In-between:

Reframing a Flourishing Future for Arts Learning in Schools through Isotonic Instruction

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What-if...

1) What if... the definition of K-12 arts education included the development of creative skills that express artistry in all subject areas, beyond, and as a support for, sequential instruction in arts media?

2) What if... the delivery of K-12 arts education were not limited to 42-minute blocks of time? How can we advance our mission to bring the arts deeply into the lives of all American children, without any additional minutes of official instruction time? This quest has fuelled the growth of arts-integrated curriculum, after-school and summer programming, and other ways to work around the suffocating scarcity of arts class time in U.S. schooling. How else might we teach “in-between?”

Many of us imagine such possibilities because the power of arts learning is so much greater than its current curriculum containers. I have seen many passionate and skillful arts educators bang their heads bloody against the wall of school scheduling, trying to bring the arts into kids’ school-day lives. I watch too many heroic K-12 arts instructors “do the best they can,” even though their mandate condemns them to minimal impact, teaching three hundred students a week for one semester a year. Similarly, I hear too many arts and arts learning organizations give
up in frustration on partnering with schools, because of the realities of school scheduling and the unanticipated shifts in longterm commitments. This discouraging status quo prompts our two what ifs...what if we 1) expanded the definition of arts learning beyond current norms, and 2) looked for ways to deliver it in-between the current (limited) blocks of class time? This essay shares some practical implications of both of those imagination trails. I will introduce a “habits of mind” model that reframes a way to think of artistic skills, and then I will describe a way of teaching these skills, called isotonic instruction, that does not require blocks of school schedule time to fulfill.

The last twenty of my thirty two years of work as a teaching artist, program designer, consultant, and professional developer have allowed me not only to imagine such “what-ifs,” but also to explore them in practice with many teachers. Our experimentation has expanded the definition of “arts education” beyond the development of skills in a particular artistic medium to include the development of fundamental skills of artistry that apply in any medium. This broader definition actually reflects a long human history of artistry. As John Dewey wrote, “Art is not the possession of the few who are recognized writers, painters, musicians; it is the authentic expression of any and all individuality.” (Dewey, 1994/1940, p. 226) Dewey also wrote, “The intelligent mechanic engaged in his job, interested in doing well and finding satisfaction in his handiwork, caring for his materials and tools with genuine affection, is artistically engaged. The difference between such a worker and the inept and careless bungler is as great in the shop as it is in the studio.” (Dewey, 1980/1934, p. 5).
For centuries, and even in my lifetime, people referred to the art of bricklaying, and to the medical arts—a universal cultural recognition that any endeavor raised to its highest level of expression becomes a work of art. We live this truth. Anytime we creatively engage in any medium, anytime we slip into the flow experience (Csikszentmihalyi, 1990) within a problem at work or a conversation with a friend, we engage in the work of art, we invest our artistry. The inclusive definition of artistry we are using applies to schooling, too. Anytime a student slips into the flow experience, making something she cares about in social studies or in rainforest studies, she invests herself as artists do.

Arts education has come to be defined by the four main artistic media: music, visual arts, drama and dance; these have been the primary media since day two in humankind’s history. These four ancient media beat the arrival of the wheel by thirty millennia, and still comprise our palette of primary colors, updated by the Johnny-come-latelies of writing and media arts. These disciplines still reward creative engagement and communicate with an eloquence no other media can, which is why those media deserve their preeminent place in arts education and arts industries. To the vast majority of Americans, “arts education” means sequential instruction that develops skills in those arts media.

However, the wider definition I propose is the one that matters in life and learning for the vast majority of our culture. Art is making stuff you care about (my casual definition), and you can slip into the work of art in any medium or subject.
Creative engagement is the inner condition in which this expanded definition of art unfolds. Few argue the learning benefits of the state of creative engagement. I have had debates with politicians and educators who think the arts are fluff, and deem it a poor use of precious school time, but they agree enthusiastically that students need to be creatively engaged in all their subjects. I find I have to remind educators, including arts educators, that a creatively engaged student is using the skills of artistry, the verbs of art, when she makes stuff she cares about in math or other non-arts media. What if, as proposed in this essay’s first what-if, at least for as long as you read this essay, “arts education” means developing the skills of art, the capacity to engage creatively, regardless of medium?

Following the inquiry trail of that what-if for many years, I became fascinated with the Habits of Mind work pioneered by Arthur Costa and Bena Kallich (2000). I found other habits of mind approaches, especially the Studio Habits of Ellen Winner and Lois Hetland (2007) at Harvard Project Zero, as well as the CPRESS (Central Park East Secondary School) Habits of Mind from Debbie Meier at the Coalition of Essential Schools (Suiter, D. & Meier, D. 2009). I read the book *Sparks of Genius: The Thirteen Thinking Tools of the World’s Most Creative People* by Michele and Robert Root-Bernstein (1999) as a habits-of-mind model for creative capacity. A question began to haunt my work: “What are people doing cognitively and emotionally, what verbs of art are they using, when they engage creatively in any subject matter?” I developed a repertoire of 20 basic capacities that humans use to creatively engage, to activate their artistry, across the school curriculum and throughout life.
The Habits of Mind of Creative Engagement

1. Generating multiple ideas and solutions.
2. Sustaining an inner atmosphere of exploration.
3. Using one's own voice.
4. Trusting one's own judgments.
5. Formulating good questions and problems.
6. Improvising.
7. Finding humor.
8. Crafting.
9. Making choices based on a variety of criteria.
10. Inquiring skillfully.
11. Persisting.
13. Reflecting metacognitively.
14. Thinking analogically.
15. Willingly suspending disbelief.
17. Going back and forth between parts and wholes.
18. Trying on multiple points of view.
19. Working with others.
20. Tapping and following intrinsic motivation.
How can educators develop these capacities in learners? Teachers I work with have found many ways; indeed, good teachers have been developing these skills since teaching began. I am quite sure young cave painters in training were guided to develop 8, 11, 12, 16, 17, and 19 at the very least. I can reflect on my own primary and secondary years and identify particular teachers who intensified the development of one or another of these skills in the way they taught—Mrs. Mazden made biology an adventure (#2) and thank heavens Ms. Lucas taught me to find humor in everything we learned, including Beowulf. Educators report back to me they like having this set of habits of mind handy to intensify their awareness of the importance of creative engagement, but that is not what sparks the habits into practical value for them. What makes a difference is our experimentation with a particular pedagogical approach—isotonic instruction—to develop these skills, which we apply in-between the chunks of dedicated time called classes.

**Isotonic instruction**

In physical fitness, isotonic exercises isolate a specific muscle or set of muscles to strengthen them through isolation, consistent engagement, and repetition, with increased resistance over time. The series of machines you see at the gym work isotonically, each strengthening a specific set of muscles, with the whole series building balanced overall fitness.

I lead workshops that directly take on our two “what if” challenges: What if arts education expanded beyond its current literal definition to include the
development of the skills of creative engagement, and what if all teachers, not just arts teachers, took on the challenge? What if arts learning were not only delivered in 42-minute blocks of time, but also in two to three minute blocks of time, twice a day, five days a week, all year long?

And what if those quick opportunities targeted specific habits of mind that are essential to creative engagement and artistic thinking? Imagine that we could work one “muscle” for a while, and then move on to the next; within a year we would have fostered holistic and creative fitness for engaged learning in all subject areas. And imagine if the educators who took on this challenge were not only certified arts instructors and teaching artists, but whole school faculties committed to developing the skills that enable students to engage creatively throughout the school day. Such an approach does not contribute to “coverage” of any subject matter, including the arts, but it does fulfill the mission of schools to prepare good learners, who will, we hope, grow into more creatively engaged careers and lives.

**Inside a professional development workshop**

In my workshops on isotonic instruction, we start off with reflection and practice. The reflective activities remind us how much each of us already knows about habits of mind and creative engagement in our learning history. Habits of mind are the toolkit of strategies we have ready to use to make sense when we encounter the new. (Note the idiom “make sense”—it is a creative act to connect to something new; we literally “make” a connection.) Creative engagement is that
familiar experience of “flow” we know as being fully invested in a task, when our skills are nicely matched with a relevant and interesting challenge (Csikszentmihalyi, 1990)—when we make stuff we care about. In researching a book I was writing, I asked some hundred people, in many walks of life, “What is the one thing that happens to you that can turn a day from a good day into a great day?” Almost every person gave me the same answer in different words—they had slipped into the flow experience at some point, and that made the day great. In a project at work, during a conversation with a friend, while playing handball, in making dinner—they had been creatively engaged; they had applied their artistry.

Readers may have noticed I use these terms interchangeably—flow, creative engagement, artistry. Some readers might prefer to parse the distinctions semantically; and there are interesting nuances of difference to point out. Such academic precision has value, but it can’t be allowed to crimp the expansive experimentation with broader understandings of these terms. Rigid adherence to definitions and silos of art forms and arts disciplines keep arts education on the periphery of schooling. So, for this purposes of this essay, and certainly within the experimentation it encourages, let’s set aside the semantic concerns; let’s accept that there is such a predominant overlap in the experiences the terms refer to that “arts education” comfortably includes creative engagement, flow, and artistry in its large and natural-to-experience basket.

Back to the workshop. Once we refresh our sense of the way habits of mind function in our lives (and how we might like to have a broader range of habits at the ready), and we recall some times we have been creatively engaged and how good
and productive that experience felt, we begin to think isotonically about developing one habit at a time. I might select #1 above, the skill of ideational fluency, also called brainstorming, which is the capacity to generate multiple solutions to an open ended challenge. (Some may be aware of the Torrance Test of Creative Thinking, which measures this capacity, and is the most widely used measuring instrument for creative capacity.)

My isotonic challenge might be: "In sixty seconds, write down all the ways in which a mouse (the animal, not the computer gizmo) and a refrigerator are the same." At the sixty-second point, I ask workshop participants to stop brainstorming and to write down all the things they can remember that they did in those sixty seconds of dealing with the challenge—how they instinctively tapped the inner workings of ideational fluency. We could easily spend an hour (and if time permits, we do) unpacking all the things that go into a sixty second brainstorming—the nanoseconds of orientation to the oddness of the question; the strategy first tried, such as comparing them visually, or considering their functioning (Why that strategy? Where did it come from?); the kinds of successes they had in pursuing their strategies; the decisions around when to try a new strategy and what new strategy to try; the resilience to keep trying for one more answer with just ten seconds left. If workshop time permits, we delve into the reasons they laughed during moments along the way; their other emotions, motivations, inner distractions, and discouragements; the reasons some people had 13 answers and others had two. We might begin to investigate issues of quality—why did over half have an answer about both being containers for cheese, and why do we all think
“both stink when they die” or “both get fur on their backs” are seen as more creative answers than “they both have tails”?

Workshop participants are consistently astonished to discover the learning world inside a single creatively engaged minute. I ask them to imagine the impact if students engaged in this kind of intentional play twice a day, every day, for two weeks. Many want to play out that experiment.

When they go back in their classrooms, teachers offer isotonic activities focusing on ideational fluency with their students. Classroom isotonic work doesn’t require the lengthy unpacking we do in the professional development workshop; it requires repetition and fun. So, once or preferably twice a day, during homeroom time or maybe at the start of a class, they lead a little brainstorming game like the mouse-fridge question. After a week or two of this daily play with students, teachers report back enthusiastically that students brainstorm more throughout their studies, come up with more creative answers in other subject areas, appreciate clever ideas from other students more, even try out unconventional ways to play games on the bus and devise fresh ideas on the soccer field. Experimentation in isotonic practices has unfolded across all grade levels and by teachers of many different subjects.

Workshop time often permits another isotonic example, perhaps for #14 above: analogical/metaphoric thinking. The challenge might be: scan this room to find something that you can use as the subject for a sermon you are expected to preach in five minutes, and which you never got around to writing; jot down the notes for your ten minute sermon. Again, after a two-minute activity, we unpack the
richness of the metaphor-making processes that arose during these brief minutes. Workshop participants then devise an analogical/metaphoric thinking activity on the spot and try it out with their workshop peers. They get feedback on the clarity of instructions, the inherent fun of the activity, how well targeted it was on the habit of mind, and so forth. They get the feel for crafting good activities. In their classroom isotonic experimentation, they get remarkable, some say astonishing, results with their students’ metaphoric capacity: within two weeks intentional metaphors begin to appear in students’ writing and on the playground. Some teachers have reported that in just a few days students catch the fun of the practice and start proposing the next isotonic activity the class might try.

**Experiments with benefits**

In my experience, I have found there to be two secret blessings of isotonic instruction. First, it doesn’t have to be assessed or tested. Two or three minutes of “fun” can be seen as an idiosyncratic way to get focus with students or provide a brain break during homeroom or class time—no need to announce to administrators that you are doing anything educationally serious. This autonomy comes as a relief to teachers and students, and partly accounts for the enthusiasm of all involved.

Second, given its brevity and inherent fun, isotonic instruction has a disproportionately large impact on morale and classroom atmosphere. Students appreciate the “serious play” of its intent, understanding experientially that the
work they are doing inside those fun challenges is worthwhile. Because it feels fresh and surprising and good, and because it applies the rules of play instead of binary correctness, it builds their intrinsic motivation to do more. They are: proud of some of the things they come up with, more accepting of mistakes and failed trials, likelier to attend to issues of quality, interested in getting feedback on what they come up with, hungry for assessment, instinctive with self-assessment, and curious about the processes and solutions of their peers. These are attributes of artists at work. These are attributes of great learning.

It is true that focusing on habits of mind and using isotonic instruction won't help students mix paint or improve their scales, but these minutes feel like a sunburst of true learning for everyone in the room, the kind we wish schooldays were filled with. Even if these blazes of human artistry can currently happen only in between the blocks of time dedicated to subject area coverage and other pedagogical requirements, they shed a lot of light across an entire school day and beyond. If...we can explore these what-if hypotheticals to provoke practical new ways of developing essential creative capacities, then artistry can become important enough to move from in-between to inside those blocks of school time to invigorate the schoolday for teachers and students.

References


http://www.essentialschools.org/resources/521
In the future, teaching and learning is going to be social, says Matt Britland. Schools of the future could have a traditional cohort of students, as well as online only students who live across the country or even the world. Things are already starting to move this way with the emergence of massive open online courses (MOOCs). For me the future of technology in education is the cloud. Technology can often be a barrier to teaching and learning. I think the cloud will go a long way to removing this barrier. Why? Rather than being ‘taught’ students can learn independently and in their own way. There is also a massive amount of resources online that students can find and use themselves, without the help of the teacher. This of course means the role of the teacher will change.