## **EDUCATION WEEK**

Published Online: February 1, 2011

Published in Print: February 2, 2011, as Not for Art's Sake Only

## The Skills Connection Between the Arts and 21st-Century Learning

## **Arts Education and 21st-Century Skills**

By Bruce D. Taylor

Few of us could disagree that today's students must be taught the necessary skills to function in an increasingly complex, conceptual, and globalized 21st-century society and economy. Students have to acquire so-called "habits of mind" that will enable them to develop the skills of creativity, critical thinking, and problem-solving. In addition, they must be able to communicate effectively, collaborate with people different from themselves, exercise initiative, and be self-directed.

That is a pretty tall order.

The primary purpose of education is to enable students to make a living as adults; without this capability, everything else falls away. Yet we still teach within a basic framework established in the 19th century. In today's education environment, we seem to be slipping back from the future into the 19th century's contextual emphasis on reading, writing, and math. The consequences could be dire, even propelling us back to a two-tiered education system: just reading, writing, and math for the disadvantaged in underresourced schools, alongside a richer 21st-century curriculum for the country's productive employees and future decisionmakers.

What can we do?

Consider the list of skills cited in the first paragraph. Aren't these 21st-century skills, in reality, arts skills? Now, stay with me here: First, we need to recognize that the very same valuable skills routinely employed by artists and arts educators can be integrated curriculum-wide in ways that are not arts-dependent. If this seems a revolutionary notion, it is because for more than 30 years, the well-meaning mandarins of arts education have promoted practitioner development above all else.









What happened over that same span of time? Not only were the arts severely

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diminished in public education, but the young people we supposedly reached 10, 15, even 20 years ago became parents of kids in schools where the arts were cut. Bear in mind that these cuts were not the work of educators, but of school boards ostensibly representing the parental community. The irony is rich, since the very skills their children will need to be capable adults can result from arts practice.

ourselves, are we preparing students to function as human beings, or just as flesh-andblood versions of a hard drive?

At this point, I believe that the prevailing public perception is that arts education is only for young people who want to be artists—"Glee" wannabes. If we applied

this mindset to science, we would teach science only to students who aspired to be chemists, biologists, or astronomers.

But the basis of this public perception is legitimate, rooted in the reality of arts education today. The fact is, we too often teach students to perform without their actually learning anything. Most of the time, students are simply remembering lines, notes, steps, terminology, and so on. To be fair, the cumulative amount of instructional time an elementary music teacher has in the school year is approximately 32 hours. This is less than the equivalent of a standard workweek to produce two concerts with 200 or more kids. Given this time constraint, perhaps all that can be accomplished is replication—not learning, much less understanding.

I believe that we can repair the damage done, and change public perception, by rethinking and reshaping our approach to arts education. I propose that the critical skills of creativity, critical thinking, and problem-solving can be developed by design—not acquired by accident or as a byproduct—using the arts as tools. For example, teaching artists, along with arts specialists in schools, can be rich resources for the integration of 21st-century teaching and learning into the 19th-century paradigm to which we seem to be wedded. After all, to be "creative" is to be, by definition, artistic.

Why am I convinced that this would work? Because the arts relate to the unique ways in which human beings think.

Marc Hauser at Harvard University postulates that there are four "key characteristics of the human mind" that are contained in the 1 percent of our DNA that distinguishes us from our nearest primate relative, the chimp.

- **Generative Computation** The ability to create a limitless variety of "expressions" from a generative catalyst of modest content. Think Beethoven's four-note theme, which he spun into the Fifth Symphony.
- **Promiscuous Combination of Ideas** Mingling of different domains of knowledge, thereby creating new products, relationships, techniques, and technologies. Think of a recipe that combines the chemistry of ingredients with knowledge of temperature and time, along with taste, feel, and smell.
- **Mental Symbols** Encoding sensory experiences, both real and imagined, into complex systems of communication. Think metaphor or analogy.
- **Abstract Thought** The ability to imagine what isn't yet.

To focus on these is to enhance the very qualities that make us ... us. In other words, to be artistic is to be human.

The arts are woven throughout the fabric of our lives and the tapestry of our society. We engage with the arts every day, all day. Artistic products envelop our daily lives, particularly those of children. They are what we listen to, watch and read, wear, put up on our walls—they are everywhere. Artists have employed for millennia the inherently human abilities that Hauser describes, transcending cultural and historical boundaries; now, these qualities have become crucial capabilities for success in the 21st century. So we must ask ourselves, are we preparing students to function as human beings, or just as flesh-and-blood versions of a hard drive?

The key connector of all these artistic artifacts in our lives is emotion—these things matter to us. They touch us, resonate with us. Now, what is the one adjective all dropouts use to describe school? Boring! To be bored is to be emotionally disengaged. Do our children go to school only to prep for tests that are limited in scope and focus to the three R's of retention, recall, and replication? Is there a difference between "to know" and "to think?"

Of course there is a difference, and surely the mission of education is to have students think as much as it is for them to "know." But how do you "test" thinking? And shouldn't teachers be asked, "What do you think?" The key disconnect with so-called teacher reform is that teachers are not urged—not permitted—to think. The demand is that teachers limit themselves to following prescriptions generated by people far removed from the classroom and the school, sometimes hundreds of miles away, both literally and figuratively.

We must allow and encourage teachers to be creative (i.e., artistic) in devising ways to reach children in a variety of circumstances, cultural frameworks, and emotional conditions, to have the flexibility to shift gears, to create (there's that word again) alternative methods, and to inspire in their students an emotional commitment to attaining mastery.

All of these are hallmarks of the artistic process, and they can—and should—be employed in nonartistic contexts as well.

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Vol. 30, Issue 19, Pages 22,26

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