

Creativity for Teachers

Warm-up

How many rectangles do you see below?

What is your initial response? If you said sixteen or seventeen, sorry! You are not even close! The real number is more than 50! (See the exact answer at the end of the article.)

Refresh/Review

In education, as everywhere else, “talk is cheap!” According to Robina Shaheen in his article “Creativity and Education” (*Creative Education*, Vol. 1, No. 3, 2010), interest in creativity historically goes back to Plato’s age and is found in the Greek, Judaic, Christian, and Muslim traditions. A sudden “frenzied” emphasis for the renewal of inventiveness and creativeness in schools (especially in the sciences) came about with the launch of “Sputnik 1” satellite by the Soviet Union in 1957. The supposed failure of engineers from Europe, USA, and other Western countries was attributed to their lack of creativity, which led to the adoption of the National Defense Education Act to accept the concept as important for “prosperity...survival of society.” Since then, there have been several additional “waves of creativity” in education. From numerous educational visionaries, we have more recently heard the essential need for 21st Century learning skills, including creativity, critical thinking, collaboration, and communications, and yet our political focus continues to be on high-stakes standardized testing and the ‘common core’ (and very limiting) subjects.

However, as music educators, we have two relevant National Standards, important tools to teach creativity:

3. *Improvising melodies, variations, and accompaniments.*

4. *Composing and arranging music within specified guidelines.*

In Part I “Creativity for Teachers,” (*PMEA News* Spring 2014), we began our exploration of these target questions:

- What is creativity?
- How creative are you?
- Why is teaching creativity important?
- How do we teach creativity?
- How can we teach more creatively?

Definitions of Creativity

- Creativity is defined as the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others. From *Human Motivation*, 3rd ed., by Robert E. Franken
- Creative refers to novel products of value, as in "The airplane was a creative invention." Creative also refers to the person who produces the work, as in, "Picasso was creative." Creativity, then, refers both to the capacity to produce such works, as in "How can we foster our employees' creativity?" and to the activity of generating such products, as in "Creativity requires hard work." From *Creativity - Beyond the Myth of Genius* by Robert W. Weisberg.
- Creativity is generating new ideas and concepts, or making connections between ideas where none previously existed. From *SmartStorming* by Mitchell Rigie and Keith Harmeyer.
- Creativity is the ability to find new solutions to a problem or new modes of expression; thus it brings into existence something new to the individual and to the culture. From *Drawing on the Right Side of the Brain* by Dr. Betty Edwards



Creativity for Teachers

Creativity According to Sir Ken

“Creativity is the process of having original ideas that have value.”

“Think of creativity as *applied imagination*.”

The above quotes are from Sir Ken Robinson, internationally recognized leader in the development of education and creativity, famous for his 2006 and 2010 talks at the prestigious TED Conference, estimated to have been seen by more than 200 million people.

Sir Ken Robinson champions a radical rethink of our school systems, to cultivate creativity, and acknowledge multiple types of intelligence. He has been known to say, “We are educating people out of their creativity,” and “Creativity is now as important in education as literacy, and we should teach it with the same status.”

Sir Ken embraces the written works of Howard Gardner (Multiple Intelligences), Robert Steinberg’s three intelligences (analytical, creative, and practical), and Robert Cooper’s “heart brain” and “gut brain.” His own “three features of intelligence” are that they are “diverse, dynamic, and distinctive.”

Through his numerous lectures and online videos, Sir Ken has tried to dispel a few myths on creativity:

1. *Only a few people are really creative.* “Everybody has tremendous creative capacities.”
2. *Creativity is for the arts only.* “Creativity is a function of everything we do. Education for creativity is about the whole curriculum, not just part of it.”
3. *Creativity is just about letting yourself go.* “No, creativity is a disciplined process that requires skill, knowledge, and control, as well as imagination and inspiration.”

In his most recent TEDTALKS video on YouTube, he defines three principles crucial for the human mind to flourish, but seem to be currently contradicted by the culture of education:

- **Diversity** vs. conformity
- **Curiosity** vs. compliance
- **Creativity** vs. standardization

Go to http://www.ted.com/talks/ken_robinson_how_to_escape_education_s_death_valley.html to see his latest lecture. If you like his presentations, you will love Sir Ken’s two books: *Out of Our Mind – Learning to Be Creative*, and *The Element – How Finding Your Passion Changes Everything*.

Eric Booth’s Creative Habits of Mind

Eric Booth, a teacher at the Kennedy Center, Stanford University, New York University and the Lincoln Center Institute, and founding editor of the *Teaching Artist Journal*, maintains that the arts are more than subject matter and disciplines. They serve as modes of cognition that are necessary for every content area and for success in life.

He offers his perspective:

I think the single most potent school reform goal would be to place the highest priority on individual creative engagement, and to shape schooling to develop the habits of mind that constitute creative engagement.



Creativity for Teachers

Part II: Definitions and Rationale for Teaching Creativity

by Paul K. Fox printed in *PMEA News* Page 3 of 4

Centering on the essential skills of brainstorming, divergent thinking, metaphoric thinking, flexible thinking, multisensory engagement, and empathy, the following “habits of mind” according to Eric Booth, are key processes, actions, and attitudes activated when we invest ourselves in the flow of creating:

1. Generating multiple ideas/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
12. Self-assessing
13. Reflecting metacognitively
14. Thinking analogically
15. Willingly suspending disbelief
16. Observing intentionally
17. Going back and forth between parts & wholes
18. Trying on multiple points of view
19. Working with others
20. Tapping & following intrinsic motivation

He concludes with advocating for the arts and more inquiry-based learning in the schools:

The “artistic process” encompasses:

- *Asking great questions and identifying good problems*
- *Experimenting, while carefully attending to results*
- *Cultivating a productive relationship with failure*
- *Anticipating challenges and generating imaginative solutions*
- *Tolerating uncertainty (even taking pleasure in ambiguity)*
- *Engaging in appropriate risk-taking*
- *Being resilient*
- *Focusing on quality and excellence*
- *Self-assessing eagerly & naturally*
- *Infusing ongoing reflection into the work at hand*
- *Enjoying the process and getting personal satisfaction out of it*
- *Connecting to others through an expression of who you really are*

Pink’s Points

To round out this provocative philosophy of teaching creativity and creative processes for their own sake, we have the highly entertaining Daniel Pink, author of three best-sellers: *A Whole New Mind: Why Right-Brainers Will Rule the Future*, *Drive: The Surprising Truth About What Motivates Us*, and *To Sell Is Human: the Surprising Truth About Moving Others*

Daniel Pink talks about his first book on YouTube: <http://www.youtube.com/watch?v=WhKLSTBSgwI>

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Pink's core argument in *A Whole New Mind...* is that "the era of 'left brain' dominance, and the Information Age that it engendered, are giving way to a new world in which 'right brain' qualities – inventiveness, empathy, meaning – predominate."

Tagged as "Pink's six senses," he proposes the following new "aptitudes" or abilities that individuals and organizations must master in an outsourced, automated age – and should become fundamental to updating our curriculum, enduring understandings ("big ideas"), essential questions, unit planning, and lesson learning targets:

- Design
- Story
- Symphony
- Empathy
- Play
- Meaning

Laura Tirello in *YoungMoney* ("A Whole New Mind: Learning to Excel in the Modern Workplace" at <http://www.divinecaroline.com>), provides an insightful book summary:

*Pink asserts that we are entering the "the conceptual age" – an age whose main characters are the creator and empathizer – attributes of right brain functioning. He characterizes this age with the notion of "high concept, high touch..." meaning the "ability to create artistic or emotional beauty, detect patterns, craft narratives, and combine unrelated ideas into novel inventions." High touch involves the ability to "empathize, understand subtleties of human interaction, and pursue purpose and meaning." So the question becomes: **How do I tap into that creative right side of my brain?***

I will leave you with a very appropriate example of defining creative thinking as "changing contexts" talked about by Roger von Oech in his book *Whack on the Side of the Head: How You Can Be More Creative*:

In 1792, the musicians of Franz Joseph Haydn's orchestra were mad because the Duke had promised them a vacation, but continually had postponed it. They asked Haydn to talk to the Duke about getting some time off. Haydn thought about it, decided to let the music do the talking, and wrote the "Farewell Symphony." The performance began with a full orchestra, but as the piece goes along, it is scored to need fewer instruments. As each musician finished his part, he blew out his candle, and left the stage. They did this, one by one, until the stage was empty. The Duke got the message and gave them a vacation.

Von Oech concludes with stating that this example illustrates "the creative mind power to transform one thing into another. By changing perspective and playing with our knowledge, we can make the ordinary extraordinary."

Part III will explore ways to "teach for creativity" and teaching more creatively.

[Answer to the 4 by 4 rectangles' puzzle. Remember, a rectangle can be two columns by one row or three rows by one column, etc. The total number is 100!]

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