Science, Sound and Sustainability
A Personal Look at Education and the Arts

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Goals of the Workshop
- Learn about different models of arts engagement
- Explore the Arts Integration model
- Discover connections to the Core Curriculum and Core Arts Standards
- Consider where to find your personal comfort level with the arts and education

The Arts and Education
Song: Gray Poodle Blues
- Is this arts education?
- Why not?
- [turn to your neighbor, introduce yourself in one sentence, then discuss if this song is arts education]

What kind of arts engagement does a student receive?
- Non-educational performance or event
- Educational performance or event
- Arts classes (music, art, dance, theater)
- General-ed teachers or non-arts specialists who use arts in their class
- Teaching Artist residencies
- Afterschool

Types of arts engagement in schools
- Arts as Entertainment
- Arts as Curriculum
- Arts-enhanced Curriculum
- Arts-integrated Curriculum

Arts as Entertainment
- Programs, performances, films, artist visits, etc.
- Education value intrinsic in the event, but not pointed out
- *The clown juggles but doesn’t explain the math behind it.*
Arts as Curriculum

• Sequential study led by school employees over a period of years, with curriculum and assessments based on federal, state and/or local standards.
• You go to music class… or visual arts… unfortunately almost never to theater or dance class…

Arts-enhanced curriculum

• Arts are used to illustrate, enhance, reinforce another subject.
• You teach your students the Declaration of Independence by setting the words to a popular song

Arts-integrated curriculum

• Two-way transition – students learn about another subject through the arts, and about the arts through that other subject.
• You learn to juggle, and explore the math, and because of your math study you are able to juggle better [Richard Feynman]

Teaching for transfer

• When you take knowledge that you have gained in one subject and apply it to another subject
• Big important concept in 21st Century education
• Mentioned prominently in Core Curriculum and Core Arts Standards

Arts Integration

• Since the connections go both ways, transfer is richer and more nuanced in arts integration, and forces you to think more flexibly and creatively
• While certainly not the only approach, arts integration is the most naturally rewarding, and therefore naturally the most difficult.

For example, you are performing a jazz song, and you learn some of the history connected to jazz and the civil rights movement. The depth of your research leads you to understand better about the song and its background, and helps you to prepare a deeper and more expressive performance.
You are studying a culture on a different continent. You begin listening to the music and looking at pictures of the instruments and think about how they were built, which leads you to consider about resources, and how different cultures use their resources. You build your own version of an instrument using your own local and cultural resources, which leads to deeper understanding of the differences and similarities between your cultures.

Kennedy Center’s definition of Arts Integration

Arts Integration is an approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative process that connects an art form and another subject and meets evolving objectives in both.

What is Bash the Trash?

- Arts education and performance group
- 25 years of science, sound and sustainability
- Focus on building instruments from trash, making connections to other subjects, and then applying those connections back to our instruments and music

- As a teaching artist, worked for Learning to Read through the Arts – so made musical stories with instruments
- Worked almost exclusively in gen-ed classroom, so had to make connections to science, social and cultural studies and math
- Making instruments from trash is not a particularly mainstream educational field, so I had to get creative

Connecting to the Core Curriculum

- As a result of Race to the Top, the idea of a national set of standards was accepted by 45 states (not VA, KS, TX, AK and MN (1/2)
- Right now the only standards in place are English Language Arts and Math

- Acceptance of studies that come from non-traditional points-of-view, including the arts
- Specific examples of where the arts could illustrate concepts and ideas
- Less stratification of subject matter in strict avenues
- Emphasize complexity of modern life and underscore the importance of preparation for that complexity

Pluses of Common Core
Controversy on Common Core

- Some parents are outraged because it raises standards
- Some teachers in some states are outraged because of awkward or badly planned implementation and assessments

My take, for what it’s worth…

- No problem with raising standards
- I’ve been a standard writer, and the work is usually good and deep
- Internationally, American education is underperforming – we need to raise the bar – but creatively
- Massachusetts leads the way

- Implementation issue needs to be worked out
- Strong resistance to new curriculum where teachers jobs are tied to student performance
- Solutions include long-term in-depth professional development

Core Arts Standards

- Also being rolled out
- Different committees, different process
- May run into same issues of underfunded implementation and professional development

Where BTT connects to Common Core

A typical BTT residency includes:
- Build a few simple instruments (pre-instruction)
- Discover the science behind sound
- Explore the concepts of sustainability and reusing
- Rebuild instruments with the benefit of the science
- Create new instruments that build on their new knowledge
- Explore the creation of musical stories
- Perform those stories

Specific areas of connection

- Sound effects story – Writing Standard #3 for K-12 asks students to “write narratives of increasing complexity”
- Math – within the composition process as students work with rhythms, subdivision, repeating patterns, time signatures and fractions, etc.
Other benefits

• Addresses Multiple Intelligences
• Helps differentiated learners
• Draws on and reinforces many Habits of Mind
• Has connections to 21st Century Skills

So, where is your comfort zone?

• How comfortable are you with the arts?
• How open are you to stretching your abilities to make connections?
• Do you have leeway to play and experiment with your curriculum?
• How willing are you to let your students see that you are anything less than all-knowing and godlike?
• Discuss in small groups/large group

For more information

• Follow links on study package
• Access study package from research guide for easy clicking, available at http://libguides.lehman.edu/exploration
• Lots of other resources at that site as well

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