Project-Based Learning and Development for Deep Musical Understanding

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## Key Principles and Aspects of Teaching for Deep Musical Understanding:

- Have a "big idea" to provide an overarching context for students' musical engagement
- Have "driving" or "essential questions" to spark inquiry throughout the entire project
- Provide students opportunities to pose their own questions for ongoing inquiry and engagement
- Keep the big picture in mind
- Musical concepts and other knowledge should be situated in a larger musical context
- Developing skills is a means toward an end rather than a discrete focus in and of itself
- Students construct their own understanding through their engagement and reflection
- Knowledge is not something that can be delivered to students

> Project-based learning (PBL) involves completing complex tasks that typically result in a realistic product, event, or presentation to an audience. Thomas (2000) defines productive project-based learning as (1) central to the curriculum; (2) organized around driving questions that lead students to encounter central concepts or principles of a discipline; (3) focused on a constructive investigation that involves inquiry and knowledge building; (4) student-driven, in that students are responsible for making choices and for designing and managing their work; and (5) authentic, by posing problems that occur in the real world and that people care about.
> (Barron & Darling-Hammond, 2008, p. 35)

## Problem solving objectives:

"In a problem-solving objective, the students formulate or are given a problem to solve" (Eisner, 2002, p. 101).

## Musical problems have many possible solutions.

"One very important difference between the problem-solving objective and the behavioral objective is that the solution to the problem in problem-solving objectives is not definite. The problem is, in a significant sense. a genuine one" (Eisner, 2002, p. 103)

When teaching for deep understanding, music educators AND students generate rich "problems" to solve. Think of these problems as challenges for musical engagement rather than things that need to be fixed.

| A musical problem | Not a musical problem |
| --- | --- |
| Create music that reflects or can affect a sense of place. | Perform this set of rhythm patterns correctly. |
| Develop or identify music that makes people want to move. | Move to the steady pulse of this music. |
| Develop a system for recording/visualizing music so that others can perform it. | Identify the names of these notes on a staff. |

**To foster such engagement, ask excellent questions to foster inquiry:**

Ask questions that "pose dilemmas, subvert obvious or canonical 'truths' or force incongruities upon our attention" (Bruner, 1996, p. 127)

| A musical problem | Questions for musical inquiry |
| --- | --- |
| Create music that reflects or can affect a sense of place. | How might music reflect or affect a sense of place? |
| Develop or identify music that makes people want to move. | What makes people move to music? What relationships exist between music and movement? |
| Develop a system for recording music so that others can perform it. | What information do people need to perform music as it was intended to be performed? How have people recorded musical ideas throughout history? |

**Essential questions:**
• Cause genuine and relevant inquiry into the big ideas and core content
• Provide deep thought, lively discussion, sustained inquiry, and new understanding as well as more questions
• Require students to consider alternatives, weigh evidence, support their ideas, and justify their answers
• Stimulate vital, ongoing rethinking of big ideas, assumptions and personal experiences
• Naturally recur, creating opportunities for transfer to other situations and subjects
(Wiggins & McTighe, 2005, p 110)

**Essential questions:**
- Are meant to be explored, argued, and continually revisited (and reflected upon).
- Have various plausible answers. Often the answers to these questions raise new questions.
- Should spark or provoke thought and stimulate students to engage in sustained inquiry and extended thinking.
- Reflect genuine questions that real people seriously ask, either in their work or in their lives —not a "teacherly" question asked only in schools (Wiggins & McTighe, 2011, p. 77)

| Essential Questions | Not Essential Questions |
|---|---|
| What types of patterns exist in music and what role do they play? | How do we perform this rhythm? |
| How can we express ourselves through music? | What does mezzo forte mean? |
| How does music affect the ways we experience time? | What is the tempo of this music? |
| What types of relationships exist between music and media? | What is the key signature of this music? |
| What is music? | What is Rondo form? |

Essential questions provide starting points for inquiry and musical engagement.

## What takes place in the classroom or ensemble to support deep learning?

| Students | Music Educators |
|---|---|
| Engaging in projects | Designing and facilitating projects |
| Asking and answering questions and solving musical problems | Asking and answering questions and posing musical problems |
| Identifying challenges in moving forward | Scaffolding by asking questions, demonstrating, or providing information when needed |
| Helping one another | Observing students' engagement and identifying who might need assistance |
| Engaging in multiple musical roles (creator, performer, arranger, critic, listener, theorist, etc) | Fostering an environment that supports students' diverse musical engagement |
| Constructing knowledge, developing understanding, making meaning | Scaffolding for learning, providing feedback, making connections to the curriculum |
| Reflecting on one's own learning and demonstrating understanding | Asking questions and observing to check for understanding while promoting further inquiry and learning |
| Making connections to one's own learning and musical life outside of school | Facilitating students' connections beyond the task at hand |

**Websites:**
- CDPPCME Project Planning Resources: http://cdppcme.asu.edu/resources/unit-project-designplanning
- The Project Approach: http://www.projectapproach.org/
- Phil Greco's Project Design: http://lcdartstudio.com/portraits/project-design.html
- Edutopia Project Based Learning: http://www.edutopia.org/project-based-learning
- Buck Institute of Ed. Project Based Learning:  http://www.bie.org/
- Understandings & Misunderstandings of Essential Questions: http://www.huffenglish.com/?p=363
- Facets Model for Interdisciplinary Planning: http://composersforum.org/program/bandquest
- Jay McTighe: UBD Resources: http://jaymctighe.com/resources/

**Articles/Chapters:**

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**Books:**

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Bruner, J. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.

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Helm, J. H., & Katz, L. G. (2011). *Young investigators: The project approach in the early years*. New York: Teachers College Press.

Katz, L. G., & Chard, S. C. (2000). *Engaging Children's Minds: The Project Approach* (2nd ed.). Stamford, CT: Ablex.

Wiggins, G. P., & McTighe, J. (2011). *The understanding by design guide to creating high-quality units*. Alexandria, Va.: ASCD.

Wiggins, G. P., & McTighe, J. (2005). *Understanding by design* (2nd ed.).  Alexandria, Va.: Association for Supervision and Curriculum Development.

Wiggins, J. (2009). *Teaching for musical understanding* (2nd ed.). Rochester, Michigan: