EDTE 226 Agenda
Friday (6/26) AM Session: 9 to 12:30

1. Q & A regarding unit & other course details, incl preview of prof dev plan
2. Review of context/learning profiles
3. Big Ideas
4. Team work
What makes a Big Idea a Big Idea?
A big idea…
(From Grant Wiggins, *Understanding by Design*)

- *Is a focusing lens*
- *Provides great breadth, connections*
- *Lies at the heart of expert understanding of the subject*
- *Requires uncoverage because its meaning/value – not obvious, is counter-intuitive, prone to misunderstanding*
Stage 2: Establishing Priorities around “Big Ideas”

- “big ideas” worth exploring and understanding in depth
- foundational knowledge & skill
- “nice to know”
- worth being familiar with
- important to know & do
- Big ideas

Graphic from Understanding by Design, Wiggins & McTighe
A Structure of Knowledge

Big Ideas

- overarching principles and generalizations
- key concepts and core processes
- discrete facts and skills

Graphic from Understanding by Design, Wiggins & McTighe
Big Ideas Typically appear as:
(From Grant Wiggins, Understanding by Design)

• Concept (migration, function, quantum)
• Theme (“Coming of Age,” “Go West...”)
• Debate (“nature vs. nurture”)
• Point of view (deconstruction, vegetarianism)
• Paradox (Freedom must have limits, imaginary numbers)
• Theory (evolution, Manifest Destiny)
• Principle (“All men are created equal”)
• Underlying assumption (fair play, texts have meaning)
From Big Ideas to Understandings about them

An understanding is a “moral of the story” about the big ideas

- State understandings as full-sentence generalizations about the Big Idea
Some examples from Grant Wiggins . . .

- Great artists often break with conventions to better express what they see and feel.
- Friendships can be deepened or undone by hard times
- History is the story told by the “winners”
- Might does not make right
- The storyteller rarely tells the meaning of the story
Sample Big Ideas

From National Board Teacher Units
Our Local Native People

**Big Ideas:**

- People will adapt to their environment in order to survive.
- People have historically formulated myths and legends to explain occurrences in their environments.
- Communities create ceremonies to solidify the major events of their culture.
Master Artist Tribute Series

☞ Art is a reflection of the culture and time it was made in.

☞ A Master Artist is one whose creative ideas, discoveries and techniques influenced the historical course of art styles and movements.
Human Systems
(Digestive, Respiratory, Circulatory, & Excretory)

- The human body needs systems in order to function
- Without one of these systems the human body would not function on its own
The Solar System

• Systems operate and move in an orderly pattern.
• Gravity influences the paths, orbits and processes of celestial bodies.
• The Sun directly affects the possibility of life and/or weather patterns on the planets.
Fiction

Authors often provide insights about human experiences through fiction.

Everybody is entitled to an opinion about what text means, but the text supports some interpretations more than others.
QUADRATIC FUNCTIONS

\[ f(x) = ax^2 + bx + c \]

**BIG IDEAS**

**Content:** Any quadratic equation can be solved using the quadratic formula

**Inquiry:** Projectile motion can be modeled with a quadratic equation

**Nature of Math:** The Fundamental Theorem of Algebra determines the possible number of solutions to an equation
History Big Ideas

- Political conflict can lead to revolution
- Historical interpretation is influenced by one’s perspective
- Compromise is an essential element in the creation of historical documents and the shaping of new governments
Narrative Writing

Writing is a persuasive, political and powerful act

Authors use rhetorical strategies to create characters, plot, and setting in order to get ideas across.

Writers write from and are impacted by what they know or what has happened in their life.
As you generate Big Ideas

Avoid truisms, definitions, and vague generalizations:

- what genuine, unobvious, and important insights do you want students to leave with about the subject?
Misconception Alert

An understanding is a non-obvious generalization about a big idea

- it cannot be adequately understood by being stated! “Coverage” and mentioning will not yield insight into the un-obvious or abstract.
- An understanding is an inference that requires inquiry and student “construction” (or confirmation) if it is to be understood.
“Uncoverage” of big ideas needed for Misunderstanding

We must anticipate likely student misunderstandings - by design and through research.

- ‘Big Ideas’ are often counter-intuitive
- What is now “obvious” to you isn’t obvious to them
- Designs must reflect likelihood of misunderstanding
Indicators of Understanding

i.e. You really understand when you can:

- explain, connect, systematize, predict it
- show its meaning, importance
- apply or adapt it to novel situations
- see it as a plausible perspective, question its assumptions
- avoid and point out common misconceptions, biases, or simplistic views
With your team. . .

- What are some big ideas that emerge from the resources related to your Unit topic?
  - Standards, student resource materials, internet, textbooks, conversations with your colleagues, etc.
- Narrow in on the big ideas that you feel most aptly characterize the nature of your unit.
- Write these as succinct but meaty statements – one liners that convey the essence of your topic.
Define 3 Kinds of Big Ideas

- Content
- Nature Of The Field
- Inquiry
As you work on your Big Ideas, keep the “peeling away” process in mind ...

- Since a big idea has many layers and nuances, how can you peel your way through the layers of misunderstandings, disagreements, and/or confusion?

- You may not necessarily know what the “big” idea is yet, but how can you keep probing to break through the surface, to peel away through the layers of inconsistency until patterns and answers begin to emerge?
Put your “big ideas” to the test …
(Based on Grant Wiggins, *Understanding by Design*)

1. Does it have many layers and nuances, not obvious to the naïve or inexperienced person?
2. Do you have to dig deep to really understand its meanings and implications – beyond a surface grasp?
3. Is it prone to misunderstanding and/or disagreement?
4. Are you likely to change your mind about its meaning and importance over a lifetime?
5. Does it yield optimal depth and breadth of insight into the subject?
6. Does it reflect the core ideas as judged by experts?