EDTE 226
Agenda for June 18, 2009

*Inquiry-based teaching*

1. The “discrepant event”
2. Inquiry – Theoretical support
3. Inquiry Model: 5 Es
4. *Teamwork on discrepant event and incorporating inquiry into the instructional blueprint*
5. Next week
Discrepant Event:  

*Egg In A Bottle*

**Materials Needed:**
- An apple juice bottle or cider bottle
- Newspaper
- Matches
- A hard boiled egg
- Sauce Pot

**Instructions:**
- Wash and dry the juice bottle. Peel the egg.
- Cut or tear the newspaper into strips.
- Place the strips into the juice bottle.
- Light the strips on fire.
- When the paper starts to burn, place the egg over the opening of the bottle.
- Wait.....keep waiting....
- Observe what happens
What do these guys have to do with the discrepant event?

- Piaget
- Bruner
- Vygotsky
Piaget’s Concept of Equilibration

- Children are active and motivated learners.

- When equilibrium is disrupted (i.e., a discrepancy because what we expected to happen does not happen) we seek out the means to reestablish that equilibrium (Equilibration).

- Equilibration leads to knowledge construction leads to learning.
Bruner & the Spiral Curriculum
Vygotsky's Zone of Proximal Development

- Teacher or parent
- Child's inner voice
- Learned tasks
- Tasks not yet in the learner's repertoire of abilities
- Tasks at the limit of the learner's abilities
Scaffolding
Engage

- How could you *pique* your students’ curiosity?
- How could you *hook* them?
- How can you *focus* their attention on the topic?
What activities will allow students to handle and manipulate materials?

How could you help students make discoveries?

How can you get students to talk about their discoveries?
How could you help students make sense of their observations and questions?
How could you help students describe what they see?
How can you help students with explanations for why things happened certain ways?
Extend

- How will students *apply* newly learned concepts and skills to *new situations*?
- How could you help them to *present and defend* their understandings and explanations?
- What are possible student *misconceptions* and how would help students work through them?
What kinds of evidence will reveal what students understand and grasp about the big ideas?

What are some different ways you could monitor progress?

How can you help students self-assess their own learning?
In your teams . . .

- Devise a *discrepant event* to introduce your unit.
- Using the *prompts for the 5 Es*, outline an *inquiry process* that emerges from the discrepant event and incorporates all of the 5 Es.
- Be ready to briefly tell us what your unit is about, your discrepant event, and how some aspect of inquiry (just one of the 5Es is fine) will build on this discrepant event.
As you flesh out your instructional blueprint . . .

- Look for opportunities to incorporate **scaffolding** (Ch 3. pages 10-12)
- Decide on types of **questions** to use (pages 17-21)
- Anticipate **misunderstandings** and strategies to promote **conceptual change** (pages 23-27)
Next week . . .

☐ Submit Stage 3 Assessment Plan by Sunday night, June 21\(^{st}\)

☐ Models of Instruction on Tuesday

☐ PowerPoint Presentations on Wednesday

☐ Full Unit Plan and individual reflections submitted by Sunday night, June 28\(^{th}\)