

## Day 2: Notes

5-13-16

- Assessing student learning
  - what purpose does assessment serve in the classroom?
  - what makes an assessment effective?
  - assessment: a mechanism for providing instructors data for improving their teaching methods and guiding and motivating students to be actively involved in their own learning
  - how can assessment improve teaching?
    - Backwards Design
      - Start with your goals/outcome (1)
      - Assessment (2)
      - Design the instruction (3)
- \* the best way to do science is to DO science
- \* check your alignment
  - what are some priorities for learning in your system?
    - application
    - problem-solving
    - systems-thinking
    - programming, statistical programs
- \* MAD Biology (Modeling, Argumentation, Data Analysis)
  - modeling is hard, and students need help with modeling practice
  - Jim Pellegrino, U. Illinois (use formative/summative assessments to obtain/utilize good data)
  - communicate priorities to students
  - assessments (usually tied to grades and points) can also be motivating and guiding
    - can be used to create cognitive dissonance;
    - to create moments where students are highly

share with students your expectations  
and rubric (not just for grading, also planning)  
perceptible to student-learning

- can be used to provide feedback about progress and opportunities to practice skills and thinking
- rubrics provide feedback (you can also use student feedback to construct rubrics)
- help your students succeed (create an environment in which your students CAN learn)
- think about the goals of the class, and plan techniques and strategies from there (e.g., taxonomy class will require some memorization techniques)
- \* course-based undergraduate research experiences (CBURE)
- be realistic, consider your time and resource constraints

• Breakout Group C (#2)

- disciplinary research
- mentored teaching projects
  - measurable teaching objectives

• Lunch