## BARDSTOWN PEP June 7, 2010

- 1. Example lesson
  - a. Establishing the environment
    - Environment handout
  - b. Analyzing games
    - Games handout
    - Chips
    - Poster paper and markers
  - c. Reflection on the lesson with Boaler-Humphreys lens, pp. 101-103
    - Mathematical Practices handout
- 2. Cognitive levels of instructional activities
  - a. First part of powerpoint, Effective Mathematics Instruction: The Role of Mathematical Tasks, up through the slide on Low Level Task / High Level Tasks
    - http://www.tcpress.com/pdfs/0807749575.ppt
    - Two Tasks handout
    - Cognitive Levels handout
  - b. Remainder of powerpoint, on fate of cognitive level upon enactment. Analyze vignettes
    - Decline and Maintenance handout
    - Cognitive Vignettes handout, http://www.tcpress.com/pdfs/0807749575.pdf
    - Cognitive Levels Powerpoint Slides handout
  - c. Boston-Smith lesson and activity lenses
    - Handout of Appendices A, B, and C from Boston and Smith, Transforming Secondary Mathematics Teaching: Increasing the Cognitive Demands of Instructional Tasks Used in Teachers' Classrooms, *Journal of Research in Mathematics Education*, 2009, Vol. 40, No. 2, 119-156.
    - PEP observation tool
- 3. Boaler-Humphreys video: The Border Problem, Part I
  - a. The Border Problem, and the Border Problem Part I Transcript handouts
  - b. Analyze using the Boston-Smith lenses
  - c. Discussion questions
    - Border Problem I Questions Handout
- 4. Reflections on your own lessons, past and future
  - a. Proportional reasoning
- 5. Proportional reasoning strand chart, including new standards