Kim Simon Summer Institute 2008 Lesson Plan for Slope-intercept form

- 1. Begin class with Activity Center slopeintercept.act to introduce slope-intercept form. Students will see the graph and the equation.
- 2. Using quick poll, teacher will ask students what they think 5 represents in the equation y=2x + 5. See results. Give students extra points who answered correctly. Next ask students what 2 would represent. (Slope and intercepts should have been discussed already.) Give students extra points who answered correctly.
- 3. Continue to discuss slope-intercept form by using activity center. Students will configure different equations and discover how lines look differently as *m* and *b* change.
- 4. Then select two students to configure two coordinates on a blank coordinate plane. One student must select a *y*-intercept.
- 5. Using the two coordinates, students configure and submit an equation for the line that will pass through those two coordinates. Students will be able to view graph before sending and as first trial be able to resubmit.
- 6. Discuss with class those students that were successful and what may have gone wrong with some students' equations.
- 7. Next students will configure the equation using the footballjump.act. This will allow students to find the rate of change between the height of one University of South Carolina football player and the jump height of another football player.
- 8. Students will again be able to view graph before sending.
- 9. Discuss again student successes and errors.
- 10. For a final check, students will use blockedkick.act . Inform students that this will be used for a class work grade. Students will be able to view graph before sending, but will not be able to resubmit.
- 11. The next class as an assessment, use the Learning Check slopeinterceptform.edc