Study Guide Questions - Day One

Planning

1.   What beliefs does the teacher hold about the students' ability to communicate their mathematical thinking? Describe the teacher's goals and plans concerning students' mathematical communication. [Click on Issues Matrix, Day 0 Journal, Classroom Norms - #7]

2.   Since class ended before the teacher finished her planned lesson, she felt that there was no closure, and the students may have left with multiple understandings of what had happened in class. Would you plan to revisit this lesson the next day? If so, how? If not, why not? [Click on Issues Matrix, Day 1 Journal, Time Management - #12]

3.   Describe the teacher's view of the overall organization of the class activities. How is this reflected in her lesson plan? [Click on Issues Matrix, Day 0 Journal, Class Organization - #5]

4.   Describe the norms for participation that the teacher has identified in her plans. How does she intend to establish these norms? Did you see evidence of her following through on these plans in the lesson? Explain. [Click on Issues Matrix, Day 0 Journal, Classroom Norms - #6]

5.   How did the teacher use anticipated student responses to help her plan this lesson? [Click on Issues Matrix, Day 0 Journal, Anticipating Student Understanding- #4 & 9]

Facilitating

1.   How did the teacher try to make sure the norms she set for participation were carried out in the group work? [Click on Issues Matrix, Day 1 class, Classroom Norms - #43 & 53, and also Day 1 class, Student Questions- #58]

2.   Look at the questions that the teacher asked the students in Group 2 (Stephanie, Shevba, and Megan) and Group 3 (Rob, Chris, and Alfred) about their systems. What do you think she wanted to accomplish with these questions? Find two similar instances where the teacher asked students questions. Can you think of additional methods to accomplish her goal? [Click on Issues Matrix, Day 1 class, Facilitating Group Work - #51 & 54]

3.   Some confusion arose when the teacher asked the students to combine the information in the six lists to make up one ranked list. Do you believe her attempts to clarify what she was asking them to do were useful? Is there a better way of posing this

problem to students? [Click on Issues Matrix, Day 1 class, Managing Transitions - #49, and Facilitating Group Work - #51]

4.   What beliefs do you think the teacher has about the students in this class?

Student Thinking

1.   Analyze the conversation that Group 2 (Stephanie, Shevba and Megan) had with the teacher. How did they approach the task of combining the lists before the teacher started to work with them? How about after she left? Do you think the teacher understood what they were doing? What else could she have done? [Click on Issues Matrix, Day 1 class, Facilitating Group Work - #51]

2.   What methods did the teacher use to assess student understanding? Can you think of additional assessment techniques? [Click on Issues Matrix, Day 0 journal, Student Understanding - #10, - Rate, #11, and Day 1 class, Student Understanding - #45,47,60]

3.   Chris questioned Jeff's group concerning how they broke the tie between quality and brand and why when they both were at #2, quality became #2 and brand became #6. Jeff responded that he did not think about that part. What would you have said after Jeff's reply? [Click on Issues Matrix, Day 1 class, Student Questions- #59]

Mathematical Content & Context

1.   The teacher anticipated that systems using frequency, sum, and average would emerge at the end of the first day. Describe the systems that did emerge. How did the teacher use this in planning for the next day's lesson? [Click on Issues Matrix, Day 0 Journal, Anticipating Student Understandings - #4, and Day 1 Journal - Sneakers #13, and Day 1 Journal, Teacher Decision Making - #14]

2.   One goal the teacher had for this lesson sequence was the students' eventual development of systems. What does she anticipate the students' development of systems to be and what would she like to see happen? [Click on Issues Matrix, Day 0 Journal, Mathematical Agenda - #2]

3.   What role did the context of purchasing sneakers play in this lesson? How did the teacher use the context? How did it influence the students' thinking?

4.   The teacher recognized a teachable moment on percents, however chose not to capitalize upon it. What may have been her rationale for making this decision? What would you have decided if you were teaching? Why? [Click on Issues Matrix, Day 1 Journal, Teacher Decision Making- #16, and Day 1 Class, Student Understanding - #56]

5.   What mathematical thinking took place when the students needed to combine six lists into one ranked list? [Click on Issues Matrix, Day 1 Journal, Context- #48,

Managing Transitions - #49, Facilitating Group Work - #50, and Sum & Average - #52]