Administrator Workshop – Upper Elementary Fractions

Audience: Administrators

Learning Outcomes:

- What knowledge do I need about the Common Core Standards to be able to support teachers' math instruction?
- What questions do I ask and what do I look for in the classroom to support the teacher in implementing the Mathematical Practices?
- How do I encourage a teacher to reflect on the interaction between the students and mathematics?

Overview—focused content learning and applying learning to classroom learning walks:

- Fraction Progression 3-5
    1. Hunt Institute Video—2 minutes
    2. Text based discussion on Grade 3 Standard
    3. Showing your mathematical thinking through comparing fractions
- Standards for Mathematical Practice
    1. Teach all practices as a jigsaw
    2. Post its: Write activities seen in classrooms. One on each post it. Sort those onto the practices posters based on what students are doing during that activity. Be sure to use posters that include pictures, to help them understand each one.
    3. Teach two practices according to slide 22 at each session. Use this method if there are at least four follow up sessions. These would be the practices for the administrators to focus on in their buildings.
- Mathematical Practices in the classroom
    1. Video analysis

Key questions throughout the workshop:

- Using what I just learned, what questions will I ask students during the learning walk?
- In an opportunity during a follow-up conversation with the teacher, what are potential questions I will ask?

Resources:

- Progression of Fractions from Hunt Institute(slide 4): http://www.youtube.com/watch?v=w7h64xjN-PM&feature=mfu_in_order&list=UL&safety_mode=true&persist_safety_mode=1&safe=active

- Video resources for Mathematical Practices analysis(slide 28): http://www.learner.org/resources/series32.html?pop=yes&pid=885#

- Use the "Practices question and Table" to guide discussion on each of the practices. Then sort by each question to synthesize. For example, for the question "What can a teacher do to inhibit the use of this practice?" they may all come up with the same responses (expecting "the right" method to be used, not allowing student conversations, not pressing for multiple solution methods, etc.) Use this to reflect on their current practices.

Resource: teaching math: a video library, grade K-4, 15 minutes

Choose a Method
A fourth-grade class shares their reasoning in evaluating the appropriateness of different computational methods (base-ten blocks, calculators, mental math, or paper and pencil) to specific problems. NCTM standards: whole number computation, estimation, communication, reasoning.

- Background knowledge: http://www.safeshare.tv/w/aWjLDJfOTV A three minute video from the Hunt Institute entitled *The Importance of Mathematics Progressions from the Student Perspective*, by Jason Zimba.

- An example of text-based discussion/close read:

http://engageny.org/resource/common-core-exemplar-for-middle-school-ela-monk%e2%80%99s-words-we-live-by/