

ACTIVITY 3: Final Write Up and Reflection

Goals for Pre-service Teachers:

- PSTs will broaden their perspectives and understandings of students' competencies (and the competencies of family members and community members), by recognizing ways that students see and use mathematics in the home and outside of school, both as reflected in their own CME projects and those of their peers.
- PSTs will reflect on and synthesize their knowledge and familiarity with students' communities, particularly of activities and practices that might relate to mathematics instruction, and in doing so, challenge deficit-based or stereotypical assumptions about students' communities.

Description of Final Write up and Reflection

The final portion of this module involves a whole class debriefing discussion about the community exploration module. During this discussion, PSTs might a) present and elicit feedback on the lessons that they planned, b) describe and provide specific examples of the mathematical activity that they observed in the community and/or that they learned about during their interview(s) with students, c) discuss how they might involve their own K-8 students in community mathematics explorations, and d) more generally, discuss what key insights they gained from this module that they think will impact their teaching. Following a group discussion, presentation, and/or debriefing session, PSTs will complete an individual or small group written reflection. This reflection will be in response to key prompts (see related PST handout), and can occur either as an in class quick write activity or an out of class homework assignment. The individual and small group versions of this final write up are described in greater detail in the Summary portion of the lesson outline.

Lesson Outline for Final Write up and Reflection

LAUNCH

You might begin the discussion by posting a set of prompts, and providing time for PSTs to reflect individually, in writing. PSTs might first share their written reflections with a partner or in small groups, before the whole group discussion begins.

Another option is to share by posting discussion prompts on chart paper around the room, and conducting a gallery walk where PSTs circulate among the posters and jot down ideas related to each question. Like the individual reflection time described above, this activity provides time for PSTs to consider the questions before the discussion begins.

EXPLORE

What follows is a list of possible questions for whole group discussion.

- What was it like to think about the community in mathematical terms?
- What did you learn?

Community Math Exploration Module – Activity 3 Lesson Plan

- about the community / the neighborhood?
- about using mathematics to investigate community contexts?
- about using math as a tool to investigate issues of equity or social justice?
- As you participated in this project, what surprised you?
- As you were planning your mathematics lesson, what kinds of things did you think about and consider? What did you find to be useful connections to the community? How did you use knowledge gained from your community walk, interviews or visits to inform your lesson?
- As you were planning your lesson, what challenges did you face? How did you respond to those challenges (focus here on challenges specific to making connections between particular math content/concepts and community knowledge, practices, activities or settings)?
- Would you like to do a similar community math exploration with your own students? Why or why not? What would students gain from a project like this? What adaptations would you need to make? What challenges do you think you might face, and how might you respond to those challenges?

SUMMARIZE

The summarize portion of this activity involves a final written reflection. There are two options for this reflection. In Version A, PSTs complete the write up individually, either during the methods course (following the whole group discussion), or outside of class as a homework assignment. In Version B, PSTs work with other members of their small group to reflect on and summarize their experiences in the Community Mathematics Exploration Module.

In both versions of this write up, PSTs are asked to reflect on their experiences interviewing a child about their community(ies), conducting a community walk and/or visiting specific community locations and dialoguing with community members about their practices, and designing a math lesson plan that draws upon what they learned about students' community(ies). Specific prompts are included in the PST handout for this activity.

We generally suggest that when PSTs complete an individual reflection (Version A), it should be approximately 2 pages, and that PSTs should be as specific as possible in their responses. When PSTs complete a small group reflection (Version B), we generally suggest that it should be between 3-4 pages.

In some instances, we have had PSTs complete both Version A and Version B of this assignment. Version A is typically an individual homework assignment completed at the end of the module, outside of class, and Version B is conducted at least partially in-class, with time for PSTs to meet and discuss in their small groups.