

URBAN TEACHERS

Proportional Reasoning – Key Assignment

KEY ASSIGNMENT: TASK-BASED LESSONS

Participants will plan and teach a series of lessons to a small group of students. Each lesson will integrate a task that aligns with at least one of *Lamon's* 6 Components of Proportional Reasoning (all 6 components need to be addressed; a minimum of 3 lessons). Participants will use the data gathered from Clinical 1 and the work done to complete Clinical 2 to support quality development and implementation of the Key Assignment. In addition, participants must gather evidence in the form of kid-watching and student work. Student evidence will support reflection on the key ideas involved in proportional reasoning and recommendations for further work to ensure student understanding of each component. DUE SESSION 10, October 14th.

Prior to implementation:

- pre-assess students' understanding of proportional reasoning in context (including conceptual and procedural knowledge) (teacher-created pre-assessment included in appendix)
- use data gathered from pre-assessment and student interviews to identify small group and individual goals and outcomes
- craft a rationale for the inclusion of each student in the group
- design a kid-watching template that will support your assessment of students' conceptual understanding and their usage of the Standards for Mathematical Practice within the context of proportional reasoning
- plan at least 3 task-based lessons (that encompass all 6 Components of Proportional Reasoning)

During implementation:

- plan and implement the task-based lessons with a small-group of students, reflecting at the end of each lesson (lesson plans with daily reflections included in the appendix)
- track understanding using the kid-watching template you created (completed kid-watching template included in the appendix)
- assess student mastery of the key mathematical understandings through collected work samples (evidence of student work included in the appendix)
- reflect on your personal practice (the appropriateness of the lessons planned, strategies used during implementation, ability to gather useful data during kid-watching, student growth, etc.)
- analyze understandings about what students 'know' and 'can do' from a conceptual basis based on kid-watching and student work
- identify challenges faced during implementation and reflect on next steps for your personal practice