Facilitator Notes to Support the Analysis of *The Two Storage Tanks* Video Clips

(see Slide 22)

**Use and connect representations (Effective Teaching Practice 3):**

* The teacher selected a task that gave students an opportunity to use and connect representations – the task is presented as a graphical representation and a real-world context. Question #1 does not suggest a particular representation to use, so students need to consider which representation(s) would be useful. While Question #1 can be solved using the representations given in the task, Question #2 requires that students create equations.
* The teacher ***posed purposeful questions (Effective Teaching Practice 5)*** that:
  + pressed students to explain what the different parts of their equations meant in the context of the problem (lines 3-8; 9-24; 25-30; 42-44; 45-47)
  + asked students to explain how they determined their equations (thus connecting the graph to their equations) (lines 8-9; 9-24; 47-59; 76-82; 97)
  + asked students to work more with the graphical representation (lines 94-96)
* The teacher had students reflect on the table representation they created on their calculator and consider why it wasn’t accurate (lines 67-73) and how to fix it (76-82; 90-94)
* The teacher could have made more of a connection to the “2 hours” mentioned by a student (line 86) and how 50 gallons every 2 hours is equivalent to 25 gallons every 1 hour

**Elicit and use evidence of student thinking (Effective Teaching Practice 8):**

* The task selected by the teacher helped to elicit students’ thinking because it required them to think, reason, and justify their thinking
* The teacher ***posed purposeful questions (Effective Teaching Practice 5)*** that:
  + elicited how students had determined their equations (lines 8-9; 9-24; 47-59; 79-82; 97)
  + used students’ incorrect equation and asked them to prove it in another way (rather than telling them that they were wrong) (lines 42-43)
* The teacher helped the students find the source of their error and figure out how to fix it (lines 67-73; 76-82; 90-94)
* The teacher paid attention to students’ ideas and responded to their ideas by revoicing and asking questions (rather than focusing the students’ attention on something they didn’t bring up)