Role-Play Activity

Supporting Argumentation in Action

As a small group, you will work together to act out the roles of *Teacher* and *Students* engaged in a mathematical argumentation activity focused on the Number Trick Task. The purpose of this activity is to provide an opportunity to focus on supporting student argumentation in "real time." The activity will help us consider how teachers can elicit and extend student argumentation, as well as what students might gain from their exchanges.

Before starting the role-play activity, be sure you have worked through the Number Trick Task on your own. You can choose to use the organizer for constructing an argument that you were given if you find it helpful.

ROLE PLAY ACTIVITY

1. ASSIGN ROLES:

The group member who received the **RED** candy bar plays the role of **TEACHER.**
Group members who received other colored candy bars play the role of **STUDENTS**.
Each student will be given a student work sample.

JOB DESCRIPTIONS: Please familiarize yourself with the role you have been assigned.

Teacher:

- Make sense of student thinking using their written work and discussion.
- Focus the discussion between the group of students.
- Your major objective is to support student learning, which may include, clarifying students' thinking and supporting them to extend and elaborate their mathematical arguments.
    - It is okay if the group does not have time to fully get a consensus on their group argument. You're focus is on understanding their thinking and helping them engage with the thinking of others.

Student:

- Closely examine the student work sample you have been given. Try to act out the thinking and persona suggested from your work sample. In the role play, you should *be* the student who wrote that work.
- Complete the organizer for constructing an argument based on the student work sample you have been given. Do your best to fill out each section as you think your student would have.
- During the group discussion time, try your best to think like your student did. If you do not have enough information from the student work to know how your student would respond, you can make an educated guess, or you can say, "I don't know."

2. INDIVIDUAL WORK TIME (5 min)

During this time, the *students* should complete the organizer based on their student work. The *teacher* can review his/her copies of the student work to get a sense of what students might be thinking. The *teacher* can also choose to engage individually with students at this time, as if a teacher circulating the room during individual work time.

3. GROUP DISCUSSION - WORKING TOWARDS A CONSENSUS ARGUMENT (10 mins)

The *teacher* facilitates a group conversation among all the students in the group. The teacher asks questions or provides feedback to help students to: (a) clarify their thinking, (b) elaborate, extend, or strengthen their arguments, (c) make connections to other students' arguments.

The *students* act out the thinking of their student from what they learned in the written work. One student records group ideas on the colored team organizer for argumentation.

It's okay if you do not have time to come to a complete consensus on the group argument. The purpose of the activity is more about the process of **engaging in mathematical argumentation.**

4. DEBRIEFING THE ACTIVITY (10 mins)

As a small group, reflect on this activity. Record notes as you discuss the following questions:

1. What kind of feedforward from the teacher (or students) seemed to be productive for group?

2. As the teacher, what were you focused on when formulating your questions or feedback?

3. As a student, what questions, prompts or comments helped you express or develop your ideas?

4. How does this activity apply to your classroom teaching situation?