

Responsive Mini-Lessons: Regulation—Not Descriptive

About Responsive Mini-Lessons

Responsive Mini-Lessons (RMLs) provide short, targeted lessons that are responsive to each class's facility with oral argumentation, as assessed with the DiALoG Tool. The DiALoG Tool has eight components. Four are intrapersonal—claims, evidence, reasoning, and relevance; four are interpersonal—listening, co-constructing, critiquing, and regulation. RMLs are aimed at providing more practice with one of the eight components of the DiALoG Tool, so your students are more able to work together to enact rich, thoughtful, and engaging oral argumentation. For each component, the following phrases can be assigned, via the DiALoG Tool, to describe your students' abilities: Not Descriptive, Somewhat Descriptive, or Very Descriptive. An assigned phrase of Not Descriptive or Somewhat Descriptive indicates that your students likely need more support with that particular component of oral argumentation; a lesson is then suggested to help your students strengthen their abilities in that area. If the Not Descriptive phrase is assigned, the lesson provides basic, introductory support; if the Somewhat Descriptive phrase is assigned, the lesson assumes some basic facility with that component and provides an opportunity to practice it with more focus.

For the Regulation RMLs, the Not Descriptive lesson asks students to consider what the term *regulation* means with regard to scientific discussions in their own classroom and engages them in developing a list of strategies they can use to support regulation during discussions in the future. The Somewhat Descriptive lesson builds on this as students watch a short video of other students participating in an oral argumentation activity and analyze the interactions with regard to the regulation that does and does not occur.

Does a Responsive Mini-Lesson for the Not Descriptive Level Make Sense for Your Class?

The suggestion to provide a Responsive Mini-Lesson for the Not Descriptive level indicates that, based on your use of the DiALoG Tool, the following statement best describes your students' ability to regulate the conversation during oral argumentation: *Students do not manage the discussion in a such way that respectful, equitable, and productive discourse can occur.* For more detail about this level and how it compares to other levels, please see the DiALoG Tool User Guide.

There is one Responsive Mini-Lesson provided for the Not Descriptive level.

Goal

- Provide students with an understanding of what constitutes respectful, equitable, and productive discussions.

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Materials and Teaching Considerations

For the class

- Projection: Definition of *Regulation*
- Projection: Group Work Questions
- Projection: The Eating Dilemma
- 4 sheets of chart paper*
- marker*
- masking tape*

*teacher provided

Time frame: 20–30 minutes (This lesson can be extended, through discussion, to a full-class period.)

Teaching Considerations

Most lessons will begin with an introduction followed by the lesson itself. The introduction is a brief activity that sets up and supports the lesson that follows. Each introduction is teacher-led, while the lesson that follows is more student-centered.

Getting Ready

- 1. Decide how to present the resources for this lesson.** During the introduction and lesson, you will present Definition of *Regulation*, Group Work Questions, and The Eating Dilemma. The lesson is written as if these resources will be projected.
 - Alternatively, you can choose to make enough copies of all projections so each pair of students receives one copy of each.
- 2. Prepare posters with the words *respectful*, *equitable*, and *productive*.** At the top of a sheet of chart paper, in large letters, write “respectful”; write “equitable” on a second sheet; and write “productive” on a third sheet. Post these where all students will be able to see them. During the lesson, you will record strategies/sentence starters/statements for each of these aspects of regulation.
- 3. Prepare Classroom Regulation Strategies chart.** At the top of a sheet of chart paper, write “Classroom Regulation Strategies” in large letters. During the lesson, you

will record student-derived strategies for regulation. Post this where all students will be able to see it.

Introduction

- 1. Introduce the concept of regulation.** Explain that in this lesson, students will work on an important part of oral argumentation: regulation. Explain that *regulation* means that students pay attention to the conversation and support one another in order to make sure that the group conversation is working well. In this lesson, students will think about how they can help regulate the group when they are holding a discussion independently, without the teacher directing them.
- 2. Project Definition of *Regulation*.** Explain that this is a definition that applies to group discussions and, specifically, to the kinds of scientific discussions that are held in this class. The term *regulation* can mean other things in other contexts. Read the definition aloud and explain that students will be thinking about, and learning more about, the words in this definition.

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- 3. Project Group Work Questions.** Read aloud each each question and ask students to give a thumbs-up or raise their hands if they have had the experiences that are described.
- 4. Discuss how it felt to work in groups with the attributes mentioned on the projection.** Ask students to describe how it felt to work in group situations like these (without mentioning anyone's name). Say, **“When you work together to regulate the conversation, you can avoid many of these issues and have better conversations. Today, we will work on understanding how to do this.”**
- 5. Project Definition of Regulation again.** Read aloud the definition to remind students what it entails. Afterward, say, **“The words in this definition are difficult and may be unfamiliar. I want to take a few minutes to think about these before we move on to the rest of the lesson.”**
- 6. Point out the posters for respectful, equitable, and productive.** Explain that you want students to share examples and words that will help all students understand what these words mean. Say, **“I am going to start with the word *productive* and use this as an example. The word *productive* is one that a lot of grown-ups and teachers use. It is something we say to students when we want them to work hard and have a clear outcome. You can see that the word *product* is a part of this word. Often, teachers ask you to create a product such as writing a paper or making a drawing. When you work on this product, we might say, “You are being productive!” This means that you are working toward your goal. When we talk about scientific argumentation being productive, this might mean working together to better understand an important science idea through discussion.”**
 - On the productive poster write “working toward a goal; creating a product; and/or working together to understand something, such as a science idea.”
- 7. Focus on the *respectful* poster.** Ask students how they have heard this term before and what it means. As students share, record their ideas.
- 8. Focus on the *equitable* poster.** Explain that *equitable* has to do with being equal. When something is equitable, then everyone has a chance to share or participate. Ask students to share examples of equitable situations. As students share, record their ideas.
- 9. Discuss the definition of regulation again.** Say, **“Now that we know a little more about these words, let’s think about the definition of *regulation* again. Regulation is a way of interacting that helps people make sure that everyone feels respected; that everyone is getting a chance to talk; and that the discussion is productive, or moving toward a goal, such as better understanding of a science idea. When regulation does not occur, then it often means that one or more of these things isn’t happening. Next, we are going to look at a short scenario with a few people who are trying to have a discussion, but in many ways, it isn’t working. We will first decide which of these ideas—respect, equity, or being productive—aren’t happening. Then, we will come up with a list of ways in which we can support better ways of discussing through having participants regulate the conversation.”**

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Lesson

- 1. Project The Eating Dilemma.** Ask for volunteers to play the roles of Sara, Alan, Jazmine, and Ron. Read the introduction aloud and then have volunteers read the short script aloud.
- 2. Discuss The Eating Dilemma as a class.** Ask students to share impressions of ways in which the scenario was not successful in terms of respect, equity, and productivity. [Sara and Alan were disrespectful; Ron never spoke, so it wasn't equitable; it wasn't productive because their goal was to eat, but that never happened.]
- 3. Discuss possible ways the conversation could have worked out better through regulation.**
 - **Discuss respect.** Ask students to suggest ways the teenagers could have been more respectful in the conversation. [Not saying that ideas were horrible. Not suggesting that yours is the only way to do things.]
 - **Discuss equity.** Ask students to suggest ways the teenagers could have supported more equity in the conversation. [Inviting Ron to share his ideas. Asking if anyone had other ideas to contribute.]
 - **Discuss productivity.** Ask students to suggest ways the teenagers could have been more productive. [Reminding one another that their goal was to eat together and to stay focused on that goal.]
- 4. Develop a class list of regulation strategies.** Explain to students that while some groups seem to naturally work well together, it often takes some work to ensure that everyone collaborates well.
 - Let students know that they will now think about things they can do or say that are helpful or not helpful in achieving good collaboration.
 - Have students first work in pairs and then share ideas for how they might offer supportive ways of regulating the conversation when working together.
 - Record students' strategies on the Classroom Regulation Strategies chart.

Why This Mini-Lesson Matters

This mini-lesson provides students with an initial understanding of the importance of regulation and what it looks like with regard to oral argumentation in the science classroom. In this lesson, students have an opportunity to access their own experience with group discussions to help them develop an understanding of the importance of regulation and to generate a list of regulation strategies they can use when holding discussions in the future. Research has found that differences in collaborative learning outcomes relate to levels of mutuality, coordination, and goal alignment among group members (Barron 2000). For students to effectively construct science knowledge with one another through argumentation, they need to understand the meaning and importance of working together as well as have the group-interaction skills—or regulation skills—to coordinate their efforts.

Resources

Barron, B. (2000). Achieving Coordination in Collaborative Problem-Solving Groups, *The Journal of the Learning Sciences* 9(4): 403–436.



The Learning
Design Group



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regulation: managing a discussion so it is respectful, equitable, and productive

Group Work Questions

Have you ever worked in a group in which . . .

- only one or two people spoke?
- people were disrespectful of one another?
- the teacher or another adult had to come in and resolve issues in the group?

The Eating Dilemma

Scenario: Four teenagers—Sara, Alan, Jazmine, and Ron—are at work and only have 30 minutes for their lunch break. As they discuss where to eat, they realize that one of them has a car to drive; one has a phone to look up places to eat; and one has some money and can pay for all the food, as long as everyone pays him back later.

Sara: It's my car, so I'll decide where we'll go and what to order.

Alan: That's a horrible idea, Sara. You always have horrible ideas. It's my money. I'll decide.

Sara: You can walk, Alan.

Jazmine: Come on guys, we aren't going to get anywhere if each of us tries to decide for everyone else. We need to work together if we want to get something to eat, and I'm hungry. All of us have good ideas. I can look up a place that has food that we all like.

The teenagers continue to fight and never decide on what to eat. They miss their lunch break because they can't work together.