Background

Groupwork is an instructional strategy that helps to promote more equitable classrooms, provides opportunities for student interactions, and increases science discussions with the goal of improving student learning. Unfortunately, some students are perceived by their peers as having low academic performance and/or linguistic abilities. Our goal is to equalize rates of participation so all students are able to contribute to the learning of the whole class. One effective method of doing this is to help students understand that they need the intellectual abilities of their group members to successfully complete the tasks throughout this curriculum. To promote the idea that all students have something to contribute, we suggest that you use the following two statements when introducing each task.

- No one is good at all the abilities.
- Everyone is good at some of the abilities.

This Groupwork unit will help students learn two important components of productive and efficient groupwork. The first component is that each member has a role and plays their role throughout the task. These roles are Facilitator, Harmonizer, Reporter, Recorder, Materials Manager, and Resource Person. Task 2 introduces these roles, and then the roles should be used in every task. The groupwork roles are found in the Student Edition and Teacher Edition.

The second important component of groupwork is that there are general Behavior Norms that every member must adhere to. These Behavior Norms are introduced in different groupwork tasks. In the Teacher Edition, each Behavior Norm is provided on a separate page to allow you to make a poster to display in your classroom. Following is a list of Behavior Norms that students will focus on in each task.

Behavior Norms by Task

Task 1: Broken Circles

- Pay attention to what other group members need.
- No one is done until everyone is done.

Task 2: Role Playing

Play your role in the group.

Task 3: Master Designer

- Help others do things for themselves.
- Listen and pay attention to what is being said.
- Explain by telling how.

Task 4: Four-Stage Rocket

- Be concise.
- Listen and pay attention to what is being said.
- Rephrase and build on others' ideas.
- Everyone contributes.

Task 5: Practicing Groupwork Skills to Construct Scientific Explanations

Everybody helps.

Unit Overview

Orientation to Groupwork

Additional Behavior Norms

The following are additional Behavior Norms that may be used if necessary to address weaknesses in groups or to continue to help groups move toward effective and productive group dynamics.

- Discuss and decide.
- Give reasons for your suggestions.
- Everyone gives information.
- Make a plan.
- Agree on strategies.
- Describe accurately and carefully.
- You have the right to ask anyone in your group for help.
- You have the duty to assist anyone who asks for help.
- Help other group members without doing their work for them.
- Everybody cleans up.

The more students practice, the more a behavior becomes internalized. The tasks in this unit will help students start the internalization process for the roles they play and the Behavior Norms they should follow when working in groups.