

Unit Essential Question

How do we work productively in groups?

Introduction

Just as it is important to prepare students for working together in groups, it is also critical that they learn, experience, and label the behaviors that they needed for a productive discussion. The Four-Stage Rocket task is based on work conducted by Charlotte Epstein in her book *Affective Subjects in the Classroom*¹. Epstein proposed having students conduct a discussion in which they go through four stages in order to engage in behaviors that facilitate products discussions. The exercise has become been used extensively by the Stanford Program for Complex Instruction (Cohen and Lotan, 2015) and is a general favorite among practitioners of cooperative training to help individuals think about the things they can all do to have the best discussion possible.

Objectives

Students will be able to

- Discuss and identify which seven people will take a spaceship voyage.
- Learn and practice different Behavior Norms provided by their teacher to improve discussions within their group.
- Share what they learned with the whole class.

Academic Vocabulary

- spaceship
- voyage
- asteroid
- collision

Timing

This task can be completed in 2 class periods (based on 45-minute periods).

- Part I • The Spaceship Voyage: Review the task and start the Four-Stage Rocket process with whole class, debriefing after each stage (1 class period)
- Part II • The Four-Stage Rocket to Help the Discussion Take Off (1 class period)

Student Materials

- Stopwatch

Teacher Materials

- Behavior Norms poster from Task 1

¹ Charlotte Epstein, *Affective Subjects in the Classroom: Exploring Race, Sex, and Drugs* (Scranton, PA: Intext Educational Publishers, 1972), 48–57.

Part I • The Spaceship Voyage

1. Assign four to five students per group.
2. Assign group roles to individuals in the group. Give time so that each individual can review their roles.
3. Explain to the class that in today's task they will learn what it takes to have a productive group discussion.
4. Ask the Facilitator in each group to read out loud the Goal, The Situation, and The New Situation about the spaceship voyage.



LANGUAGE SUPPORT STRATEGY

For ELLs less familiar with this context, show a brief video or photographs of astronauts from a NASA mission (including Mission Control), an asteroid, as well as a rocket launch, so all students understand the upcoming analogy of a rocket taking off.

5. Check in with each group to make sure students understand the directions.



LANGUAGE SUPPORT STRATEGY

Check for understanding by having students hold up five fingers if they completely understand, three to four fingers if they understand well enough to try, one to two fingers if they need to have more clarification from the teacher or a peer (five-finger students can explain it).

6. Students start their first 5-minute discussion to begin to determine which seven people the group will select to board the spaceship to start a new civilization on a new planet.
 - Remind the Timekeeper to start the stopwatch.
 - Remind students that they do not have to come to a consensus on the final seven people in 5 minutes. There will be four more 5-minute discussion sessions after this one.



LANGUAGE SUPPORT STRATEGY

Offer sentence frames for ELLs to prompt oral discussion.

Emerging →	Expanding →	Bridging →
I chose _____ to go because _____.	I believe _____ should be selected for the mission because _____.	I agree/disagree with your selection of _____ for the mission due to the fact that _____.

7. Circulate, listen, observe, and take notes on examples of "good" and "needs improving" discussion techniques. The groups discuss for 5 minutes.

8. Debrief the first 5-minute discussion period with students.
 - What makes a good group discussion?
 - What are some barriers or challenges to a good discussion?
 - What are specific things group members can do or say to have a good group discussion?



STUDENT CONNECTION

Be aware that family norms around discussion may differ in the home due to values systems. In some cases, elders speak and children must always go last or even be silent. In other cases, gender comes into play (e.g., the men speak first, then the women). In some homes, interruption is not considered rude, and so forth. Mention to students that a productive discussion at school involves some of the strategies that were just discussed.

Part II • The Four-Stage Rocket to Help the Discussion Take Off

1. Introduce the Four-Stage Rocket to students using the Behavior Norms poster to emphasize the Behavior Norms for each stage. Ask for student volunteers to read the four stages of the rocket, starting with Stage 1 at the bottom of the rocket. Let students know that they are going to continue their discussion about who goes to the new planet in the spaceship four more times, and each time they will practice skills necessary so that a group discussion can be effective and take off like a rocket.
2. Instruct the Facilitator of each group to read the Stage 1 directions to their group.
 - Remind the Timekeepers to time how long each contributor speaks.
 - Remind the Reporters that they will be reporting out on how well the skill was being practiced by the group.
3. After each stage:
 - Ask each Reporter to report on how well their group did on the skill being practiced.
 - Ask the Timekeepers whether they have other observations they made about what happened, including the “strengths” and the “challenges.”
 - Ask the class to identify why each skill is important.
4. Repeat instructions 2 and 3 for each rocket stage.
5. For the Takeoff step, ask groups to select a person as Observer who has not yet had a chance to play the Timekeeper. Hold 5 more minutes of discussion without having to observe the rules but trying to use the Behavior Norms identified in the four-stage rocket. Observers will make a tally mark in their chart (found in the Student Edition) every time they see good examples of each of the behaviors.
6. Ask each Reporter in the group to identify the list of 7 people selected to take the spaceship voyage and to explain why they were selected. Ask the class to compare the list of each group. Which people were selected by most of the groups?
7. After this Takeoff discussion, ask Observers to share what they observed. Also ask the whole class some of the differences between the first discussion and the last discussion.



NOTE

Unless the class has had some previous experience with discussion, you will find that they will finish discussion tasks very rapidly. You may need to have alternative questions or tasks prepared.