



SETI INSTITUTE

## Mission 12

### Cultural Aspects of the Search for Extraterrestrial Intelligence (CSETI)

#### What Would Happen If We *Did* Detect a Signal?

## Notes

*In Mission 11, students brainstormed ideas regarding the implications of receiving a signal from intelligent extraterrestrials.*

## Overview

In this mission, students see how their thinking has progressed. They consider the importance of advance planning for an “official” reaction to the discovery of a confirmed interstellar detection. Students hold a mock CSETI Conference of their own to consider their fears and concerns about the detection of an extraterrestrial intelligence. In Mission 12.2, students produce recommendations in a “CSETI Final Report” that suggest ways in which humanity’s responses to the discovery can be inclusive, positive, and effective. It is our hope, here at the SETI Institute, that this report can have a bearing on policy and practice with regard to our response if we do receive a radio signal from an extraterrestrial civilization on a planet orbiting a distant star.

## Mission 12.1

### Materials

#### For a Class of 30

#### For Each Team

- “Resource Card” for that team’s particular special interest group (pages xxxxx)
- “CSETI Conference” worksheet (page xxx)

#### For Each Student

- Paper and pencil

## Getting Ready

1. Decide if you want to have additional roles played by students. If so, write a “Resource Card” for each new role.

2. Copy one complete set of “Resource Cards.” Copy the “CSETI Conference” worksheet for each team.
3. Arrange the classroom to model a conference setting for six (or more) groups of students.

## Classroom Action

1. **Discussion.** Assemble students and tell them that today they will hold a CSETI Conference to consider the cultural aspects of the search for extraterrestrial intelligence. Remind students that, in spite of all of the popular science fiction, interstellar travel is not a realistic possibility because of the enormous times involved. Remind them that even radio waves traveling at the speed of light take many, many years to reach Earth from the stars. When (or if!) we do receive a confirmed signal from an extraterrestrial intelligence, it will be a detection, not a contact. A detection is a one-way communication; contact implies a reply, two individuals exchanging information. Point out that this will be a very slow communication. We will have plenty of time to consider each response!

This student CSETI meeting will simulate the effort that was made by NASA to anticipate public reaction to discovery of a message from an extraterrestrial intelligence. In 1991, NASA conducted a CSETI Workshop during which some two dozen persons from varied backgrounds participated. These persons identified some potential problems that warrant NASA’s careful attention. The findings of this workshop were assembled into a report that represents the collective view of all the participating members.

Appoint or elect a student conference moderator. Ask the conference moderator to open the CSETI Conference. This will include, but should not be limited to, an initial welcome, a statement of why this conference has been assembled, and an introduction of the people present.

Would there be rioting in the streets? Would people stay calm, but be amazed? Or would they even care at all? Charge students with the serious responsibility of creating a report that represents their collective opinions on this issue of how we Earthlings should react if an actual message were to be received.

2. **Activity.** Divide the class into six “special interest” groups (four to six students each). Have each group sit together so they can talk amongst their group. Hand out one Resource Card (not one set) and one “CSETI Conference” worksheet to each group. Student experts who represent a wide variety of disciplines and professional backgrounds will be assembled at this CSETI Conference. Students will be asked to play various roles. “Resource Cards” are provided for:

- Political Leaders
- Scientists
- The Children
- Media Persons
- The Future Thinkers
- Military Leaders

You may also wish to add sociologists, entertainers, philosophers, humanitarians, historians, educators, the police, economists, and religious leaders. You will need to write new Resource Cards for any roles that you add.

The individual groups will meet in their small sessions in the classroom to accomplish the following:

- Each group will appoint a leader, a recorder, and a reader.
- The leader directs the discussion, making sure all student ideas are heard and encouraged. The leader reviews the suggestions that the recorder has written with the group. The leader will report to the whole conference in mission 12.2.
- The recorder acquaints the group with the “CASETI Conference” worksheet, which gives students a format for recording their recommendations. The recorder writes down all of the group’s ideas on notebook paper as they occur.
- The reader will first read the “Group Purpose” aloud to the group. It is the first paragraph at the top of each Resource Card. The reader will also read the remainder of the Resource Card for the group, one question or comment at a time, waiting for responses from the group. This card contains some general views and information that might be of concern to the group. The card is intended to be used as a launching pad from which other ideas will come.

Each group should decide on their three most important recommendations. The recorder writes the reason and rationale behind each recommendation on the CASETI Conference Card.

*Optional:* Instead of passing out the Resource Cards, just assign roles to each group and let them generate the questions that need to be answered. The groups could still have a leader and a recorder, but no reader.

## **Mission 12.2**

### **Materials**

#### **For Each Student**

- Paper and pencil

### **Getting Ready**

1. Arrange the classroom to model the conference setting from Mission 12.1.

## Classroom Action

1. **The Mission.** Tell the class that each student will be asked to write a personal letter to Dr. Jill Tarter (or to the SETI scientists) stating what he/she believes to be the three most important recommendations from the entire CASETI Conference, not just from his/her own group's concerns. Encourage students to take notes during the Conference.

*Optional:* Ask students to write a press release on the CASETI Conference instead of a letter. This could be for the school newspaper, or for the local newspaper. The article may be written in class or as homework.

2. **Activity.** Reassemble the special interest groups from Mission 12.1 for a 5-10 minute review before the conference begins. The conference moderator calls the conference to order and directs the groups to begin their reports. The leader of each group makes a general statement about the fears, recommendations, and suggestions expressed by his/her group to the conference. The conference moderator should control any questioning or discussion that may follow each presentation. He/she should also allow each leader the same amount of time to speak. When everyone has spoken, the conference moderator ends the CASETI Conference and thanks everyone for participating.
3. **Activity.** Each student should write a personal letter to Dr. Jill Tarter (or to the SETI scientists), in class or as homework. E-mail the letters to [ed\\_dept@seti.org](mailto:ed_dept@seti.org) with the following in the Subject line:

CASETI Project  
Attention Dr. Jill Tarter

## Going Further

### Activity: Reaching an Agreement!

After suggestions from the class and from the video have been heard, and after individual letters or articles have been written, conduct a discussion so that the class can collectively decide which recommendations will go into a "CASETI Final Report." Have the class elect discussion secretaries to compile the recommendations, or perhaps offer this task to someone who would like to do it for extra credit. The "CASETI Final Report" should be typed (or written neatly). Each student should sign the document to give it a professional and official appearance.

E-mail the letters to [ed\\_dept@seti.org](mailto:ed_dept@seti.org) with the following in the Subject line:

CASETI Project  
Attention Dr. Jill Tarter