

Lesson 1: Meet Your Partners

Overall problem: To determine the impact of restoration of the Lālākea stream on stream flow, water quality, habitat and biota.

Lesson Context: In this lesson, students will become familiar with the partnership of students and scientists who are conducting the stream study (including their class, another school's class, and a team of scientists). They will learn some background about those partners. They will learn how to communicate and work with their partners via the website, video conferencing, and in the field.

Time Frame: 1 class period

Objectives:

Student will be able to:

1. Set up conditions for working effectively on a team and with partners to conduct a scientific study.
2. Use computer and video technology to communicate with remote partners.

Materials:

Procedure:

1. Welcome the students to the "Waipi'o Valley Stream Restoration Study", a partnership of themselves as "student scientists", another school (name the school), and scientists at Bishop Museum and affiliated institutions. Explain that the partnership will be conducting a stream restoration study, and working together to collect, share and analyze data.

If your students are a newly-formed group, ask each student to introduce him/herself and mention one science project, activity or topic that they have enjoyed either in or outside of school.

2. Ask the students to read over the background section on the Stream Study Website's home page. They should read the scientists' profiles and also click on their partner school's website and review it. Hold a brief discussion about the scientists' backgrounds and expertise, as well as the partner school.
3. Explain that the primary purpose of working with partners is to share ideas on study design, to collect and share data, and to work together to analyze the data and draw conclusions. The scientists will serve in a mentoring role, providing instruction to students on methods of collecting (in the field) and interpreting data.

4. Explain that the students will be communicating with their study partners in these ways:
 - Postings on the Discussion Board of the Stream Study Website. Postings will be done at designated times during the project.
 - Video conferences with the scientists at designated times.
 - Live chats with the scientists and the partner school at designated times.
 - In Waipi'o Valley , during the study field trips, when the scientists and partner schools will come together (one day for "overlap") to collect data.

5. Ask the students to form three teams (approximately 4-5 students in each team). They will be working on this team for many of the classroom activities as well as in the field (Waipi'o Valley) when they collect data. Ask each team to go to the "Meet the Critters" section of the Stream Study Website and select a stream animal to be their team mascot and to be the name of their team. They can use either the common or scientific name of the species.

[Extension: Ask each team to design a small poster or sign advertising their team's "mascot critter" for posting in the classroom].

6. Ask each team to formulate a message to their partners – the scientists and the partner school -- for posting on the Discussion Board. The message could introduce their school and team, and offer a gesture of aloha to their study partners. It can include pictures or drawings. The students should know that the message will not be accessible to any other viewers other than their partners.