

Tips for planning a safe and effective field trip

1. Safety rules: Having kids come up with their own safety rules gets them thinking about potential safety issues, and should help with adherence. You can always bring up issues that kids might not think of themselves. For instance many classes routinely forget to bring up warmer layers and raincoats for inclement weather. Discuss as a class what consequences there should be for breaking safety rules. When students are involved in the planning process, discipline issues related to safety tend to be minimal. Kids, teachers, and adult helpers should know what the rules are and what the consequences will be for violating them.

In process of discussing safety issues, students may conduct background research on the hazards of visiting a rocky intertidal zone (wet slippery environment, waves), and the specific hazards presented by different organisms. Students can then be responsible for identifying items that need to be in the first-aid kit brought on the trip (See Potentially Hazardous Intertidal Organisms).

Again, with student involvement, discuss appropriate clothing, sun protection, and the need for water and snacks. You and your students should also discuss conservation techniques to use in the field, such as limiting collections, not collecting rare or protected species, handling organisms gently and returning organisms to where they were found, and turning rocks back to their original positions. On site, point out potential hazards and remind students of safety rules.

Sample Safety Guidelines (written by students at the University Lab School):

1. Algae and seawater make the rocks slippery. Be careful walking around. No running.
2. Watch the waves; be aware of your surroundings. Never turn your back on the ocean.
3. Do not go into the water more than knee deep. (*This is a DOE regulation for public schools*)
4. Be aware of the dangers presented by marine organisms:
 - Sponges, fireworms, hydroids and some zoanths can sting and irritate skin – wear gloves or use nets when handling these animals
 - oysters, crabs, mantis shrimp, octopi, sea urchins and moray eels can cause injuries – do not stick your hand into a hole if you don't know what is there, and handle all marine organisms with caution
5. If you turn over a rock, make sure you put it back the way that you found it.
6. Don't leave any trash behind. If you see trash that someone else has left, pick it up.
7. Respect your colleagues, and the environment.
8. Be prepared for our trip. This is what you'll need:
 - clothes that can get wet and dirty
 - sturdy, close-toed shoes for walking around on rocks (reefwalkers, tabis, or old sneakers)
 - sunscreen and a hat
 - snacks and a drink
 - a good attitude!

These safety guidelines can be incorporated into a student-generated field trip contract encompassing safety issues and safety rules to be signed by the student and a parent or guardian.

2. Good ratio of adults or older kids to kids: The DOE requires a certain ratio based on the age of the students. We found that a lower ratio (1 per 4-6) is good not just for safety, but for making sure kids stay focused and can get questions answered quickly, but this may depend on the complexity of your planned activity. We have also used students from previous years as mentors with good success. Make sure all chaperones are well-informed about the goals of the trip, policies, and procedures for the day, and what they will be expected to do.

3. Clearly defined goals for the field trip, understood by kids: Our trips work the best when we spend an entire class session the day before going over details of the site and reviewing the details of how the trip would run. Practicing field techniques, dividing students into teams beforehand with agreed-on roles for each team member, and prepping field equipment as a class the day before were all helpful. Reminding kids of what the plan is and going over techniques on site is also important.

4. Some combination of focused and open-ended activities is probably the best way to make the trip effective in terms of learning. You want the students to focus, and may have a specific data-collection goal, but ideally you also want students to make their own observations and discoveries and come up with their own questions.

5. Pre-visit the site on a date with a similar low tide level as your field trip. Take some pictures to show the class (e.g. during the OPIHI intro powerpoint), and look for organisms. Make sure you can identify the most common species. Determine exactly where the transects should be laid out and how long they should be. Take note of any potential safety hazards that would require an adjustment of planned activities.

6. Details: Make sure you have all permits and permissions in place. Consult a tide table and plan for enough travel time to arrive right around low tide. Set up buses as early as possible. Know where bathrooms are and plan time to make stops at them.

7. Pre-trip and post-trip activities: Giving kids some background allows them to see more than they would going into a trip without it, and can provide the meaningful context for the work you do on the trip. Post-trip activities are a way for kids to connect their direct experience into bigger topics and encourage teachers to think of the field trip as an integral part of what they are teaching, rather than as add-ons that take away from classroom time.