

Pre-assessment

It is important to learn what students already know about earthquakes and earthquake hazards prior to teaching the lessons. This activity, more than anything else, is designed to bring the teacher and students closer (if this is the first time they meet), and to provide an opportunity for all to share stories, experiences, and personal beliefs concerning earthquakes. It allows students to ask questions and share concerns prior to the lessons in a completely private and respectful environment. In addition, the teacher can use the information exchanged during this activity to assess student's current level of knowledge prior to the lessons, and adjust the lessons appropriately.

Materials

Writing paper and pen
A private room in the school
Voice recorder (optional)

Procedures

1. Introduction:

Ask each student to meet with you individually, in a safe and private environment (usually an empty room within the school's facility). Introduce yourself and give a brief description of why you are at the school and why the student has been invited to participate in this activity. Ask the student if you may record their voice during this activity. Recording allows you to review the information at a later time. If you choose not to record, you may want to take brief notes during the activity.

2. Start the discussion by asking simple questions:

Have you felt an earthquake before? How many times?
Where were you when the earthquake occurred? Were you alone?
When did the earthquakes occur? Recently or a long time ago? What time of day was it?
Did you know you were feeling an earthquake when it happened?

These questions may bring up sensitive topics. If the student chooses not to respond to the above questions, talk about your own experiences with earthquakes. Ask yourself the above questions. Tell the student that it is okay not to answer the questions. You may choose to tell the student what your feelings are about earthquakes.

3. Then, proceed to the following questions:

Why do you think the Earth shakes sometimes?
Has anyone talked to you about why the Earth shakes?
Do you know what other people might think about this?

Allow some time for the student to think about this question. In many cultures, this can be a sensitive question. If the student brings up folk stories and myths to demonstrate the causes behind earthquakes, do not disapprove of them, but encourage them to talk about them by asking questions such as: Where did you hear this story? Did you read it somewhere? Do you believe it? Why do you believe it?

4. Find out what your student did during and after an earthquake they have experienced, and/or what they think they should be doing:

What did you do when you felt the Earth shaking?

What did people around you do when they felt the Earth shaking?

What do you think you should do when the Earth shakes?

When the Earth stopped shaking, what did you do?

What do you think you should do after an earthquake?

Has anyone talked to you about what to do during and after an earthquake?

5. Learn if your student is prepared for an earthquake, or knows how to prepare for it:

Have you participated in an earthquake drill at your school or in your community?

What did you do during the drill?

Do you think it is possible to prepare for an earthquake?

What are a few things one can do to prepare for an earthquake?

Have you (your family, your community, etc.) done anything to prepare for an earthquake?

Do you know where to go to get information about earthquakes, earthquake hazards, and preparedness?

6. Explore the topic of earthquake forecasting:

Have you heard of anyone forecasting an earthquake? How did they do it? Do you believe them?

Do you think it is possible to predict an earthquake?

Right before an earthquake is about to occur, do you think it is possible to see any sign of it in your surrounding environment?

7. Find out how much Earth sciences background your student has:

Do you know why the region in which you live is susceptible to earthquakes?

Do you know why there are mountains in your region (ask if the region is mountainous)?

Do you know what the Earth is made of? What is inside of it?

Is there an Earth sciences class taught at your school? Have you taken it? What do you remember the most about that class?

8. Finish the discussion:

Would you like to learn more about the earthquakes?

What do you want to learn the most about earthquakes?

Do you have any questions right now about the upcoming lessons?
Is there a particular topic and/or question you would like to explore during lessons?

This can be a time consuming activity, allow 5-10 minutes per student. Remember, you have your notes and/or the tape recorder if you need to go back and review the interviews. You may decide to ask your students to write down the answers to the questions instead of talking to you about them. Modify this activity to fit your needs.