

Workshop 2

Latin America

Part 1. Guatemala and Mexico

Part 2. Ecuador

Latin America is a region with rich cultural heritage and devastating political turmoil. It is a place of beautiful and bountiful farmlands tucked amid dangerous volcanoes. This workshop looks at the region of Latin America asking questions such as, "What factors compel people to migrate from one place to another?" and, "How can geography help people cope with the hazards associated with living near volcanoes?"

Explore these and other questions with geographers in the field and teachers in the classroom.

Before You Watch

Before viewing the video programs for **Workshop 2: Latin America**, please read the Video Program Overviews below—paying close attention to the Questions To Consider—and the descriptions of the standards featured in this workshop (listed below). Those descriptions can be found in the Appendix of this guide.

These readings provide background on the geographic and pedagogical issues addressed in this workshop. We encourage you to read *Geography for Life* in its entirety as you move through the workshops. It contains further background on the National Standards and their development, numerous examples and rich illustrations aiding interpretation, valuable tools for strengthening and developing lessons, and additional insight into geography's significance in our daily lives.

Also, prior to the workshop, you should explore the associated Key Maps and Interactive Activities on the *Teaching Geography* Web site:

www.learner.org/channel/workshops/geography.

The National Geography Standards for Workshop 2

The National Geography Standards highlighted in this workshop include Standards 4, 7, 9, and 15. Read the descriptions of the appropriate standards found in the Appendix, on the workshop Web site, or in their complete form in Chapter 4 of *Geography for Life*. You can find supplemental materials in the Resources at the end of this workshop chapter.

Before You Watch, cont'd.

Video Program Overviews

Part 1. Guatemala and Mexico: Population Migration

During a few months of each year in Guatemala, millions of Maya have been migrating from the highlands to Guatemala City for temporary employment. Why is this seasonal migration so prevalent? Why don't the Maya have sufficient land to support themselves and why is there so little industrial growth? Geographer George Lovell relates this seasonal migration pattern to the collapse and explosion of Maya population. In doing so, he examines the Guatemalans' history of violence against the Maya, starting with the sixteenth-century *conquistadors*. Through historical survey and one-on-one interviews with Mayan families, Lovell investigates the geographic roots of migration; the cultural conflict regarding land use and ownership; and the extreme effects of temporary displacement to the city on the rural Mayan population. Using Guatemala as one geographic example, we can begin to understand the nature of human settlement, distribution, and interdependence.

This workshop includes a classroom segment featuring geography teacher Randy Hoover leading his class in an investigation into the reasons Mexican people migrate to Northern Mexico and the United States in search of employment. His class participates in group activities creating visual organizers which they use to present their findings and analysis to their classmates.

Objectives

Participants will be able to:

- explain the relationship between migration and cultural conflict;
- identify factors associated with rural to urban migration and transnational migration;
- identify the tools used by geographers;
- understand how group investigations engage students in developing geographic perspectives; and
- apply the geographic inquiry process to your own teaching.

Questions To Consider

1. What are some causes for migration in Guatemala?
2. What are the features of rural to urban migration? Transnational migration? How do they differ?
3. What tools do you see geographers using to answer their questions about Guatemala?
4. How does teacher Randy Hoover engage students in developing geographic perspectives through group investigation?
5. How might you adapt Randy Hoover's use of geographic inquiry to investigate a question appropriate to a topic that you teach?

Featured Educator: Mr. Randy Hoover, seventh-grade world geography teacher, Dover-Sherborn Middle School, Massachusetts.

Before You Watch, cont'd.

Part 2. Ecuador: Preventing Tragedy Through Understanding Geography

In the Andes of Ecuador, inhabitants live with the constant threat of eruptions in a region called the Valley of the Volcanoes. Monitoring and mapping these geological hazards are Patty Mothes and Peter Hall at the Geophysical Institute in Quito, Ecuador. Their findings will be applied to the population and infrastructure of the area.

One of the volcanoes Patty has been studying is the 16,500-foot mountain called Tungurahua, at the foot of which lies the town of Banos. Since the tragedy of Tungurahua's eruption 90 years ago, Banos has grown rapidly, tremendously increasing the potential for human catastrophe. Using prisms, Patty measures the volcano for any changes that might indicate activity. Despite her efforts, many inhabitants are doubtful regarding the threat of Tungurahua and such attitudes have prompted a campaign to increase public awareness of the volcano and how to respond in the case of an eruption. While researchers cannot control such geographical phenomena, their attempts to understand and predict them are inherent to the safety of the inhabitants of the Valley of the Volcanoes.

This workshop is followed by a classroom segment featuring environmental science teacher Carole Mayrose as she engages her students in an exploration of volcano location. Her class gains insight into the relationship between volcanoes and earthquakes and discusses the advantages and dangers of living near a volcano.

Objectives

Participants will be able to:

- explain how physical systems influence the Earth's features;
- explain positive and negative influences of physical systems on human activity;
- explain how technology helps our understanding of natural hazards;
- explain how teachers can use student curiosity as an entry point for teaching about physical features; and
- identify how instruction can be adapted to accommodate the learning requirements of students at all levels.

Questions To Consider

1. What is the relationship between earthquakes and volcanoes?
2. What constructive and destructive features of volcanoes are explained in the case study?
3. How has technology been applied to volcanoes to make us "smarter" about their activity?
4. How does Carole Mayrose use the volcano to interest students in human and physical geography?
5. What strategies does the teacher use to adapt classroom instruction for her special needs students in learning geography?

Featured Educator: Ms. Carole Mayrose, 10th- to 12th-grade environmental science teacher, Northview High School, Brazil, Indiana.

Workshop Session

The video program for **Workshop 2: Latin America** includes two parts, each containing a geography case study, classroom segment, regional and human geography commentary, and pedagogical commentary. This guide provides pre- and post-video activities, as well as questions to consider while watching the program. Follow the approximate timelines on the grid below, depending on the length of your workshop session and whether you are watching a real-time broadcast or a videotape.

Viewing Real-Time Broadcast (Two-Hour Session): Watch the full program, then do each of the activities.

Viewing Videotapes (One Two-Hour or Two One-Hour Sessions): Watch each video segment listed below, then do the related activity. If you can only meet for an hour, do Part 1 as one session and Part 2 as another. Please complete Part 1 before doing Part 2.

All times are approximate	VIEWING REAL-TIME BROADCAST Watch the full program, then do each of the activities below.	VIEWING VIDEOTAPES Watch each video segment listed below, pausing after each one to do the related activity.
Watch Full Program	58 minutes	
Do Getting Ready 1: How's Your Mental Map?	15 minutes	15 minutes
Watch Latin America Part 1: Guatemala and Mexico: Population Migration		29 minutes
Do Going Further 1: Migration Inquiry	15 minutes	15 minutes
Do Getting Ready 2: What Do You Know About Volcanoes?	15 minutes	15 minutes
Watch Latin America Part 2: Ecuador: Preventing Tragedy Through Understanding Geography		29 minutes
Do Going Further 2: Adaptive Teaching Strategies	15 minutes	15 minutes

Note: Readings are not included here. These should be completed prior to the workshop session. See Before You Watch for more information.

Workshop Session, cont'd.

Part 1. Guatemala and Mexico: Population Migration

Getting Ready 1: How's Your Mental Map? (15 minutes)

What is your mental map of Guatemala? Without the benefit of an atlas, take **five minutes** and sketch a map of Guatemala. Include whatever features of the land and people that you know, and its neighboring countries in the region of Latin America.

When you have completed your mental map, take **10 minutes** to discuss your map with a partner. What features did you both include? Where did your maps differ? What previous experience or knowledge influenced your final mental map? Our case study and classroom segment for Part 1 investigate human migration issues in Latin America. Based on your map and discussion, individually write down what you consider to be a good geographic inquiry question relating to migration.

Be thinking of your inquiry question as you watch the video program.

Site Leader: Part of this activity involves discussion with partners. Please be sure that everyone has a partner before they engage in the activity and help people keep track of time. The first five minutes of this activity should be done individually and the last 10 minutes should be spent with a partner.

Watch Part 1. Guatemala and Mexico: Population Migration (30 minutes)

Questions To Consider

1. What are some causes for migration in Guatemala?
2. What are the features of rural to urban migration? Transnational migration? How do they differ?
3. What tools do you see geographers using to answer their questions about Guatemala?
4. How does teacher Randy Hoover engage students in developing geographic perspectives through group investigation?
5. How might you adapt Randy Hoover's use of geographic inquiry to investigate a question appropriate to a topic that you teach?

Going Further 1: Migration Inquiry (15 minutes)

Based on what you saw in the Part 1 of the video program, look back at your inquiry question from Getting Ready. Does it still look like a question you wish to investigate? Take **five minutes** to change or revise it.

For the remaining **10 minutes**, discuss with your partner the ways you might engage students in a group investigation in order to answer that question.

Site Leader: Please keep participants to five minutes in the first part of this activity.

Workshop Session, cont'd.

Part 2. Ecuador: Preventing Tragedy Through Understanding Geography

Getting Ready 2: What Do You Know About Volcanoes? (15 minutes)

Take **10 minutes** to construct a graphic organizer to show what you already know about the benefits and disadvantages of living near a volcano. Be original with your graphic organizer.

Site Leader: Please keep participants to 10 minutes in the first part of this activity.

Use the last **five minutes** to discuss your finished product with your partner and brainstorm ways to bring these pros and cons to life for your students.

As you watch the video, look for the techniques that our teacher, Carole Mayrose, uses to engage her students in the study of volcanoes and the people who live near them. How can you adapt these strategies to your own teaching?

Watch Part 2. Ecuador: Preventing Tragedy Through Understanding Geography (30 minutes)

Questions To Consider

1. What is the relationship between earthquakes and volcanoes?
2. What constructive and destructive features of volcanoes are explained in the case study?
3. How has technology been applied to volcanoes to make us “smarter” about their activity?
4. How does Carole Mayrose use the volcano to interest students in human and physical geography?
5. What strategies does the teacher use to adapt classroom instruction for her special needs students in learning geography?

Going Further 2: Adaptive Teaching Strategies (15 minutes)

Teacher Carole Mayrose uses at least a dozen strategies to adapt her instruction and provide a positive learning environment for her students. Working individually, take **five minutes** to list as many as you can recall. Think about your own students, those who may have difficulty with geography. Choose three strategies from your list and for the remaining **10 minutes** discuss with the group why you chose them and why you think they would be effective methods in assisting your students.

Site Leader: After participants have completed their lists, please facilitate a large group discussion.

Featured Lesson Plans

Go to the workshop Web site for the lesson plans upon which the video classroom segments were based: **Mexico: Motive to Migrate**, contributed by Randy Hoover, and **Volcanoes, Trenches, and Plate Boundaries**, contributed by Carole Mayrose. Please note that not all material covered by the lesson plans was presented in the video segments.

Teaching Geography Web site: www.learner.org/channel/workshops/geography

Resources

Print Resources

Geography for Life: The National Geography Standards, 1994, (1994), National Geographic Society, "The Rationale for Geographic Skills," pp. 41-45.

Classroom Instruction That Works, Research-Based Strategies for Increasing Student Achievement, (2001), by Marzano, Pickering, and Pollack, ASCD, "Generating and Testing Hypotheses," pp. 103-111.

Creating Interactive Environments in the Secondary School, (1993), by Stover, Neubert, and Lawlor, National Education Association, pp. 11-26.

Web Resources

Christian Science Monitor

<http://www.csmonitor.com>

Volcanoworld

<http://volcano.und.nodak.edu/vw.html>

An excellent source for volcano information and activities, featured in Carole Mayrose's classroom.

National Council for Geographic Education

<http://www.ncge.org>

By clicking on the "standards" tab, you can view the 18 National Geography Standards.

National Geographic

<http://www.nationalgeographic.com/xpeditions>

These sites feature many valuable resources and information on geographic topics.

Article: "Sicilians Take Grumpy Mount Etna in Their Stride"

http://news.nationalgeographic.com/news/2001/07/0731_wiremountetna.html

Record of Tungurahua's Activity

<http://www.volcano.si.edu/gvp/volcano/region15/ecuador/tungurah/var.htm>

Curriculum Resources

Volcanoes Online

<http://library.thinkquest.org/17457/english.html?tqskip=1>

This site offers information, comics, and games having to do with volcanoes.

Notes
