

Workshop 1

Introduction

Part 1. El Paso and Ciudad Juarez

Part 2. NASA

Geography is more important than ever to make sense of our changing world. This workshop lays the foundation for the geography content and pedagogical skills to assist you in teaching challenging lessons in your classroom.

We begin with an overview of the geographical perspective, highlighting the 18 National Geography Standards and associated geographic skills that inform the *Teaching Geography* series, as well as introducing concepts of human and regional geography. These issues are illustrated through two video case studies, one in the borderland region of El Paso, Texas and Ciudad Juarez, Mexico; the other follows NASA astronauts on a space shuttle mission. This foundation in solid geographic content and teaching methodology is seen in practice in a classroom segment where students answer the question, "Why is Russia's Aral Sea shrinking?"

Before You Watch

Before viewing the video programs for **Workshop 1: Introduction**, please read:

- the Video Program Overviews, paying particular attention to the Questions To Consider;
- the introductory material from *Geography for Life: The National Geography Standards, 1994*, which can be found in the Appendix of this guide; and
- the standards featured in this workshop (listed below). The standards and their descriptions can be found in the Appendix.

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 1

The National Geography Standards highlighted in this workshop include Standards 1, 2, 3, 4, 7, 8, 14, 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*. As you read, be thinking about how these standards apply in lessons you may have taught. You can find supplemental materials in the Resources at the end of this workshop chapter.

Inquiry-Based Instruction

The five geographic skills are embedded in the inquiry approach to learning. Inquiry involves a process of exploring the natural or material world that leads to asking questions and making discoveries in the search for new understandings. Inquiry, as it relates to science education, should mirror as closely as possible the enterprise of doing real science. For more information on the inquiry approach, you may check online with the Institute for Inquiry Learning at the Exploratorium at www.exploratorium.edu/IFI/.

Video Program Overviews

Part 1. El Paso and Ciudad Juarez: Life on the Borderlands

We begin the workshops by focusing on the geographical perspective and how the National Geography Standards provide the means to organize, analyze, and understand the role that geographic forces have on our lives. We begin by following the compelling story of Concha, a single mother of five, who had been living in a tar-paper shack in Ciudad Juarez, Mexico, just south of the U.S. border. Now working in a *maquiladora*, she previously spent her nights sneaking through the rattlesnake-infested desert smuggling cigarettes to sell in Hispanic bars in El Paso, Texas. Her illegal journey, and now her factory work, not only brings her across the border of two countries but across two geographical regions. Concha's story is our case study for exploring how the standards function and the light they can shed on geographical phenomena.

This half hour also introduces three educators who will guide you through geography and teaching content over the course of this series. They are Dr. James Binko, noted educational specialist at Towson University and our series host; Dr. Susan Hardwick, professor of geography at the University of Oregon, who will comment on the Human

Before You Watch, cont'd.

Geography component of this series; and Dr. Gil Latz, professor of East Asian geography and international studies at Portland State University in Oregon, who will provide the Regional Geography commentary component of the series.

Objectives

Participants will be able to:

- identify how the 18 National Geography Standards can help further understanding of geographic concepts;
- examine how a geographic perspective provides insight into a variety of issues;
- identify concepts central to regional and human geography; and
- understand how border regions shape people's lives.

Questions To Consider

1. How do the 18 National Geography Standards help to explain our world?
2. How do regional and human geography approaches differ?
3. How does a spatial understanding of regions translate into real-world policy?
4. Why is it important to remember that regions are human constructs?
5. How does the environment affect culture?

Part 2. NASA: A Lofty View

This half hour explains how the five geographic skills embedded in the inquiry-learning process lead to deeper geographic understanding and can form the basis of engaging and thought-provoking lessons. This foundation in solid geographic content is seen in practice in a classroom segment where students answer the question, "Why is Russia's Aral Sea shrinking?"

This case study provides an overview of the spatial perspective, following the training of NASA astronauts as they attend classes to help them orient themselves when observing Earth from the space shuttle. From space, concepts like latitude and longitude are almost meaningless, thus astronauts must develop good mental maps and learn to distinguish major geographic features such as Lake Chad or the Nile River Delta. This piece also addresses concepts such as "scale," the use of GIS and remote sensing technology, and the distribution of population across the Earth's surface. Regarding the latter, the point is made that populations are concentrated in a relatively small area of available land, and that humans have a great impact on the environment of these precious oases on a planet comprised of two-thirds water.

Our classroom segment features Illinois teacher Fred Walk. Using the five geographic skills in a guided inquiry lesson, his students study satellite imagery of Russia's shrinking Aral Sea, using that knowledge to develop hypotheses about the cause of this environmental disaster and formulate strategies for combating this problem.

Objectives

Participants will be able to:

- identify the five geographic skills and recognize how they are used in geographic inquiry;
- understand how satellite imagery can illuminate geographic events; and
- examine how the geographic skills can serve as the framework for an inquiry lesson.

Before You Watch, cont'd.

Questions To Consider

1. How do the five geographic skills inform the learning process?
2. What is geographic information?
3. Where can geographic information be found?
4. What has space-based imagery allowed us to learn about Earth?
5. How does asking students, rather than telling them, lead to effective teaching?

Featured Educator: Mr. Fred Walk, 11th- and 12th-grade geography teacher, Normal Community High School, Normal, Illinois.

Workshop Session

The video program for **Workshop 1: Introduction** 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: On the Border	15 minutes	15 minutes
Watch Introduction Part 1: El Paso and Ciudad Juarez: Life on the Borderlands		29 minutes
Do Going Further 1: Using the Standards	15 minutes	15 minutes
Do Getting Ready 2: Lost in Space	15 minutes	15 minutes
Watch Introduction Part 2: NASA: A Lofty View		29 minutes
Do Going Further 2: Skill Builder	15 minutes	15 minutes

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

Workshop Session, cont'd.

Part 1. El Paso and Ciudad Juarez: Life on the Borderlands

Getting Ready 1: On the Border (15 minutes)

Take a look at the card you received upon entering the meeting space. That is where you live, on either side of the Rio Grande, either in Ciudad Juarez, Mexico or in El Paso, Texas. Working in your small groups, take **five to seven minutes** to briefly answer the following questions:

- What types of jobs might you hold?
- Where might you work?
- What language(s) might you speak?
- What might be your ethnic background?
- What might be some of the most difficult things about living so closely to the other country?
- How would things be different if there were no border between Mexico and the United States?

Site Leader: Please prepare an appropriate number of index cards, one per participant, prior to meeting. Each card should have printed on one side either Mexico or United States. Evenly divide participants between Mexico and United States and randomly hand them cards as they walk in the door. Once everyone is present, have everyone whose card reads "Mexico" move to one side of the room, and those whose cards read, "United States," move to the other side of the room.

Please keep participants to five to seven minutes of small group work and then facilitate large group discussion for the remaining time.

For the remaining time, discuss your answers with the large group. How are the two groups' answers similar? How are they different? What effect does a border have on the people living nearby?

Watch Part 1. El Paso and Ciudad Juarez: Life on the Borderlands (30 minutes)

Questions To Consider

1. How do the 18 National Geography Standards help to explain our world?
2. How do regional and human geography approaches differ?
3. How does a spatial understanding of regions translate into real-world policy?
4. Why is it important to remember that regions are human constructs?
5. How does the environment affect culture?

Going Further 1: Using the Standards (15 minutes)

Choose one of the 18 National Geography Standards. Working individually, take **five minutes** to address the following questions in writing. First, write down your chosen standard. How did it relate to the video case study? What geographic issue did your chosen standard help to explain? Why did you choose that standard? Choose another geographic issue or phenomenon anywhere in the world that relates to your standard. How can your chosen standard help explain this geographic issue/phenomenon to you and/or your students?

Site Leader: You will need copies of the National Standards from the Appendix of this guide for this activity. Please keep participants to five minutes of individual writing and facilitate discussion for the remaining time.

For the remaining **10 minutes**, please discuss your answers with the group.

Workshop Session, cont'd.

Part 2. NASA: A Lofty View

Getting Ready 2: Lost in Space (15 minutes)

These images are the types of things astronauts see from space. Take **five to seven minutes** and see if your group can identify these geographic locations. What identifying clues do you see? What is happening in the pictures to make these places look as they do? What is going on in picture 4?

For the remaining time, compare your findings with those of the other groups. Did you have the same answers? How do these pictures, taken from space, help us better understand our world?

Site Leader: Please make sure that each group of three has a set of satellite images. Please help participants keep track of the time. When it appears that all groups have identified the images, feel free to move into discussion. Visit the Web site for the answers.



Picture 1



Picture 2



Picture 3



Picture 4

Workshop Session, cont'd.

Watch Part 2. NASA: A Lofty View (30 minutes)

Questions To Consider

1. How do the five geographic skills inform the learning process?
2. What is geographic information?
3. Where can geographic information be found?
4. What has space-based imagery allowed us to learn about Earth?
5. How does asking students, rather than telling them, lead to effective teaching?

Going Further 2: Skill Builder (15 minutes)

Think of one of your lesson plans. How does it relate to the five geographic skills? Take **five to seven minutes** to break your lesson down according to the five geographic skills. Does your lesson include all of the skills? Does it have a focused inquiry question? What kinds of geographic information does your lesson use? Are there any methods of acquiring information, organizing information, or analysis presentation that you saw in the case study or classroom segments that might work as well or better than your current method? What was one idea that you saw presented that you'd like to try?

Spend the remaining time discussing your lesson with a partner.

Site Leader: This activity is in two parts and requires participants to work with a partner in the second part. Please make sure that everyone has a partner before beginning the activity. Help participants keep track of the time.

Featured Lesson Plan

Go to the workshop Web site for the lesson plan that formed the basis of the classroom segment: **What Is Happening to the Aral Sea?**, a Mission Geography module contributed by Fred Walk. Please note that not all material covered by the lesson plan was presented in the video segment.

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

Resources

Web Resources

Article: “Cameras, GPS integrated to fight illegal immigration”

http://www.fcw.com/fcw/articles/1997/FCW_102097_1141.asp

NASA

<http://www.nasa.gov/>

Article: “Women Respond to a Shrinking Aral Sea”

<http://www.igc.org/wedo/ehealth/respond.htm>

Visible Earth

<http://visibleearth.nasa.gov/>

A searchable directory of NASA images.

Curriculum Resources

Mission Geography

<http://www.missiongeography.org/>

Information on the Mission Geography program, including draft lesson plans, workshops, and other resource materials.

National Geographic

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

This site features lesson plans, maps, books, etc., and under the “teacher community” tab, has links to and address listings for all state geography alliances.

Massachusetts Department of Education

http://www.doe.mass.edu/frameworks/history/archive/hist97/hissoc1_toc.html

Curriculum standards for Massachusetts.

New York State Department of Education

<http://www.emsc.nysed.gov/ciai/socst/ssstate.html>

This page links to all state social studies curriculum standards.

Notes
