

RESOURCE LIBRARY
ACTIVITY : 50 MINS

Genographic Project: Looking Ahead

Students discuss ways the world may change over the next century and millennium. Then they work in teams to develop plans for Genographic 3005—an imaginary updated study of human migration.

GRADES

9 - 12+

SUBJECTS

Anthropology, Biology, English Language Arts, Geography, Human Geography, Social Studies, World History

OVERVIEW

Students discuss ways the world may change over the next century and millennium. Then they work in teams to develop plans for Genographic 3005—an imaginary updated study of human migration.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/genographic-project-looking-ahead/>

Program



DIRECTIONS

1. Brainstorm ways the world is changing.

Ask students to name some of the ways the world has changed over the past century. Then ask: *What changes do you think will happen over the next 100 years?* Encourage students to

think of a variety of areas including communication, transportation, science and technology, and especially globalization. Make sure students understand what globalization means—globalization is the process by which local and regional cultures and economies are becoming integrated into a worldwide network. Ask: *Can you imagine some of the changes that might take place over the next 1,000 years? How might globalization change the world by then?*

2. Review the accomplishments of the Genographic Project.

Review with students what the Genographic Project has accomplished, how it achieved those results, and what role indigenous cultures played in the project. Ask: *What have we learned from the Genographic Project? Why is that information important? Will researchers be able to collect that same information 50 or 100 years from now? Why or why not?* Emphasize that as globalization continues and more and more indigenous cultures and languages disappear, the geographic and historic context for interpreting genetic information will be lost. The Genographic Project has recorded some of that information.

3. Introduce Genographic 3005.

Ask students to imagine they are researchers working approximately 1,000 years from now, in the year 3005. Their mission will be to come up with a plan to update the Genographic Project's study of human migration patterns, which began in 2005. Their project—Genographic 3005—will document human migration during the period from 2005 to 3005.

4. Have students design their plans.

Divide students into small groups. Write the following statement and question on the board:

The year is 3005.

How has human migration changed over the past 1,000 years?

Tell each team to come up with a plan to answer that question. They should think about the following questions to generate ideas:

- What methods did the Genographic Project use in 2005?
- What new scientific and technological advances may be available in 3005?
- How may globalization have changed the world and the ways people move around?
- How will your methods be different from those of the original Genographic Project?
- How do you think your findings will be different?

5. Have students report on their plans.

Have each team briefly report on their plan for Genographic 3005. Then discuss how the plans are similar and different. Ask: *How do your plans for Genographic 3005 differ from those of the original Genographic Project? Why?*

Informal Assessment

Have each team write a letter to a particular government or cultural group of their choosing on behalf of Genographic 3005. The letter should be based on the team's plan for Genographic 3005, and should try to convince the government or cultural group to participate in the project. The letter should explain why the project is important, how it will benefit the government or cultural group, and how the project will respect the culture and beliefs of the government or group.

Extending the Learning

Show the video *Journey of Man*, about the Genographic Project. Go to the [PBS](#) website to find out where you can get the *Journey of Man* documentary.

OBJECTIVES

Subjects & Disciplines

Anthropology

Biology

- English Language Arts

Geography

- Human Geography

Social Studies

- World History

Learning Objectives

Students will:

- explain the basic research methods used by the Genographic Project
- discuss how the project preserves information that will not be available in the future

- describe how globalization is changing human migration patterns
- develop a plan to update the Genographic Project study of human migration patterns

Teaching Approach

- Learning-for-use

Teaching Methods

- Discussions
- Role playing

Skills Summary

This activity targets the following skills:

- 21st Century Student Outcomes
 - Learning and Innovation Skills
 - Communication and Collaboration
- Critical Thinking Skills
 - Analyzing
 - Applying
- Geographic Skills
 - Analyzing Geographic Information
 - Answering Geographic Questions
 - Organizing Geographic Information

National Standards, Principles, and Practices

NATIONAL COUNCIL FOR SOCIAL STUDIES CURRICULUM STANDARDS

- Theme 3:

People, Places, and Environments

- Theme 8:

• **Theme 9:**

Global Connections

NATIONAL GEOGRAPHY STANDARDS

• **Standard 9:**

The characteristics, distribution, and migration of human populations on Earth's surface

NATIONAL SCIENCE EDUCATION STANDARDS

• **(9-12) Standard A-1:**

Abilities necessary to do scientific inquiry

• **(9-12) Standard A-2:**

Understandings about scientific inquiry

Preparation

What You'll Need

MATERIALS YOU PROVIDE

- Lined or ruled paper
- Pencils
- Pens

REQUIRED TECHNOLOGY

- Tech Setup: 1 computer per classroom, Projector, Speakers

PHYSICAL SPACE

- Classroom

GROUPING

- Large-group instruction
- Small-group instruction

BACKGROUND & VOCABULARY

Background Information

The Genographic Project studies where our early human ancestors came from and how humans came to populate the entire planet. Following genetic markers through thousands of human generations enables scientists to track our human origins back to Africa, and to determine the pattern of routes by which humans migrated around the world. As globalization continues, the patterns and pace of human migration will change, and more indigenous cultures will be lost. Speculating on the different methods a future Genographic Project might use 1,000 years from now can help students understand the importance of the Genographic Project and its timing.

Prior Knowledge

["genetic markers","The Genographic Project"]

Recommended Prior Activities

- None

Vocabulary

Term	Part of Speech	Definition
genetic marker	<i>noun</i>	gene that is located on a specific place on a chromosome.
globalization	<i>noun</i>	connection of different parts of the world resulting in the expansion of international cultural, economic, and political activities.
human migration	<i>noun</i>	the movement of people from one place to another.
indigenous culture	<i>noun</i>	languages, belief systems, social structures, institutions, and material goods of people who are native to a specific geographic area.

For Further Exploration

Articles & Profiles

- [National Geographic Explorers: Spencer Wells, Geneticist](#)

Books

- [Wells, Spencer. *The Journey of Man: A Genetic Odyssey*. New Jersey: Princeton University Press, 2002. Print.](#)
- [Wells, Spencer. *Deep Ancestry: Inside The Genographic Project*. Washington, D.C.: National Geographic, 2006. Print.](#)

Websites

- [National Geographic: The Genographic Project](#)

FUNDER



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