



A Country's Shape Is More than Its Borders: Population Pyramids

Author	Dennis Rees
Grade Level	6-8 and High School
Duration	1-2 class periods

National Standards

GEOGRAPHY
Element 1: The World in Spatial Terms
 How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

Element 2: Places and Regions
 4. The physical and human characteristics of places.

Element 6: The Uses of Geography
 17. How to apply geography to interpret the past.
 18. How to apply geography to interpret the present and plan for the future.

AZ Standards

ELA
Reading
Integration of Knowledge and Ideas
 6.RI.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
 11-12.RI.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in print in order to address a question or solve a problem.

Writing
Production and Distribution of Writing
 6.W.4, 7.W.4, 8.W.4 and 11-12.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Arizona Social Science Standards

GEOGRAPHY
The use of geographic representations and tools helps individuals understand their world.
 6.G1.1 Use and construct maps, graphs, and other representations to explain relationships between locations of places and regions
 7.G1.1 Use and construct maps and other geographic representations to explain the spatial patterns of cultural and environmental characteristics.
 8.G1.1 Use geographic tools and representations to analyze historical and modern political and economic issues and events.
 HS.G1.1 Use geographic data to explain and analyze relationships between locations of place and regions.
 HS.G1.2 Use geospatial tools and related technologies to construct relevant geographic data to explain spatial patterns and relationships

Human-environment interactions are essential aspects of human life in all societies.
 8.G2.2 Evaluate how political, social, and economic decisions throughout time have influenced cultural and environmental characteristics of various places and regions.
 HS.G2.2 Evaluate how political and economic decisions throughout time have influenced cultural and environmental characteristics of various places and regions.

SIOP Elements		
Preparation Adapting content Linking to background Linking to past learning Strategies used	Scaffolding Modeling Guided practice Independent practice Comprehensible input	Grouping Option Whole class Small groups Partners Independent

A Country's Shape is More than Its Borders: Population Pyramids

Integrating Processes Reading Writing Speaking Listening	Application Hands on Meaningful Linked to objectives Promotes engagement	Assessment Individual Group Written Oral
---	--	---

Arizona ELP Standards

Grade 6-8

Basic

Listening and Reading

Standard 1 By the end of each language proficiency level, an English learner can construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.

B-1: determine the central idea or theme and explain how they are supported by using some text evidence.

B-2: recount specific details and information in a variety of texts.

B-3 identify and describe similarities and differences between multiple texts.

Speaking and Writing

Standard 4 By the end of each language proficiency level, an English learner can construct grade appropriate oral and written claims and support them with reasoning and evidence.

B-1: construct a claim about a topic or text.

B-2: supply a reason that supports the opinion and is based on some textual evidence.

B-3 use grade appropriate words and phrases.

B-4: provide a concluding statement to an opinion.

Standard 5 By the end of each language proficiency level, an English learner can adapt language choices to purpose, task, and audience when speaking and writing.

B-1 demonstrate awareness of the need to adapt language choices according to purpose, task, and audience.

B-2: use general academic and content specific words, phrases, and phrases to express ideas.

Grade 9-12

Basic

Listening and Reading

Standard 1 By the end of each language proficiency level, an English learner can construct meaning from oral presentations and literary and informational text through grade appropriate listening, reading, and viewing.

B-1: determine the central idea or theme and explain how they are supported by using text evidence.

B-2: recount a text including specific details and information.

B-5: utilize visual information to understand the text.

Speaking and Writing

Standard 4 By the end of each language proficiency level, an English learner can construct grade appropriate oral and written claims and support them with reasoning and evidence.

B-1: construct a claim about a topic or text.

B-2: introduce the claim and provide logically ordered reasons or facts that effectively support the claim.

B-4: provide a concluding statement to an argument.

Standard 5 By the end of each language proficiency level, an English learner can adapt language choices to purpose, task, and audience when speaking and writing.

B-1 demonstrate awareness of the need to adapt language choices according to purpose, task, and audience.

B-2: use general academic and content specific words, phrases, and phrases to express ideas.

Overview

A Country's Shape is More than Its Borders: Population Pyramids

Demographics is the study of population characteristics. Population pyramids examine the age and gender characteristics of a country's population. Understanding how to read and interpret a population pyramid will give students the opportunity to examine a country's past, present, and implications for the future through its population.

Purpose

In this lesson, students will learn how to read and interpret population pyramids and then write a paragraph explaining the implications of these demographics. This lesson included adaptations for diverse learners (ELLs).

Key Vocabulary

population - the number of people living in an area
scale – a range of number used to show size of something
rapid – fast
negative - less than before
demographics – characteristics of a group of people (age, income, gender)

Materials

- Projection device
- A Country's Shape is More Than Its Borders reading
- Highlighted Copy of the reading
- Practice Sheet
- Population Pyramid Assessment and Answer Key
- Writing Prompt and Scoring Guide for the Paragraph
- Population Pyramids for France, India, and Australia

Objectives

The student will be able to:

- Interpret population pyramids.
- Describe implications of demographic patterns.

Procedures

Note: The materials in this lesson are for 2014. Knowing that a census occurs in 2020, this lesson will be updated when the 2020 data is available.

1. Project the population pyramid for the U.S. Ask students if they have ever seen such a graph. Ask what they notice about the graph.
(Preparation: Linking to past learning)

2. Introduce key vocabulary by projecting the Vocabulary Cards. Discuss and give examples. Have students divide their paper into 6 sections on each side; copy the words and definitions onto the paper with one word and definition per square leaving room for an illustration. In pairs, have students illustrate each word. **(Grouping: Partners; Application: Hands on, Scaffolding: Comprehensible input)**
3. Distribute the A Country's Shape is More Than Its Borders reading and read aloud as a class. Instruct students to highlight information they feel is important. After each paragraph, have students share what they highlighted. Display the Highlighted Copy of the reading and allow time for students to make adjustments and to ask questions. **(Scaffolding: Modeling, Comprehensible input)**
4. Demonstrate the shape each pyramid using a vertical rectangle for slow growth, a triangle for rapid growth, and a diamond shape for negative growth. Have students copy this onto their copy of the reading or on the back of the vocabulary practice as a visual reminder of what each type of population pyramid looks like. **(Scaffolding: Modeling, Comprehensible input)**

SESSION TWO

5. Review key vocabulary and examples of the types of population pyramids from Session One. **(Preparation: Linking to past learning)**
6. Distribute the Practice Sheet for A Country's Shape is More Than Its Borders. Allow students to partner and use the reading to answer the questions. When they are done, have students share answers. Allow time to clarify any questions. **(Scaffolding: Comprehensible input, Integrated Processes: Reading, Listening)**
7. Distribute the multiple choice Population Pyramid Assessment. Allow students time to complete and collect for a grade. **(Assessment: Individual, Written)**
8. Distribute and explain the Writing Prompt and Scoring Guide for the Paragraph. Allow time to clarify any questions. Students may complete this in class or as homework. **(Assessment: Individual, Written)**

Assessment

Geography

The Population Pyramid Assessment can be graded for accuracy. A score of 80% or higher would be considered mastery.

A Country's Shape is More than Its Borders: Population Pyramids

ELA and Geography

The paragraph can be graded with the Scoring Guide. Mastery will be 80 points or higher on the Scoring Sheet.

Extensions

Students can update the population pyramids using the most current data and compare the changes if any.

Students could make population pyramids using the website. They will need to create a free account.
<https://vizzlo.com/create/population-pyramid>

Research US population pyramids for different states to do an analysis of the demographics of our

country. <https://usafacts.org/articles/population-pyramids-every-state/>

Assign students to research other countries' demographics.

<https://www.populationpyramid.net/world/2019/>

Sources

National Geographic Society 1998 Geography Awareness Week packet

Geography: Focus on Economics
National Council on Economic Education

<https://www.census.gov/>