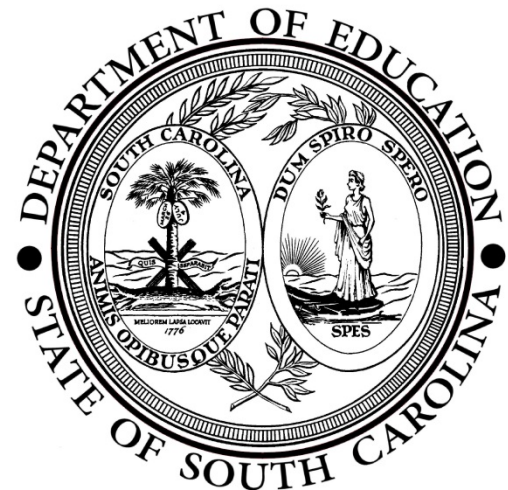


Grade 9

Lowering Infant Mortality/Raising Development Status

Instructional Resource for the
South Carolina Social Studies Academic Standards

South Carolina Department of Education



Office of Standards and Learning

June 2017

9th Grade Geography: Population Studies/Demographics “Lowering Infant Mortality/Raising Development”

This lesson focuses on the social studies skills of cause and effect, reading charts and graphs (population pyramids), and reading a historical narrative, as well as the literacy skill of citing evidence. Students will compare researched demographic data from two time periods, construct a population pyramid, investigate the cause of the divergence in data, and construct a hypothesis explaining their results. These are critical thinking and problem solving skills as defined by the Profile of the South Carolina Graduate. The purpose of the lesson is for students to connect a geographical area’s lowered infant mortality rate and maternal mortality rate with a decreased birthrate, culminating in an increase in development as demonstrated through population pyramids and the case study of the work of Maude Callen as a South Carolina midwife. This lesson should take 2 days of 55 minutes per day instruction.

Standard(s) and/or Indicator(s)

There are two types of standards/indicators for each instructional plan. Targeted standards are standards/indicators that will be taught and assessed throughout the unit while embedded standards are those that have been spiraled through the curriculum and will be present, but not all will be formally “taught.” ELA standards can be listed as embedded standards in addition to other Social Studies standards being spiraled. Assessment of these indicators/descriptors (as applicable) will be included in both summative and formative assessments as they have been previously taught.

Targeted:

World Geography Standard WG-3: The student will demonstrate an understanding of the characteristics, distribution, and migration of human populations on Earth’s surface. Enduring Understanding Social, political, and ecological issues require an understanding of the characteristics, distribution, and movement of human population.

WG-3.1 Evaluate demographic patterns to predict trends in the spatial distribution of population using graphs, maps, and other models (e.g., Hispanic population growth in the United States).

WG-3.2 Analyze population issues and policies, including pro-natal and anti-natal policies of different countries and their effects on population characteristics (e.g., China’s one-child policy).

Embedded:

Reading - Informational Text (RI) Principles of Reading

Standard 1: Demonstrate understanding of the organization and basic features of print.

Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.

Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence and investigating multiple interpretations.

5.1 Cite significant textual evidence in order to articulate explicit meanings and meanings that can be inferred from the text; identify multiple supported interpretations.

Standard 6: Summarize key details and ideas to support analysis of central ideas.

6.1 Determine a central idea of a text and analyze its development over the course of the text including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.

“I Can” Statements

“I Can” statements are learning targets of what students need to know and be able to do as it relates to the standard/indicator(s).

- *Day 1: I can analyze demographic data and identify a region’s birthrate, mortality rate, and infant mortality rate. (WG 3.1-2)*
- *Day 2: I can analyze population pyramids and determine the population growth status and development status of a region (WG 3.1-2)*

Essential Question(s)

The following are **suggested** essential questions that will help guide student inquiry.

- What is the relationship between infant mortality rate and birthrate, mortality rate, and development?
- How can a community lower infant mortality?
- What are the long term demographic effects of lowered infant mortality on a population?
- How does a lowered infant mortality rate affect a region’s population structure?

Academic Vocabulary

Some students may need extra support with the following academic vocabulary in order to understand what they are being asked to do. Teaching these terms in an instructional context is recommended rather than teaching the words in isolation. An appropriate time to deliver explicit instruction for the terms is during the modeling process. Ultimately, the student should be able to use the academic vocabulary in conversation with peers and teachers.

- Infant mortality rate
- Crude birth rate
- Mortality rate
- Economic development

- Midwifery
- Population pyramid
- Demographics
- Demographic transition

Prior Knowledge

In the prior unit students learned the basic definitions of region, birth rate, mortality rate, demographics, and infant mortality rate. Students previously learned how to construct and analyze an age/gender ratio chart known as a population pyramid. Students learned the demographic hazards of overpopulation on a region. Students also learned the leveling effects of equal birth and mortality rates. (WG 3.1-2)

Subsequent Knowledge

Using their knowledge students will be able to identify how other demographic factors (i.e. life expectancy, maternal mortality rates, etc.) as well as socio-economic factors such as education access affect population growth and development status. (WG 3.1-2)

Potential Instructional Strategies

Day 1: “I Can” Statement: I can analyze demographic data and identify a region’s birthrate, mortality rate, and infant mortality rate. (WG 3.1-2)

Warm Up/Hook – Day 1: Definitions/examples of crude birth rate, mortality rate, and infant mortality rate. Day 2: Discussion/reflection on ways a country can develop (from the PRB video)

Materials:

- Multimedia presentation system...i.e. keynote or PowerPoint demonstrated on an Active Panel, projector, or similar device
- Student notebooks (digital or tradition)
- 2018 South Carolina Calendar digital link/or printed copy (February)

Procedure (Day 1): Students will participate in a Socratic style review of the key vocabulary term in the warm up activity. Students will actively participate in a lecture/discussion model demonstrating applicable effects on population growth and development models shown through varied examples of birth rate, mortality rate, and infant mortality rate. Students will view video from the Population Reference Bureau detailing the methodology required to lower the birth rates and improve development

- <https://www.youtube.com/watch?v=OpOEHjndywk&feature=player>
- <https://www.youtube.com/watch?v=d1dlAtvuSFLM>
- <https://www.youtube.com/watch?v=BNSC10BksBs>
- <http://www.youtube.com/watch?v=RLmKfXwWQtE>
- <http://www.worldometers.info/world-population/>

Students will respond to a reflective essay prompt before exiting the classroom.

Reflection: (Socratic discussion orally in large group setting)

- What are the ways in which a region can develop?
- What are the demographic impacts of a high infant mortality or maternal mortality rate?
- How would this data appear in a population pyramid?

Day 2: “I Can” Statement: I can analyze population pyramids and determine the population growth status and development status of a region. (WG 3.1-2)

Procedure (Day 2): Students will individually read the February section of the SC2018 calendar regarding Maude. E. Callen. Students will then brainstorm in groups of 2-3 at least 5 ways in which Cullen’s actions could have influenced the infant mortality rate, birth rate, and mortality rate in South Carolina during her lifetime. Students will access the Census Bureau Dataset to gather, analyze demographic data, and construct population pyramids for South Carolina in 1960 and 2010 to prove or disprove Cullen’s impact on South Carolina’s demographic transition. Students will complete an exit essay report prior to class dismissal. Students could participate in a Socratic discussion as a whole group or write a summary reflection after the lesson focusing on the reflection prompts below.

Reflection:

- How did Cullen impact South Carolina?
- In what ways are South Carolina during the Depression and Rwanda today similar?
- How was South Carolina’s demographic transition altered by lowering infant mortality and maternal mortality rates?
- How could Callen’s impact on South Carolina be used to devise a plan for Rwanda?
- How will South Carolina and Rwanda change if they continue decreasing birthrates?

Potential Assessment Task
<p>Day 1: <i>Exit Essay (WG 3.1-2 RI 6.1)</i></p> <p>Day 2: <i>Exit Essay (WG 3.1-2 RI 6.1)</i></p>
Resources
<p>Rubenstein, J.M. (2015). <i>The cultural landscape: an introduction to human geography</i> (12th ed.). Upper Saddle River, NJ: Pearson.</p> <p>SCASA Superintendents Roundtable. (2015). Profile of the South Carolina graduate. [PDF document]. Retrieved from http://ed.sc.gov/newsroom/profile-of-the-south-carolina-graduate/</p> <p>South Carolina Department of Education. (2018). South Carolina African American history calendar. [PDF document]. Retrieved from http://scafricanamerican.com/wp-content/uploads/2017/10/SCAAHCCALEDAR_2018_web.pdf</p> <p>South Carolina Department of Education. (2011). South Carolina social studies academic standards [PDF document]. Retrieved from https://ed.sc.gov/scdoe/assets/file/agency/ccr/Standards_Learning/documents/FINALAPPROVEDSSStandardsAugust182011.pdf</p> <p>South Carolina Department of Education (2012). Support documents for social studies world geography [PDF document]. Retrieved from https://ed.sc.gov/scdoe/assets/file/agency/ccr/Standards-Learning/documents/WorldGeographySupportDocuments.pdf</p>

Population Geography Information

- Worldwide Population Growth!
- Population Growth
 - Over 7 Billion people live on Earth!
 - Estimated to reach 9 Billion by 2050!
 - Growth Rates
 - Population is growing rapidly because **birthrates** are higher than **mortality rates**
 - **Birthrate** = number of births per 1000 people in a population
 - **Mortality Rate** = number of deaths per 1000 people in a population
 - Healthcare, hygiene, scientific knowledge etc. = less deaths
 - Less developed countries (**LDCs**) tend to have more babies
 - Higher **fertility rates** – average number of children a woman will have
 - Cultural reasons
 - Agricultural necessity
 - Lack of education, birth control, women's rights
 - Population Pyramids
- Bar graphs that show sex and age levels for a place
- LDCs have more young people and are shaped like triangles
- **MDCs** (more developed countries) are rectangles and have more equal age groupings
- Population Pyramids
- Pyramids can, based on their shape, show:
 - Population growth
 - Rapid, steady, slow, no, or declining growth
 - Economic development
 - MDC or LDC
- **Growth in Developed/More Developed Countries (MDCs) vs. Developing/Less Developed Countries (LDCs)**

- <http://www.youtube.com/watch?v=RLmKfXwWQtE>
5 min Pyramid Explanation: Russia, Nigeria, Canada, Rwanda, Japan
- PRB Video
- http://www.youtube.com/watch?v=OpOEHjndywk&feature=player_embedded
- [Demo Data](#)

Census Pyramid Activity

1. At www.census.gov, select "American FactFinder" from the bottom menu
2. Enter South Carolina into the Community Facts search box. Click GO!
3. Click **1960** Census – Population, Age, Sex, Race, Households and Housing...highlighted in blue
4. Copy the data (**Round numbers to nearest 10,000**) and create your pyramid below.

Ages	Males	Females
Total Population		
Under 5 years		
5 to 9 years		
10 to 14 years		
15 to 19 years		
20 to 24 years		
25 to 29 years		
30 to 34 years		
35 to 39 years		

40 to 44 years		
45 to 49 years		
50 to 54 years		
55 to 59 years		
60 to 64 years		
65 to 69 years		
70 to 74 years		
75 to 79 years		
80 to 84 years		
85 and over		

*Determine the value of each = _____ people

1. At www.census.gov, select "American FactFinder" from the bottom menu
2. Enter a U.S. State into the Community Facts search box. Click GO!
3. Click **2010** Census – Population, Age, Sex, Race, Households and Housing...highlighted in blue
4. Copy the data (**Round numbers to nearest 10,000**) and create your pyramid below.

Ages	Males	Females
Total Population		
Under 5 years		
5 to 9 years		
10 to 14 years		
15 to 19 years		
20 to 24 years		
25 to 29 years		
30 to 34 years		
35 to 39 years		
40 to 44 years		
45 to 49 years		
50 to 54 years		

55 to 59 years		
60 to 64 years		
65 to 69 years		
70 to 74 years		
75 to 79 years		
80 to 84 years		
85 years and over		

*Determine the value of each = _____ people

Exit Essay

Exit Essay:

Name: _____

I learned that...

I would like to know more about...

If I were the teacher my essay prompt on this lesson would be....