“Lunger’s” Life – So You Like Breathing: Tuberculosis in Early Arizona History

This lesson is designed to provide students the opportunity to examine aspects of the migration to Arizona for tuberculosis treatments.

Author: Julie A.M. Leckman
Grade Level: 7
Duration: 2-3 class periods

National Geography Standards

ELEMENT FOUR: HUMAN SYSTEMS
9. The characteristics, distribution, and migration of human populations on earth’s surface.

Arizona Geography Standards

Grade 7
Concept 4: Human Systems
PO 1. Discuss the implications of the demographic structure of places and regions.
PO 2. Describe the push and pull factors (e.g., need for raw materials, enslavement, employment opportunities, impact of war, religious freedom, political freedom) that cause human migrations.
PO 3. Describe the effects of human migration (e.g., imperialism, quota system, changing of political boundaries, multiculturalism) in the U.S. and regions of the world.

Other Arizona Standards

Grade 7
Strand 1 American History
Concept 1: Research Skills for History
PO 1. Construct charts, graphs, and narratives using historical data.
PO 2. Interpret historical data displayed in graphs, tables, and charts.

Concept 7: Emergence of the Modern United States
PO 2. Describe how the United States was positively and negatively affected by factors and events resulting from the arrival of a large numbers of immigrants.
PO 5. Analyze the impact of industrialization on the United States:
   a. rural to urban migration
   b. factory conditions
   c. unions
   d. influence of big businesses

Math Common Core Standards

Standards for Mathematical Practice (MP)
7.MP.3. Construct viable arguments and critique the reasoning of others.

ELA Common Core Standards

Reading Standards for Literacy in History/Social Studies 6–12
Key Ideas and Details
6-8.RH.1 Cite specific textual evidence to support analysis of primary and secondary sources.
Integration of Knowledge and Ideas
6-8.RH.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
Range of Reading and Level of Text Complexity
6-8.RH.10 By the end of grade 8, read and comprehend history/social studies texts in the
Lunger’s Life – So You Like Breathing: Tuberculosis in Early Arizona History

Overview
This lesson explains how the Arizona population changed during the 1900s because of migration for tuberculosis (TB) treatments. The lesson outlines living conditions, locations of population, and treatments provided. The lesson also provides historical data relating to the migration to Arizona for tuberculosis treatments. The students will make meaning of the data in relation to its historic and current value.

Purpose
In this lesson students will gain a better understanding through the use of data and statistics of how the West and people’s lives changed because of TB.

Materials
- “Lunger’s” reading assignment
- What Do We Know? handout
- Lungers Lab Sheet
Lunger’s Life – So You Like Breathing: Tuberculosis in Early Arizona History

- Lungers Lab Sheet –Answer Key
- Lunger Rubric
- Arizona’s Cities and Counties map
- Circle graph blackline
- Graph paper
- Paper, pencil
- Calculators – optional
- Colored Markers (for extension activity, avoid light colors)

Objectives
The student will be able to:

1. Make conjectures about changes and influences on Arizona populations and from historical data.

2. Make visual representations from the data.

Procedures

Students should have experience with fractions, percents, and decimals.

SESSION ONE
1. As a whole class, read the “Lungers” reading assignment.

2. Break children into small groups (3-4 students). Give each group the Arizona Cities and Counties map, “What Do We Know,” and “Lunger Lab Sheet.”

3. Allow students to work in groups for the rest of the period. Allow plenty of time for this portion of the activity. Provide the Lunger Rubric, so students will understand how they will be assessed.

SESSION TWO
1. Students should continue to create their visual representation and their letter to the Arizona Historical Society. The completion of this assignment might be given as a homework assignment if students are not done by the 2nd session.

SESSION THREE
1. Have each group share their findings with the rest of the class. Have classmates grade each other and/or do the self-assessment.

Assessment

Math Assessments
The Lunger Lab sheet question #2 (a-e) can be graded. Reasonable answers for 4 out of the 5 questions are considered mastery.

The visual representation should be graded according to the Lunger Rubric. Mastery is considered 10 out of the 12 points.

Geography Assessment
The letter to the Arizona Historical Society should contain facts relating to the statistics and the Arizona map (20 points) and why this information is important for students to know (5 points). Mastery is considered 20 points or higher.

Extensions

1. Tuberculosis stigma may have influenced the population distribution in Arizona. Have the students consider how the people of “Lunger” cities would encourage people to move there after the epidemic had diminished. Have them create brochures that “sell” the benefits of their city.

2. Have the students color code the Arizona Cities with TB statistics map. (For instance, marking cities with the highest death rate per capita in red, and so on.)

Sources
A special thanks to Liz Williams and Marty Huber at the Arizona CDC.
Lunger’s Life – So You Like Breathing: Tuberculosis in Early Arizona History
Kay McClain at Vanderbilt University

http://www.library.arizona.edu/branches/SPC/PAMS/health.html

http://www.azstarnet.com/~comstck/comhst08.htm

http://www.jantb.com/historytb1.htm

http://www.demog.berkeley.edu/~andrew/1918/


http://ag.arizona.edu/alumni/oralhistory/CLakin.PDF

http://www.niaid.nih.gov/newsroom/focuson/tb02/story

http://www.azstarnet.com/~comstck/artl40.htm

http://www.cosmosclub.org/journals/1996/kraus.e.html
http://www.ci.tucson.az.us/planning/decennials.pdf