

Using Reliable Sources in the Search for Statistics

Sarah Lerdal – School not available

Grade Level (Req.): 7th-12th grade	Content Area (Req.): Social Studies	Unit (Opt.):
<p>Connections to Other Disciplines (Opt.):</p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>		
Time Frame (Req.): 1 or 2 class periods	Goal (Req.): Students will understand how to use statistical information.	
	Objective (Req.): Students will be able to locate specific information on the US Census and CIA World Factbook sites. Students will be able to create a visual of the statistical information by utilizing Microsoft Excel, Students will, in written form, be able to compare and contrast two U.S. cities and two world countries.	
<p>Materials Needed (Req.):</p> <ul style="list-style-type: none"> <li>• Computers for each student (or for each pair)</li> <li>• Introduction quiz</li> <li>• Internet access to <a href="http://www.census.gov">www.census.gov</a> and <a href="https://www.cia.gov/library/publications/the-world-factbook/">https://www.cia.gov/library/publications/the-world-factbook/</a></li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	<p>New Vocabulary (Opt.):</p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	
<p>Anticipatory Set/Introduction [Inquiry Question is required] (Req.): In the Social Sciences, it is important to use updated statistics to get some points communicated. As an introductory lesson, this activity familiarizes students with two important statistical databases: US Census and CIA World Factbook. How much do you know about world statistics?</p>		
<p>Instructional Sequence/Procedure (Req.):</p> <ol style="list-style-type: none"> <li>1. Students will complete a short introductory (hook) quiz: Introductory quiz regarding Census site: 1) What percentage of the people in the United States have at least a bachelor’s degree? 2) What percentage of people in the U.S. have a high school diploma? 3) Do you think the percentage of people in the U.S. that have a HS diploma is higher or lower than the percentage of people in Wellman that have a HS Diploma? 4) How many miles does the average Kalona resident travel to work? 5) What is the average age of someone living in Wellman?</li> <li>2. Using the U.S. census bureau website, we will check the students’ answers together.</li> <li>3. The teacher will demonstrate how to use the site, and students will take notes for future use.</li> <li>4. Students will complete another short quiz over country questions: Introductory quiz regarding CIA World Factbook site: 1) Amongst all countries in the world, where does the U.S. rank in terms of population? 2) What percentage of Americans are literate? 3) What percentage of Kenyans are literate? 4) What percentage of its Gross Domestic Product does Canada spend on its military?</li> </ol>		

5. Together, the class will check the answers by locating them on <https://www.cia.gov/library/publications/the-world-factbook/>.
6. Students should take notes on how to use this site as well.
7. Together with the teacher's assistance, the class should find two statistics to compare. Once that is completed, the teacher should show students how to use Microsoft Excel to input the data and create a bar or pie graph.
8. The students should have about 25-30 minutes to locate information and complete their visuals. Here are their guidelines: Each student should use the census to compare 3 demographics from any two cities of their choosing. They must also use the World Factbook to compare 3 demographics from any two countries. Once they have the information, they should use Excel to create a graphic. The graphic must have all axes labeled, along with a title. The sheet should be printed, as tomorrow all students will present their findings.
9. Wrap-up: Journal write: In paragraph form, students will respond to the following prompt – Describe some of the interesting information you found while investigating these sources. Make at least two inferences about the information.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.

Formative Evaluation (Req.): Excel statistical graph, journal response

Assessment (Req.): Test

Iowa Core Curriculum Standards Used (Req.):

- Geography, grade 9-12: Understand the use of geographic tools to locate and analyze information about people, places, and environments.
- Technology Literacy (21st Century Skills), grade 9-12: Apply digital tools to gather, evaluate, and use information.
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Common Core Curriculum Standards Used (Opt.):

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NGS Standards Used (Req.):

- How to use maps and other geographic representations, tools, and technologies to acquire,

process, and report information from a spatial perspective

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Five Themes of Geography Used (Req.):

- Place
- Human-Environmental Interaction
- Region
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School District Standards and Benchmarks (Opt.):

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21<sup>st</sup> Century Universal Constructs (Opt.):

Other Disciplinary Standards (Opt.):

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Other Essential Information (Opt.):

Other Resources (Opt.):

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