UTAH

Giant Traveling Map Lesson

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UTAH ACADEMIC STANDARDS / SUITABLE DISCIPLINES:

UT Standard 2.1: Students will explain the causes and lasting effects of the Mormon migration to Utah. (history)

UT Standard 2.2: Students will compare the causes and lasting effects of various non-Mormon groups' migrations to Utah. (history)

UT Standard 2.3: Students will use geographic inquiry to explain patterns in the settlement of Utah and the subsequent trends in urbanization, referring to a range of communities as case studies. (geography)

UT Standard 2.5: Students will construct an evidence-based argument to explain how the development of transportation and communication networks across the state changed Utah's economy and human geography. (economics, geography)

UT Standard 2.6: Students will explain how agriculture, railroads, mining, and industrialization created new communities and new economies throughout the state. (economics, geography)

UT Standard 3.3: Students will describe the effects of events, movements, and innovations on Utah's economic development, such as the organized labor movement, farming and industrial improvements, the World Wars, and the Great Depression. (economics)

UT Standard 4.5: Students will describe the historic and present management of natural resources and make recommendations for natural resource management in the future. (geography)

UT Standard 5.2: Students will use geographic tools and resources to investigate a current issue, challenge, or problem facing Utah or their community, and propose a viable solution. (geography)

UT Standard 5.3: Students will use data regarding the key components of Utah's economy to make recommendations for sustainable development. (economics)

UT Standard 5.4: Students will use recent population growth and other demographic trends to make predictions about Utah's growth, and create and defend a public policy in response to those trends. (economics)

OBJECTIVES:
Participants will:

- Learn about major cities in Utah during three different historical periods
- Practice using grids and cardinal directions to locate cities in the state
- Practice using latitude and longitude lines (if appropriate for grade level)
- Analyze change over time
- Discuss topics such as the census (source of data), distribution of resources in the state, and implications of changes in population for political representation at various levels of government

RECOMMENDED GRADES: Fourth through adult

TIME NEEDED: 20 to 25 minutes, depending on whether discussion is held as part of the map visit or at a later time

MATERIALS:

- Compass rose
- 15 flat markers
- 15 tall cones
- 15 shorter, flexible cones
- 2 to 3 plastic chains for dividing state
- List of Utah cities by population for 1890/1950/2010 (some cities are not on the map and will need to be found by using latitude and longitude lines at the sides of the map – attached)

PREPARATION:

- Discussion about the reasons why people choose to live in different places
- Review of historical settlement patterns in Utah
- Development of predictions by participants about where they think people might live

RULES:

- Shoes are not allowed on the map. Please have participants remove shoes before walking on the map.
- Participants should wear socks on the map.
- No writing utensils on the map.
- No sliding on the map.

DIRECTIONS:

Using the list of cities and colored cones, participants will locate the fifteen most populous cities in Utah for the years 1890, 1950, and 2010. They will then look for trends based on the east/west axis and north/south axis, speculating about the factors that contributed to populations shifting along the Front Range.

On the map:

1. Provide participants with an overview about exploring the top fifteen populated places in Utah in 1890, 1950, and 2010 using U.S. Census data as a source of information.
2. Ask participants about the kinds of jobs they imagine people were doing in Utah in 1890. Ask them to predict where people might be living.
3. Take 15 of the round makers. Pass them out to 15 of the participants (usually just ask them to take one and pass the remainder along).
4. Read the 15 largest cities one at a time, going down the row of participants and asking the participants to place the marker on the dot identifying the town (star in the case of Salt Lake City).
5. Remind the participants that they can provide assistance to their classmates or colleagues about the location of a city based on cardinal directions or the grid. They should avoid shouting "over there", "this way", "left/right", etc. From the beginning of the lesson, model the use of cardinal directions or the grid. Participants may use the compass. Place NSEW labels on the walls or around the map if necessary.
6. After the flat, round markers are all on the map, ask the participants to interpret the new information that has been added to the map. (e.g. Most of the cities were settlements created by Brigham Young in the 1840s-1850s and Mormon immigrants were assigned to settle and live there. Population clusters around the Wasatch Front, where runoff water is available for irrigated farming in the valleys. Ogden is the second largest city because of the railroads {Union and Central Pacific. Union Station was dedicated December 31 in 1889. It had 33 hotel rooms, a restaurant, and barbershop}. Some people live in the mountains {Park City} because of the mining jobs available there. None of the largest cities in 1890 are on the western or southern deserts or eastern plateaus. A few of the cities are "connector" cities built to supply wagon transportation between Salt Lake City and St. George. Mt. Pleasant was a stop on the Rio Grande Western Railway in 1890 and had lumber mills. The railroad also went through Manti in 1890, and the Manti Temple of the Church of Jesus Christ of Latter-day Saints was completed in 1888. It was the third completed in Utah, after St. George and Logan.)
7. Move on to the 1950 census and ask participants what jobs people were doing then. Ask them to predict where people might be living.
8. Pass out the 15 larger cones. Assign individual participants to place their cones on the 15 cities. For cities in the top 15 in 1890 and 1950, have participants pick up the red marker and place it on top of the cone.
9. After the larger cones are all on the map, repeat Item 6 above, asking them to think about what has changed and why. Ask how many cities that were in the top 15 in 1890 are in the top 15 in 1950.
10. Repeat process with 2010 census data and smaller or flexible orange cones. Have participants put the orange cone on top of the flat, round marker creating a pyramid, or on top of the large cone if the city was in the top 15 only in 1950.

NOTES:

Tell participants that at the beginning of Utah history farming/agriculture was a main industry in the state. Some other industries were forestry (lumber) and mining. In the 1890s total farmland increased more than threefold, from 1.3 million to 4.1 million acres. Ask what other factors might have influenced where people settled.

Ask participants:

Q. How many of the fifteen largest cities were located near a major river or freshwater lake?
A. About 5. Although the Jordan River flows north near Salt Lake City, it is not located on the river.

Q. How many of the cities were located just west of the Wasatch Range?
A. 10

Q. For what reasons did this pattern exist?
A. Population clusters around the Wasatch Front, where runoff water is available for irrigated farming in the valleys.

Q. What was the demographic make-up of the population?
A. According to the 2010 Census, the percentage of males was 50.1%; in 1950 it was – 50.5%; in 1890 it was 51.8%.

In 1890, the racial and ethnic make-up was reported as 98.9% white, .2% Black, .6% Native American, and .3% Chinese;

In 1950, the racial and ethnic make-up was reported as 98.2% white, .4% black, .6% Native American, .6% Japanese, and .1% Chinese in 1950;

In 2010, the racial and ethnic make-up was reported as 88.6% White or European, 2.8% Asian-American, 1.8% American Indians and Alaskan Natives, 1.6% African American, 1.3% Pacific Islander, 6.9% Some other race, 13% Hispanic/Latino (of any race).

24.7-% reported being born out of the state in 1890; in 1950 that dropped to 4.3%.
The population density of Utah was 2.5 mi^2 in 1890, 8.1 mi^2 in 1950, and 32.6 mi^2 in 2010.

Q. How did Utah compare with the rest of the United States?
A. Consider how much the population of Utah increased compared to the increase in the United States. What percentage of people in the United States lived in Utah during the various time periods?

	1890	1930	2010
Utah	210,779	2,563,953	5,290,000
United States	62,979,766	123,202,624	308,745,538

In 1890, the population of all of Utah was 210,779. That was a 66.7% increase over the population in 1880. During the same decade, the population of the United States increased by 25.5%.

After adding cones from the 1950 Census, ask participants to consider how many of the new top fifteen largest cities are near population centers?

Q. How many cities in the new top fifteen in 1950 were also in the top fifteen in 1890?
A. 9

Q. What percentage is nine of fifteen?
A. 60%

Q. How many cities in the new top fifteen in 2010 were also in the top fifteen in 1890?
A. Four: Salt Lake City, Provo, Ogden, Logan

Q. Where are most of the large cities in Utah located in 2010? Why?
A. People want to be near Salt Lake City, but not live in the city.

Q. Are Salt Lake City and suburbs significantly more concentrated than they were in 1890?
A. Depending on which suburbs are counted as being part of Salt Lake City, the concentration of population in Salt Lake City is much more concentrated than what is was in 1890.

Conclusion

Tell participants that the total population of the fifteen largest cities in 1890 was approximately 94,700 and that the total of the top fifteen cities in 2010 is 1,244,500.

Now ask participants:

Q. Generally speaking, how would you describe the majority of population movement and growth in Utah over the past one hundred years?
A. More concentrated along the center of the Wasatch Front (Salt Lake and Utah Counties) with outliers in Logan and St. George.

Q. Why? What factors have encouraged people to move and live in cities?
A. The proportion of people involved in agricultural production has decreased significantly. Resources such as minerals and timber have been depleted. There are generally better and more varied educational opportunities and employment prospects in cities.

MODIFICATIONS:

For younger participants, focus on the map key and compass rose. For older participants, invite them to have more autonomy in the lesson and incorporate additional mathematical concepts.

EXTENSIONS:

Consider using the census data in math lessons. How much larger is Salt Lake City today than in 1890? How much larger is Salt Lake City than the 15th largest city? How concentrated is the population in Salt Lake City over time? How did the population of your city change?

For use with the GeoCivics activities (https://www.uccs.edu/geocivics/), invite participants to think about the current configuration of United States Congressional Districts in the state. Ask them to remember the key characteristics of how districts are drawn (equal population and contiguous). Invite them to pretend that their state has just two Congressional Districts; ask two people to pick up one of the chains and divide the state generally in half by population; invite two more people to divide the state into four districts (they may choose to move the original chain, or not). Discuss why some districts would likely be smaller in area than others. If appropriate, determine how to divide the state into state senate districts.

Consider when a giant floor map is a good tool for understanding geographic phenomena and when other tools (paper maps, online maps) might be more appropriate.

NOTE:

Thanks to National Geographic's Giant Traveling Maps team for the inspiration for this lesson, which is based on "People on the Move", a lesson for the North America Giant Map.

RESOURCES:

Utah Education Network
https://www.uen.org/core/core.do?courseNum=6400

Utah State Board of Education
https://www.schools.utah.gov/curr/socialstudies

City	1890	√	City	1950	√	City	2010	√
State	**210,779**		**State**	**688,862**		**State**	**2,763,885**	
Salt Lake City	44,843		Salt Lake City	182,121		Salt Lake City	186,440	
Ogden	14,889		Ogden	57,112		West Valley City	129,480	40.7 N, 112.0 W
Provo	5,159		Provo	28,937		Provo	112,488	
Logan	4,565		Logan	16,832		West Jordan	103,712	
Park City	2,850	40.6 N, 111.5 W	Murray	9,006		Orem	88,328	
Springville	2,849	40.2 N, 111.6 W	Orem	8,351		Sandy	87,461	
Spanish Fork	2,686		Tooele	7,269		Ogden	82,825	
Bountiful	2,438		Brigham City	6,790		St. George	72,897	
Mt. Pleasant	2,254	39.5 N, 111.5 W	Springville	6,475		Layton	67,311	
Brigham City	2,139		Cedar City	6,106		Millcreek	62,139	40.7 N, 111.8
Payson	2,135		Price	6010		Taylorsville	58,652	40.7 N, 111.9 W
Nephi	2,034		Bountiful	6,004		South Jordan	50,418	40.6 N, 112.0 W
Manti	2,022	39.3 N, 111.6 W	Spanish Fork	5,230		Logan	48,174	
American Fork	1,942	40.4 N, 11.8 W	American Fork	5126		Lehi	47,407	
Pleasant Grove	1,926	40.4 N, 111.7 W	Clearfield	4,723		Murray	46,746	
*The following cities are not necessarily ranked in order, but are included because they were in the top 15 at one time			*The following cities are not necessarily ranked in order, but are included because they were in the top 15 at one time			*The following cities are not necessarily ranked in order, but are included because they were in the top 15 at one time		
Lehi	1907		St. George	4,562		Bountiful	42,552	
St. George	1,377		Payson	3,998		Spanish Fork	34,691	
Sandy	1,065		Lehi	3,627		Pleasant Grove	33,509	
Tooele	1,008		Layton	3,456		Tooele	31,605	
Cedar City	967		Pleasant Grove	3,195		Clearfield	30,112	
Price	209		Nephi	2,990		Springville	29,466	

US Census Data

	City	2020*	√
	State	**3,271,616**	
1	Salt Lake City	199,723	
2	West Valley City	140,230	
3	West Jordan	116,961	
4	Provo	115,162	
5	Orem	98,129	
6	Sandy	96,904	
7	St. George	95,342	
8	Ogden	87,321	
9	Layton	81,773	
10	South Jordan	77,487	
11	Lehi	75,907	
12	Millcreek	63,380	
13	Taylorsville	60,448	
14	Herriman	55,144	
15	Logan	52,778	

*2020 Census data is from Redistricting Data Hub using the State and Place level PL 94-171 datasets.
https://redistrictingdatahub.org/data/download-data/#state-menu