



How did the Transcontinental Railroad Change Utah's Economy?

GRADE 4

How did the Transcontinental Railroad Change Utah's Economy?

By Rebecca Kirkman

Summary

Students will read about how the railroad changed Utah's economy. The students will write a letter as an immigrant farmer or miner to their friends and families about how the railroad has changed Utah's economy.

Main Curriculum Tie

UT Standard 2.6

Students will explain how agriculture, railroads, mining, and industrialization created new communities and new economies throughout the state.

Time Frame

One to two time periods that run 45 minutes each

Group Size

Individual or pairs

Life Skills

Aesthetics Character Communication Employability
 Social & Civic Responsibility Systems Thinking Thinking & Reasoning

Bibliography

- Arrington, Leonard J. "The Transcontinental Railroad and the Development of the West." *Utah Historical Quarterly*, vol. 37, no. 1, Jan. 1969.
- Christensen, Michael E. "Industries in Utah." *Utah History Encyclopedia*, UEN, www.uen.org/utah_history_encyclopedia/s/SERVICE_INDUSTRIES.shtml.
- Haymond, Jay M. "Transportation." *Utah History Encyclopedia*, UEN, www.uen.org/utah_history_encyclopedia/t/TRANSPORTATION.shtml.
- Notarianni, Philip F. "Mining." *Utah History Encyclopedia*, UEN, https://www.uen.org/utah_history_encyclopedia/m/MINING.shtml
- Strack, Don. "Railroads in Utah." *Railroads in Utah*, Utah History to Go, historytogo.utah.gov/utah_chapters/mining_and_railroads/railroadsinutah.html.
- Spielmaker, Debra. "Changes & Challenges (1840s-1880s): Era of Self-Sufficiency." *Utah Agriculture in the Classroom*, Utah State University Extension, utah.agclassroom.org/matrix/lessonplan.cfm?lpid=555.

Materials

How the Railroad Changed Utah's Economy Readings

How the Railroad Changed Utah's Economy R.A.F.T.

Background for Teachers

Teachers will need to understand the basics of Utah's economy before and after the transcontinental railroad.

Student Prior Knowledge

Students will need to understand words like economy, agriculture, and profit. Students will need background knowledge that Utah was mainly agricultural before the railroad came to Utah. See building background knowledge below.

Intended Learning Outcomes

I can explain how the railroad affected Utah's economy.

Instructional Procedures

The teacher poses the question to the students: How did the arrival of the railroad affect Utah's economy? The teacher distributes the reading and the R.A.F.T. assignment. The teacher goes over the instructions: students are to determine how the railroad affected Utah's economy. The teacher can decide if students read and fill out the chart as a class, pairs or individually. After the students read the passages, they use the information from the chart to write a letter. The students write the letter from the point of view of an immigrant farmer or miner that come to Utah. In their letter they need to include how the railroad changed Utah's economy, how farming or mining changed because of the railroad, and why their family and friends should come to Utah to farm or mine.

Strategies for Diverse Learners

Students can read in partners or pairs. Students can use Google Read & Write to help with reading and writing on this lesson. Length of the writing assignment can be modified to meet students' needs

Extensions

Students can research how the railroad affects Utah's economy today. Students can research about Utah's economy and develop an advertisement on Utah's economy and why businesses come to Utah.

Assessment Plan

The R.A.F.T. assignment can be used as an assessment of students' learning of how the railroad affected Utah's economy.

Building Background Knowledge (Starter/Bell Ringer)

UTAH BEFORE THE TRANSCONTINENTAL RAILROAD

Read the passages and answer the questions.

Agriculture

Hundreds of small farming villages were founded throughout Utah after the arrival of Mormon settlers in 1847. Families in these villages farmed on small plots of land near their communities. The land was dry and had to be irrigated for raising animals and crops. Farmers brought water to their land by digging ditches and canals with hand tools and horsepower. During the first decades of Utah settlement, each family and village worked to become self-sufficient, striving to grow and raise everything they needed to take care of themselves. They were not farming for profit.

Source: <http://utah.agclassroom.org/matrix/lessonplan.cfm?lpid=555>

What was agriculture like before the railroad? What was the main purpose of farming?

Mining

Early leaders of the Mormon Church placed a higher value on agricultural development than on mining for the precious metals. This meant that Mormon settlers were not involved in mining before the arrival of the railroad. The beginnings of commercial mining in Utah are traced to U.S. Army Colonel Patrick E. Connor and his California and Nevada Volunteers who arrived in the Salt Lake Valley in October 1862. Many of these soldiers were experienced prospectors and, with Connor's blessing and prompting, they searched the nearby Wasatch and Oquirrh mountains for gold and silver. In 1863 the first formal claims were located in the Bingham Canyon area, and this spurred further exploration.

Source: https://www.uen.org/utah_history_encyclopedia/m/MINING.shtml

What was mining like before the railroad?

How did the Transcontinental Railroad change Utah's Economy? Readings for the R.A.F.T. assignment

Reading #1 The Impact of the Railroad

Railroads changed the economy of Utah. The ability to ship goods both within the state and to and from other states was greatly improved. Metal mining in many cases now became profitable. Consumer goods were cheaper but required that more business be transacted in cash, resulting in the establishment of more banks. Community economics changed from their rural antecedents (predecessors). Railroads created a commercial zone by their demand for services and by providing a shipment area. Stockyards, lumber yards, and breweries were built. Distribution firms set up shop to receive goods for retailers. Workers lived near the places of their employment.

Source: https://www.uen.org/utah_history_encyclopedia/t/TRANSPORTATION.shtml

By 1890 Utah employment trends were showing signs of the modern era. Railroads employed almost 2,100 people. Financial services had grown from five workers in 1850 to over 1,900, and employed three percent of the non-agricultural workforce. Government, too, had grown by 1890; though it still was the smallest sector, it employed 1,231 people--785 in the military and 446 in civilian work.

Source: https://www.uen.org/utah_history_encyclopedia/s/SERVICE_INDUSTRIES.shtml

The railroad helped with the development of the west in many ways. The construction of the railroads gave income to residents that led to them building homes, buying machinery, and money for immigration. The completion of the railroad made it easier for people to come and build settlements in the west. Industries like agriculture and mining were increased and made profitable with the completion of the railroad. With the railroad it was profitable to move factories nearer raw materials and encouraged manufacturing activity.

The Union Pacific- Central Pacific spent an estimated \$500 million during the four years the Pacific Railroad was under construction. Not all of this money was spent on iron, steel and other products in the East. The money also went to laborers, farmers, freighters, and businessmen. Draft animals, meat products, grain, and flour, fruit and vegetables, water, timber, and ballast were among the provisions and supplies which came from western territories, as did much of the labor involved in grading the roadbed. Coal mines were opened to supply locomotives with fuel. The construction of the roads provided the training and discipline to prepare local labor for other industrial jobs. The railroad also helped strengthen and developed banks and other financial institutions. New businesses were able to grow.

Colonization was more successful as the various railroads promoted new techniques of farming, introduced new crops and varieties of livestock, and transported new types of agricultural machinery. The geography of nation's agriculture was revolutionized; the center of crop production moved from Indiana and Illinois to Iowa, Kansas, and Nebraska. New areas were opened up for dry farming and irrigation, and westerners used the railroad to market their farm products. The number of farms in the nation increased from two million in 1860 to six million in 1900, largely due to the construction of the western railroads.

Expanding rail lines also played a major role in the development of the western cattle and mining industries. Millions of Texas-bred cattle were shipped over these lines, as were millions of tons of western silver, lead, and copper.

Source: "The Transcontinental Railroad and the Development of the West," by Leonard J. Arrington, *Utah Historical Quarterly*, Volume 37, Number 1, Jan 1969.

Reading #2 Mining

The development of Utah's abundant mineral resources also included the building of a large network of railroad branch lines to serve the transportation needs of the mining industry. The availability of low-cost transportation did much to help Utah gain its reputation as one of the nation's treasure houses.

By 1915, in part because of the availability of low-cost transportation, coal had become a major contributor to the economic growth of the state of Utah, and remained such until the late 1940s.

The Tintic Mining District near Eureka was developed in the early 1870s, just after the coming of the transcontinental railroad. The silver, lead, and gold ore was of such high value that the first mines were successful even with the high cost of wagon transportation. The first railroad that arrived in the district, the Union Pacific-controlled Salt Lake and Western Railroad, was actually headed toward California in competition with the Central Pacific. Construction stopped in 1882 at Mammoth Mills in the Tintic Valley south of Eureka. Within a year the company completed a branch into Silver City, and in 1889 a branch was completed to serve Eureka. The line immediately began transporting ores out of the district. With the availability of low-cost rail transportation, many of the marginal mines became successful operations.

Railroad transportation played a very important part in the new mining method, which is called open-cut mining. First, steam shovels would remove the capping, or waste material, which covered the ore, and then load it into railroad cars for movement to other locations. As the ore was exposed, the shovels would load it into rail cars and these would be transported to the mills. Both Utah Copper and Boston Consolidated built mills sixteen miles north of Bingham Canyon on the south shore of the Great Salt Lake, where the availability of free-flowing springs could furnish enough water for the milling operations.

Source: https://historytogo.utah.gov/utah_chapters/mining_and_railroads/railroadsinutah.html

Reading #3 Agriculture

The railroads also built a network of branch lines to serve Utah's major agricultural industries, including dairy products, wheat, sugar beets, and many kinds of fruits and vegetables. Most of the vegetables and some of the fruits were grown to support the state's canning industry, centered mostly in Weber, Davis, and other counties along the Wasatch Front.

The railroads played an important part in agriculture by moving the goods to markets both within and outside of the state. Most of the dairy products were shipped to California, and the wheat was shipped either as grain or as flour to California and the southern states. The destination for the finished sugar from sugar beets was local markets and points in the Midwest and Pacific Northwest. Utah's canned goods were sold mostly on the Pacific Coast and in the Intermountain West and the Midwest.

The agricultural branch lines which the railroads built were almost solely used for the movement of sugar beets from the fields to the sugar factories. The major sugar-beet-growing regions included the Cache Valley, the Bear River Valley, and Weber and Davis counties. Also included were parts of Salt Lake Valley, Utah Valley, and the areas around Gunnison and Delta.

The railroads also had an important role in Utah's canned milk industry, which produced both evaporated and condensed milk. In 1904 Utah's, and especially Cache Valley's, dairy industry received a major boost when Sege Milk Products Company opened a condensing plant in Richmond, north of Logan. In 1925 Sege built a processing plant in Hyrum. The Borden Company opened its milk-condensing plant in Logan in 1916. The Morning Milk Company opened a condensing plant in Wellsville in 1923, and sold it to the Carnation Company in 1946. The Sege plant in Richmond was served by the Oregon Short Line, as was the Morning Milk plant in Wellsville. The Sege plant in Hyrum was served by a spur of the Utah-Idaho Central electric line. Borden's Logan plant was served by both the Utah-Idaho Central and the Oregon Short Line.

The opening of these plants has been called the single greatest stimulus to the dairy industry in northern Utah. In 1933 milk was collected from nearly three thousand dairy farms and delivered daily to the condensing plants, mostly using the trains of the Utah-Idaho Central interurban railroad and those of the Oregon Short Line's Cache Valley Branch. Between 1926 and 1930 the dairy industry was the third largest farm-based industry in the state, and half of the dairy production came from the annual production of sixty million cans of condensed and evaporated milk.

Source: https://historytogo.utah.gov/utah_chapters/mining_and_railroads/railroadsinutah.html

Name: _____ Date: _____ Period: _____

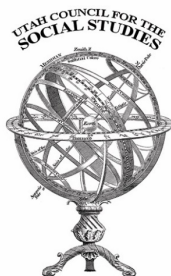
How did the Railroad Change Utah's Economy R.A.F.T. Assignment

You are an immigrant farmer or miner that came to Utah to farm or mine. First, read about how the railroad changed Utah's economy and fill in the chart. Then, as a farmer or miner write a letter to your family about Utah and how the railroad has changed Utah's economy.

Role	Audience	Format	Topic (in your letter cover these topics)
Choose one: Immigrant Farmer Immigrant Miner	Family members and friends in your home country	Letter	<ul style="list-style-type: none"> • How the economy has changed because of the railroad • How has farming or mining changed because of the railroad • Your experience farming or mining in Utah • Why they should come to Utah to farm or mine

Before you write your letter fill out this chart. On the last column, you may not have enough to fill in the whole column.

	Summarize the reading	How did the railroad change mining and/or agriculture?	How has Utah's economy changed because of the railroad?
Reading 1 Impact of the Railroad			
Reading 2 Mining			
Reading 3 Agriculture			



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