Geographic Perspectives with Elementary Students: The Silk Road

Paper presented at the International Assembly of the National Council for the Social Studies
Washington, D.C.
December 1, 2006

Beverly Milner (Lee) Bisland, Assistant Professor
Elementary and Early Childhood Education Department
Queens College of the City University of New York
65-30 Kissena Boulevard
Flushing, New York 11367-1597

beverly.bisland@qc.cuny.edu

A source of both historical fact and myth, the legendary Silk Road stretches from the Middle East across forbidding deserts and rugged mountains into western China. Across the millennium, it was never one route but a series of caravan routes used for trade and transculturation (Leavens, 2004) that resulted in transformations in religion, art and the use of commodities which included silk. The many tentacles of these trade routes extended as far north as Russia and as far south as India, but the main routes crossed central Asia, including western provinces of China such as Xinjiang and the former republics of the Soviet Union such as Uzbekistan, and inner Asia which includes Mongolia and Inner Mongolia (Wood, 2003; Amster & Chin, 2004). The best known western traveler along these routes and the one most likely to be familiar to elementary students in the United States was the Italian, Marco Polo.

The ancient Silk Roads flourished during three separate periods, when there were powerful dynasties in China to protect the trade routes. Beginning in the second century B.C.E. the routes continued to be used into the late fifteenth century when they were replaced by sea routes from Asia to Europe. The overland routes flourished under the Chinese Han and Tang dynasties and the Mongol empire. Under the Han dynasty, oases and oases towns were established throughout central Asia that helped to connect the Han empire. The trade in this early period began with horses from central Asia traded for Chinese silk. With the collapse of the Han and Parthian dynasty in Persia in the third century C.E. the trade routes fell into disuse. During the Tang dynasty from the seventh to late ninth century trade along the silk routes flourished again and was accompanied by the spread of art and religion, particularly Islam, along the silk routes. With the fall of the Tang dynasty trade along the silk routes diminished considerably and did not revive until the rise of the Mongol empire in the thirteenth century. Under the Mongols the flow of merchants, craftsmen and missionaries across the route from Europe to Asia was strongly encouraged. With the fall of the Mongols and the discovery of a sea route, the silk routes again fell into disuse and the great oases towns of central Asia fell into poverty and decline *(* China Institute, 2005; Wood, 2003).

The Silk Road provides an excellent opportunity to develop a sense of geographic perspective with elementary students. Four elementary teachers used a lesson on the geography of the Silk Road with thirty-eight students in grades four to six. They first went through the lesson itself as teachers and then worked with their students using the materials. The purpose of the activity is for students to be able

to explain how physical features of the land influence the location of humanly defined structures including pathways, roads and trade routes such as the Silk Road. The lesson includes the following steps:

Interest Building

1. Have the students use a map to locate China on a political map.
2. Help them to identify some of the cities in China.
3. Have them locate the western part of China.
4. Ask them to think of reasons why there are not many major cities in western China.
5. Have the student turn to a physical map of China.
6. Help them to read the elevation key to discover that there are very high mountains and plateaus in the western part of China.
7. Ask them to use information from the map to explain why few major cities developed in this part of China.
   For example: The mountains are too hard to cross
   it is difficult to build well on steep slopes
   it is hard to transport goods over the mountains

Lesson Development:

1. Have the students work in pairs to point to the far western edge of Turkey and mark the location with a marker.
2. Have them point to the curved part of the Huang He (Yellow River) west of Beijing, China and mark it with a marker.
3. Say: "We are going back in time to the year 700, about 1,300 years ago. Suppose you wanted to travel between the places that you have marked on the map. There are no cars, trains, buses or airplanes. With your partner, plan a route that will let you travel from one of the locations to the other. Remember, there are physical obstacles in your way."
4. Allow time for the pairs of students to discuss the different routes that they could use.

Assessment:

1. When they are ready, have some groups share their plans.
2. Discuss which routes might take the shortest or longest time, which might be most dangerous, and which might be impossible at different times of the year because of climate.
3. Tell the students that some traders in the year 700 were making this very same decision about ways to travel in that part of the world.
4. Show a map of the silk route and ask students to explain why the traders did not travel in a straight path between the two locations.
   a. For example: There were high mountains and deserts in the way of a straight path.
   b. The traders would try to follow the easiest path through or around the barriers.

Materials:

- Laminated Relief Maps of Asia
- Maps of the Silk Route
- Pens and markers

Four teachers used this lesson on the geography of the Silk Road with their students. One sixth grade teacher used the lesson with six of his students. The six students represent Puerto Rican,

Guyanese and African cultures. The second sixth grade teacher used the lesson with two of her students who are Hispanic in culture. This pair of students is studying China in their social studies curriculum. Therefore they were familiar with the location of China on a map and some of the major cities. The third teacher used the lesson with five fourth grade students; four of whom are Hispanic and one who is African-American. The last teacher used the lesson with her entire mixed level class of twenty bilinqual Spanish speaking students. The last teacher used all the steps in the lesson plan with her students whereas the other three teachers used only parts of the lesson plan.

The first sixth grade teacher formed the six students into three pairs. He began by having them look at a political/relief map of the world. The students had no difficulty comprehending the map and reading the map legend. Then the teacher discussed types of transportation today and a thousand years ago. He then asked the students who had no prior knowledge of the Silk Road to determine a route from Turkey to western China. Two pair took a straight edge and drew a line from one point to the other. The teacher then reminded the students that they were to use the physical features of the map to determine the most reasonable route. Each pair then had animated discussions and considered a variety of possibilities using the relief map. Two pair chose a water route from Turkey to China on the basis that water transport was faster. The teacher pointed out however that the water route was easily twice as far in mileage compared to the land route. One group chose the land route that closely approximated one of the Silk Routes. They took care to skirt high mountains and desert areas. The teacher found it interesting that the two pair, one from the Caribbean and one from coastal South America chose the water route, whereas the African pair chose a land route and wondered if their were cultural connotations to their choices.

The other sixth grade teacher first used a political map of China and then a physical map of China with her two students. They engaged well with the physical map and took particular interest in reading the legend on the map that explained the different elevations. In order to locate the silk routes the teacher asked them to first locate the two ends of the route, the western edge of Turkey and the curved part of the Yellow River west of Beijing, China. The students had some difficulty with these two geographic locations but eventually found them. The students knew about the Chinese production of silk

but not how the silk was transported. The teacher then discussed with them transportation as it existed a thousand years ago and the physical obstacles across Asia between Turkey and western China.

The two students then began a discussion of the route that they might take. One student was concerned about lowland and mountain obstacles, while the other student was concerned about how cold it would be in the mountains. After about twenty minutes of thought and discussion the pair decided on a route across central Asia that very much resembled one of the main routes of the Silk Road. The students were very pleased with their results.

The five fourth grade students were very enthusiastic about the lesson and enjoyed the opportunity to share their routes for the Silk Road. They then debated adamantly why one route was better than another. As the sixth graders did, they also looked at political and physical maps of Asia and China. They located cities in China, but only two of the five students were able to explain that there were fewer cities in western China because it is mountainous and that creates building and transportation difficulties. Several of the students drew land routes that closely resemble the silk routes. Two students drew half water and half land routes. One student had the traders put ashore in present day Burma and proceed by land into China. Another student had the traders land in Vietnam and proceed up the Mekong River into China. The teacher noticed also that the students did not comprehend the scale of the map and thought it would be feasible to walk from Turkey to China. A suggestion was that the students investigate map scale prior to determining the trade routes.

The bilingual teacher was the most ambitious with the Silk Road lesson and used the entire lesson with the students over the course of several class periods. When she originally tried to explain physical land features to these English language learners they seemed confused, so she needed to use visual transparencies of maps and an atlas and globe. She also created a series of questions in both English and Spanish about the physical maps for each of the students to complete. She drew the questions from the National Archives and Records Administration worksheet on maps. The questions were the following:

- List three things in this map that you think are important?
- Why do you think this map was drawn?
- What evidence in the map suggests why it was drawn?
- Write a question to the map-maker that is left unanswered by this map

Since both maps were relief maps, although one map contained place names while the other did not, the students answered the first question using physical features such as rivers, mountains and lakes.

In answer to the second question most of the students said the purpose was to show where different places and features such as mountains are located. Answers to the third question were similar to the answers to the second questions. As one student said “they want to tell us how to get around like getting (from) one place to another place”. The question most of the students asked the map maker was why one map had cities marked and why the other map, which showed only physical features, did not.

For the most part the students chose a land route from Turkey to China. They were particular about making sure their routes went along the edges of the Taklamakan and Gobi Deserts, but were not as aware of the high mountain ranges. Some routes went along the top of the Himalayan Mountains and the Tienshan range in the former Soviet central Asian republics. The teacher felt that the geography lesson had limited success. The students had a degree of success in reading the relief maps and placing the route. She felt they would have been more successful with more background, particularly visual background, since these students are English language learners. A possibility is to show them pictures of the terrain of the two deserts and the two mountain ranges. Then they might better understand the kind of undertaking it is to cross these areas.

Discussion

In order for students to take a geographic perspective they need to think spatially. Thinking spatially means that they need “to understand where things are, why they are there, and the consequences of those spatial patterns” (Klein, 2003, p 147). In the 1960s in his discussion of the underlying structures of the disciplines, Bruner (1960/1977) suggested a geography lesson similar to the Silk Road lesson in which the students are given a relief map and asked to decide where communities, roads and other elements in a human created environment would be located based on the map’s physical features. In the lesson in this study students were asked to take into consideration the geography of central Asia and the climate in order to determine the best route for a caravan.

In *Geography for Life: National Geography Standards* (1994, pp 42-44), five skill sets for thinking spatially or geographic literacy are discussed:

Ability to ask geographic questions: An example of this skill is a student asking where something is located as well as asking why it is located in that particular place and not somewhere else. In this study

the geographic questions was what route people took to travel from Turkey to western China prior to industrialization.

Ability to acquire geographic information: A student will recognize that there are many different ways to acquire this type of information and that among the ways are reading and interpreting maps. This ability was demonstrated by the elementary students in this study when they discussed and decided how to map their route from Turkey to western China.

Ability to organize geographic information: The example of this skill in the present study is drawing the Silk Route on a map. Their decisions in drawing the route helped student to think critically about information that they found on the map.

Ability to analyze geographic information: Analyzing geographic information consists of seeking patterns, relationships and connections. When students can see meaningful patterns they can synthesize their observations into a coherent explanation. The students demonstrate this ability in the present study by their ability to explain why they chose the routes that they did based on terrain, climate and ease of travel.

Ability to answer geographic questions: "Successful geographic inquiry culminates in the development of generalizations and conclusions based on the data collected, organized and analyzed" (*Geography for Life: National Geography Standards*, 1994, p 44). As demonstrated in the previous steps, the students in this study were able to answer the initial questions of where a route across central Asia might be located and were able to explain why they chose a particular route.

Conclusions

The students in this study, even those with limited English speaking ability, were able to analyze a physical topographical map of Asia and determine a route from west to east. Those who chose a land route were more cognizant of deserts than they were of mountains. As the bilingual teacher observed, more visual information such as pictures of the Tianshan mountain range or the Himalayans would help the students to decide that following a route along the top of these ranges would not be feasible. Those students who chose a water route understood that in pre-industrial times water was often the easiest way to travel, but did not understand map scale and the fact that they were doubling the mileage from Turkey to China. As one teacher pointed out, it would be helpful for students to focus on the map scale as well as the terrain before determining a route.

As a purely map reading exercise the students in this study, after some discussion from the teachers and exercising their observation skills, understood how physical features of the terrain determine paths and routes in a time before mechanized machinery and transportation, such as airplanes. This skill can be applied in a variety of other historical contexts as well as the silk routes. For example students can use a physical topographical map of the western United States to determine the best overland trails from the Mississippi River to the Pacific coast or include North Africa in their mapping of the silk routes. To fully understand the silk routes and how trade and transport along these routes impacted the history and culture of central Asia and western China needs more extensive study including more information for the students, both visual and textual.

References

Amster, Martin and Chen, Lier. (Spring, 2004). Buddhist Art Styles and Cultural Exchange Along the Silk Road. *Education About Asia,* 9,1, 30-35.

Bruner, Jerome (1960/1977). *The Process of Education*. Cambridge, Massachusetts: Harvard University Press.

China Institute. (2005). *From Silk to Oil: Cross-Cultural Connections along the Silk Roads*. New York: China Institute in America.

Geography for Life: National Geography Standards. (1994) Washington, D.C.: National Geographic Research and Exploration.

Klein, Phil. (2003) Active Learning Strategies and Assessment in World Geography Classes. *Journal of Geography*. 102, 146-157.

Leavens, Ileana B. (Spring, 2004). Transculturation: A Pedagogical Approach to Asian Art*. Education About Asia,* 9,1,47-54.

National Archives and Record Administration. http://www.archives.gov/education/lessons/worksheets/map_analysis_worksheet.pdf

Wood, Frances. (2003) *The Silk Road*. Berkeley: University of California Press.