Acknowledgements:
To my wife Sylvia D. Richardson, my son Brent E. Richardson, my daughter Dana E. Richardson and my parents Donald Richardson and Margaret Richardson, in gratitude for and recognition of their love, strength, sense of humor, patience, constancy, compassion, resiliency, and encouragement, without which I could not have summoned the endurance to complete this journey. Sincere appreciation is given to my dissertation committee chair, Liane Brouillette and committee members George Farkas, Frank Heuser and Margaret Murata in addition to and Rita Petersen and Dr. Robert Newcomb of the Center for Statistical Consulting at U.C. Irvine. Many thanks to professors and staff at UC Irvine, UC Los Angeles, and UC Santa Cruz, including Dennis Evans, Margaret Murata, Michael Martinez, Hank Becker,m Anne DeVaney, Joan Bissell, Kimberly Burge, Kim Pierce, Nancy Christensen, Leora Fellus, Jasmine Ye, Stewart Biegel, Peter Jones and Annie Jones. I extend gratitude to Frank Andrews of UC Santa Cruz and recognize teachers at the middle school where this study took place, Jessica Shanks and Kelsey Baughtman. I am grateful to Nina Eidsheim, William Boyer, and the National Geographic Society, along with other educators, musicians, and specialists who have contributed to Mapping the Beat lessons. Many thanks to Norman Bettis, co-author of the NCGE exam and acknowledge Scott Walker, author of the Test of Geography-Related Attitudes (ToGRA).

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Keywords:
Mapping the Beat, environment, identity, middle school, physical and cultural geography, social studies, United States history, migration, culture, writing fluency, focus group, enthusiasm,

motivation, interest, intellectual curiosity, exploration, fun, enjoyment, motivation, affect, attitude, slavery, American folklore, instruments, polka, Industrial Revolution, Native Americans, National Council for Geographic Education (NCGE), Test of Geography-Related Knowledge (ToGRA), statistically significant results, improvement, quantitative, qualitative

Abstract:

This article is based on a doctoral dissertation study, “Expanding Geographic Understanding in Grade 8 Social Studies Classes through Integration of Geography, Music, and History: A Quasi-Experimental Study” that took place in a high-achieving, suburban middle school in Southern California. The study compared learning as a result of nine 90-minute workshops in Grade 8 social studies. Three classes (N=84) were the control group and four classes (N=131) were the treatment. 85% of students were assigned by computer to the classes. As much as possible, classes were balanced in terms of gender, ethnicity, and academic proficiency in English. The key question is whether social studies workshops that include music, hands-on geography activities, and cultural studies could result in greater understanding of physical and cultural geography and more positive geography-related attitudes for students in the treatment workshops, as compared to the control group who studied the standard curricula. Quantitative analyses compared baseline and follow-up results on a multiple-choice geography exam and an attitude survey. Four research questions asked if the control or treatment workshops led to greater: (1) geographic understanding, measured by the National Council for Geographic Education (NCGE) Intermediate Standards-Based Geography Test; (2) improvement in geography-related attitudes, measured by the Test of Geography-Related Attitudes (ToGRA); (3) success on the NCGE or the ToGRA, when controlling for sub-groups (English learners, gender, low-achieving, ethnicity); and (4) understanding of connections between geography, history, and culture, measured by qualitative observations, quick-writes, and focus group interviews. Analysis of Questions 1, 2, and 3 suggested statistically significant results. ¬¬Question 1 analysis was performed on NCGE exam results, including tests for assumption of equal variance, parametric t-tests and the Wilcoxon non-parametric tests. Question 2 analyzed ToGRA results and suggested that treatment workshops resulted in greater improvement in geography-related attitudes. Group comparisons of change scores indicated statistically significant mean differences between control and treatment groups. Question 3 focused on regression results and suggested that the treatment intervention was more successful. For Question 4, qualitative measures included classroom observations, comparisons of quick-writes by students with similar characteristics, and focus group interviews. Qualitative data supported the quantitative results. An unanticipated outcome was greater writing fluency for treatment students. This study also considered the possible impact of interest, motivation and affect on student learning.

Implementing *Mapping the Beat* in the 8th Grade

Despite the increasing involvement of the United States in world affairs, American young people remain woefully uninformed about both physical and cultural geography. For example, about 11 percent of 18 to 24-year-olds in the United States cannot locate the United States on a world map; 29 percent cannot point out the Pacific Ocean; 58 percent cannot locate Japan; and 65 percent cannot find France (Roper, 2006). In *Why Geography Matters* (2007), the geographer Harm de Blij traced the decline of geographic understanding to the 1960s, when geography, history, and government were lumped together under the single umbrella of "social studies."

Other explanations for students' lack of geographic awareness focus on more recent events. For example, a strong argument can be made that the narrow focus of recent state and national accountability legislation has been a contributing factor. This legislation has mandated high-stakes testing in literacy and mathematics while ignoring other important content areas. Faced with steep penalties for not meeting state standards in language arts and math, teachers tend to focus their efforts on these subjects, leaving social studies achievement largely unnoticed.

The increased emphasis on standards-based assessments has also translated into fewer opportunities to explore and learn about music, the arts, and diverse cultures. This is especially true for second-language-learners and struggling students who may be required to take English language development or remedial classes intended to bring these students up to grade-level. Logic dictates that basic literacy and computational skills are of critical importance. Providing English learners and students who are not proficient with targeted instruction is intended to reduce gaps in readiness for high school. However, something is lost when students are assigned to remedial classes year after year, with little opportunity to study music, dance, theater, visual art, and other elective classes.

Mounting evidence indicates that increasing numbers of children are becoming culturally, artistically, and musically illiterate (Leming, Ellington, & Shug, 2007). Yet, rectifying this problem will require more than just asking students to memorize the names of nations on a world map. Creating integrated social studies lessons that help students understand the exciting and fascinating connections among geography, culture, history, and the visual and performing arts is one way to introduce all students to music and the arts, including those who may not have an opportunity to take an enrichment class during their middle school years.

Creating an 8th Grade Version of *Mapping the Beat*

Originally developed by University of California, San Diego, graduate music students Nina Eidsheim and William Boyer, the *Mapping the Beat* lessons bring together music and history in an imaginative way. Funded by a grant from the National Geographic Education Foundation, the *Mapping the Beat* curriculum project traced the soundtrack of the 5th grade United States history curriculum. The *Mapping the Beat* curriculum uses migration of musical forms as a metaphor for human migration and cultural interaction. Through tracing the spread of the rhythms of the African Diaspora or the Latin beats driving the fingers of German accordion players in Texas, *Mapping the Beat* lessons encourage students to explore the physical and cultural geography of America.

The *Mapping the Beat* lessons explore three concepts – environment, identity, and movement – taken from the standards outlined in Geography for Life, the national geography

standards. Students are encouraged to consider how the physical character of a region shapes the music, and how, in turn, the music shapes the cultural character of that same region. The arts are viewed as a record of cultural migration, a product of geographic environment, and a cornerstone of personal and group identity. *Mapping the Beat* promotes cultural inquiry and emphasizes the importance of exploration, intellectual curiosity, and fun in the classroom. A multi-state project, the *Mapping the Beat* curriculum has been successfully implemented by teachers and teaching artists in K-12 schools served by university-based ArtsBridge America K-12 outreach programs in California, Delaware, Michigan, North Carolina, Oklahoma, and Wisconsin.

In California, students study United States history and geography in both the 5th and 8th grades; the time periods studied are roughly comparable. Instructors involved in the implementation of the *Mapping the Beat* lessons in 5th grade classrooms in California suggested that, due to their challenging content, the *Mapping the Beat* lessons might also be effective at the 8th grade level. The project described in this article adapted the *Mapping the Beat* lessons for the 8th grade California content standards in social studies, geography and music. Nine of the existing 5th grade units from the *Mapping the Beat* curriculum were modified for use in 8th grade classrooms.

Curricular adjustments and grade-appropriate modifications were made. Emphasis was put on helping students gain a better understanding of the culture and complexities of the American experience. Lessons emphasized not only the migration of musical forms to -- and within -- the United States, but also the impact of various types of music on the nation's culture. Workshop activities were designed to enhance the topics introduced in the 8th grade social studies curriculum. Time constraints, availability of materials, budget, grade appropriateness, and teacher preferences contributed to the selection of activities.

Each *Mapping the Beat* lesson was designed as a two-day workshop introduced by teachers over two 45-minute class periods. Each workshop included the introduction of: 1) hands-on music activities (guided listening, opportunities to participate in singing, dancing and playing instruments, and interactions with a music specialist); 2) hands-on geography activities; 3) thought provoking discussions; and 4) opportunities to explore ideas from multiple perspectives and express those ideas verbally and in writing. In each workshop, students studied geographic representations, including maps, supplemented by text and music activities. Teachers played samples of recordings of selected music for each workshop, asking students to identify the instruments used in the songs, also discussing their country of origin or the new country of residence. At the end of each two-day workshop, students were encouraged to consider the connections among music, geography, and history by completing a quick-write assignment.

Students from four 8th grade treatment classes participated in nine 90-minute classroom workshops and an additional three 50-minute large group music presentations. Stephanie Feder, a musician with an extensive choral background who had developed the country music unit for the *Mapping the Beat* 5th grade curriculum, assisted with planning and design during the summer of 2008. During the fall of 2008, Ms. Feder led the three large group music presentations in the school cafeteria. The music presentations are described at the end of this article.

Table 1 presents a summary of the nine treatment workshops developed for implementation of *Mapping the Beat* for the 8th grade level.

Table 1

Workshop 1: Read/discuss "Instrument Migration: -- Introduction of the migration of selected instruments as culture groups settled in the New World. Quick-write: Compare and contrast the ethnic and cultural diversity of the early American colonies. Emphasize regional differences and economic interests.
Workshop 2: American Worksongs. A study of songs Americans sang as the early Industrial Revolution took hold in the Northeast. Songs told how water powered mills and wind powered sails for trading ships. Quick-write: How does the physical environment in which one lives determine the type of work that is done in that region?
Workshop 3: The Ngoni, the Banjo, and the Atlantic Slave Trade. The origins of African tribal music and African-American musical traditions in the American South. Quick-write: What did you learn about the African slave trade and its impact on slavery?
Workshop 4: Music and Migration in Texas. Tracing the many cultural groups who settled in Texas as the territory changed hands between Spain, Mexico, the Republic of Texas, and the United States. (No quick-write was assigned in Workshop 4.)
Workshop 5: Unconventional Maps and the Underground Railroad. Exploring African-American spirituals, including songs that were used to help guide runaway slaves on the journey north and the people who led them. Quick-write: Why did so many freed slaves head north to Washington, D.C.?
Workshop 6: Civil War Bands and Their Music. Viewing the Civil War conflict through patriotic songs and traditions of military music. Quick-write: Is it wrong to use music to fire patriotic feeling?
Workshop 7: Flutes, Natural Resources and Trade in the Great Plains. Examining the cultural and material influences of the Native Americans who lived in the Great Plains regions of North America. Quick-write: How might the geography and climate of an area influence the culture that develops there?
Workshop 8: Chinese in America. Contributions of the Chinese to the settlement of California during the Gold Rush along with involvement of Chinese workers in construction of the transcontinental railroad. Quick-write: What did you learn about the Chinese after they first immigrated to the United States?
Workshop 9: The Piano and the Industrial Revolution. Examining the introduction of mass production and the developing immigrant labor sources in major urban areas as well as systems of transportation of goods and people. Quick-write: What did you learn about the Industrial Revolution?

Workshop 1: Instrument Migration

On Day 1 of Workshop 1, *Instrument Migration,* students read about and discussed cultural groups and regional differences that emerged in the New World. Each learning segment was accompanied by an activity, including written responses and hands-on activities. Teachers introduced geography-related vocabulary, built a "word wall" of geographic terms, and discussed the difference between "immigration" and "emigration." Using maps of colonial regions in North America, students identified the areas of settlement for the cultural groups that predominated in colonial America, and discussed geographic and cultural differences.

On Day 2 of the *Instrument Migration* workshop, students matched culture groups with appropriate musical instruments and identified the areas of origin. Using a large world map and maps in the social studies textbooks, students identified the areas of origin of a variety of musical instruments, which included the fiddle, guitar, accordion, banjo, piano, and "ngoni." At the conclusion of the two-period workshop, students turned in their *Instrument Migration* materials and had five minutes to respond to the quick-write prompt. Table 2.1 provides an overview of the curricular focus, activities, and approximate amount of time for each activity.

Table 2.1

Curricular Focus	Activity	Time
Day 1		
Expectations and overview	PowerPoint	5 minutes
Vocabulary	Vocabulary terms, geography & music	5 minutes
Geographic understanding	Explore /Label Maps-origins of instruments	15 minutes
Regional differences	Readings, (10-16, 122, 162, *Call to Freedom*)	20 minutes
Day 2		
Instrument information	Instrument Migration handout/activity	15 minutes
Instrument identification	Recordings of selected music (fiddle, ngoni, etc.)	15 minutes
Assessment	Map activity	10 minutes
Assessment	Quick-write	5 minutes
		Total: 90 minutes

Workshop 2: American Work Songs

In Workshop 2, *American Work Songs,* students explored how music was used to organize different kinds of work in the United States. This provided a glimpse into the diverse culture and geographic landscape of the United States. Students read lyrics and listened to sea shanties sung on whaling boats, work-tempo songs associated with industrialization and the mechanization of labor, spirituals attributed to slaves who toiled in cotton fields of the South, and rugged songs of railroad workers. Students were able to "describe the social functions of a variety of music from various cultures and time periods," meeting California Standards for Music 3.1. Students began to demonstrate an understanding of Standard 15 of the National Geography Standards: how geography determined the types of work that predominated in a region. Students were asked to compare geographic regions and consider how geography might affect one's lifestyle and choices. A mapping activity included placing products in specific geographic areas. Students participated in a discussion and activity to better understand the concept of "efficiency" by conducting an activity with and without music.

Table 2.2

Curricular Focus	Activity	Time
Day 1		
Issues & industrialization	Influence of geography on work	10 minutes
Repetitive work & discussion	Pass objects without & with music	15 minutes
Vocabulary	Music terms and examples	5 minutes
Regional & economic differences	Emerging economies & geography	15 minutes
Day 2		
Readings: *The American Journey*	John Henry, p. 732, Industrialization	15 minutes
Railroad work-songs	"John Henry"	10 minutes
Workplace song	Sea Shanties	5 minutes
Workplace song	"John Kanaka"	10 minutes
Assessment	Quick-write	5 minutes
		Total: 90 minutes

Workshop 3: The Ngoni, the Banjo, and the Atlantic Slave Trade

In Workshop 3, *The Ngoni, the Banjo, and the Atlantic Slave Trade,* students learned about hardships and challenges produced by the slave trade. Consistent with Grade 8 California Content Standards for Social Studies, they studied the effects of the institution of slavery on black Americans and on the region's political, social, religious, economic, and cultural development. Slaves, primarily from West Africa, had rich musical traditions that included drums and dancing, but nervous slave owners had banned drum music in hopes of stifling communication between slaves. On the other hand, string instruments were permitted, leading to a North American version of the West African instrument known as the "ngoni." The banjo and other instruments were invented by using materials that were available in North America.

On Day 1 of Workshop 3, vocabulary terms were presented and discussed, followed by a PowerPoint presentation of the historical background of slavery and its impact on individuals who were forced to migrate from West Africa. Geography skills were supported through a map activity that focused on the Trans-Atlantic migration from Africa. A second PowerPoint showed maps and pictorial representations of the Triangular Trade and Middle Passage.

On Day 2 of Workshop 3, students explored examples of West African music and musical instruments, then listened to recorded examples of African drumming, the ngoni, and the banjo. To deepen their understanding, students read selected documents and discussed the readings in small groups.

Table 2.3

Curricular Focus	Activity	Time
Day 1		
Vocabulary introduction	Students match terms and words	10 minutes
Background & impact of slavery	PowerPoint	12 minutes
Trans-Atlantic migration	Map activity, including trade routes	10 minutes
Origins/development of slavery	Triangular Trade PowerPoint	13 minutes
Day 2		
West African music intro	African music PowerPoint	13 minutes
Recognizing musical instruments	Listen/respond: drums, ngoni, banjo	12 minutes
Selected documents about slavery	Readings and discussion: slavery	15 minutes

Assessment	Quick-write response	5 minutes
		Total: 90 minutes

Workshop 4: Music and Migration in Texas

In Workshop 4, *Music and Migration in Texas,* students were introduced to major cultural and ethnic groups that had settled in Texas as the territory changed hands between Spain, Mexico, the Republic of Texas, and the United States. Through the lens of music, students examined similarities and differences among musical elements and the effects that migration of people from diverse cultures had on music in Texas. Students discussed Mexican settlements and their locations, cultural traditions, attitudes toward slavery, the land-grant system, and economics, and engaged in discussions about the migration patterns to Texas prior to the Texas War for independence. Using maps of the United States and Texas, students interpreted information represented on the maps, considering how spatial organization, proximity, or distance, effected the cultural diffusion of various ethnic groups in Texas.

A PowerPoint presentation introduced students to: 1) the political history of Texas, beginning with the Spanish exploration of the region, followed by independence of Texas, the War with Mexico, and ending with the Treaty of Guadalupe and declaration of Texas statehood as part of the United States; 2) the vibrant mix of people who settled in Texas, from Central and Western Europe and the British Isles, contributing unique cultural traits and opening music halls where locals gathered to socialize, dance the waltz and polka, sing songs, and play the accordion; and 3) the influence of various cultural and ethnic groups on music in the United States. The European cultural and musical traditions gradually combined with Spanish-influenced music, creating unique musical sounds including *conjunto*, *norteño*, and *tejano*, which can be found across Texas and in other areas of the Southwest. These songs, or *corridos*, are still vibrant and popular and continue to tell stories about local heroes and historical events. Students listened to recordings of selected music, including lively contemporary groups, and were asked to identify accordion sounds in the polka and German and Spanish influences in *conjunto*. Workshop 4 did not include a quick-write.

Table 2.4

Curricular Focus	Activity	Time
Day 1		
Vocabulary introduction	Match definitions	10 minutes
Political history	PowerPoint presentations	15 minutes
Musical history	Locate place names on Texas map	20 minutes
Day 2		
Readings: Texas independence	Small group readings/discussion	20 minutes
Musical forms and influences	Listening to & identifying instruments	20 minutes
Assessment	Vocabulary portfolio & maps of Texas	5 minutes
		Total: 90 minutes

Workshop 5: Unconventional Maps and the Underground Railroad

In Workshop 5, *Unconventional Maps and the Underground Railroad*, students studied the significance of coded maps, in the form of quilts and songs, on the success of the Underground Railroad. Students read about leaders of the abolitionist movement, analyzed and discussed attempts to abolish slavery, learned about dangers facing abolitionists, and explored

how the Underground Railroad helped Africans escape slavery (California State Content Standards for Social Science 8.9 and 8.9.1). Students used maps to create a coded map (National Geography Standard 1); they interpreted the spatial organization of people, places and environments (National Geography Standard 3); and they studied the influence of African slaves on the music of the United States (California Music Content Standard 3.5).

On Day 1 of Workshop 5, teachers introduced vocabulary terms and discussed the significance of the Underground Railroad. Students took an interactive "journey" on the National Geographic website to explore the choices and dangers that faced those who were involved in the railroad. Teachers provided maps and selected readings and led a class discussion about them . For homework, students were asked to write a summary of what they discovered about William Still and the Underground Railroad, based on the class activity and the resources on the National Geographic website.

On Day 2, students shared findings from their homework assignment about the Underground Railroad and abolitionists. Teachers introduced "coded messages" in the form of song lyrics. To illustrate the concept of coded songs, students worked in groups to write coded messages in the lyrics of a song about escaping from school on the first day of summer.

Table 2.5

Curricular Focus	**Activity**	**Time**
Day 1		
Teacher-led introduction	PowerPoint % vocabulary/concepts	7 minutes
Underground Railroad	Teachers logged on to National Geographic (N.G.) site*	13 minutes
Geographic understanding	N.G. website: Routes to Freedom – map	4 minutes
Background of slavery	N.G. website: Timeline	6 minutes
Dangers facing slaves & abolitionists: Posters & public notices	Teachers logged on to the Fugitive Slave Bill of 1850**	10 minutes
Abolitionists	Homework: web research on abolitionists	5 minutes
Day 2		
Assorted readings	Small group readings about abolitionists	10 minutes
Coded messages in songs	"Follow the Drinking Gourd" lyrics & listening	10 minutes
Coded messages	Coded messages: "Escape for the Summer"	10 minutes
Geographic understanding	Geography activity	10 minutes
Assessment	Collect work & quick-write	5 minutes
		Total: 90 minutes

Workshop 6: Civil War Bands and Their Music

In Workshop 6, *Civil War Bands and Their Music*, students explored the musical culture of the United States prior to and during the Civil War, then investigated the role music played in the propaganda of the Civil War. Students discovered the irony of the use of "Battle Cry of Freedom" for the same purpose by both the North and the South. They studied the boundaries constituting the North and the South, the geographical differences between the two regions, and the differences between agrarians and the industrialists (California State Content Standards for Social Science 8.10.2). They also looked at: how different economies developed in the North and South due to geographical conditions; how these differences contributed to the start of the Civil War (National Geography Standard 3); and how music was used as a propaganda tool and lament on war (California Standards for Music, 8.3.3).

On Day 1, after a vocabulary introduction, teachers introduced the importance of patriotism during the Civil War and discussed how propaganda was used to inspire and encourage active support and enlistment. Using a chart of the resources in the two regions,

students made predictions about which side was most likely to be victorious in a war. Using available maps and other information, students labeled a blank map that showed major railroad routes, strategic cities, key battles, and natural boundaries that affected the movement and placement of troops during the Civil War.

On Day 2, treatment classes compared and contrasted patriotic songs of the North and South. The Pre- and Post-Song Questions served as a platform for group discussion. Additionally, teachers asked students to write brief responses to the questions, focusing on the use of propaganda.

Pre-song Discussion Questions included:

1. Why would someone volunteer to fight in a war?
2. What would be the best way to convince someone who is undecided to join your side?
3. What reasons would a Northerner give for volunteering to fight?
4. What reasons would a Southerner give for volunteering to fight?

Post-song Discussion Questions included:

5. What were some of the propaganda messages these songs gave about war?
6. What are some realistic truths about fighting in the Civil War?

Table 2.6

Curricular Focus	Activity	Time
Day 1		
Vocabulary & introduction	PowerPoint mini-lesson: Patriotism and music	10 minutes
Compare/contract resources	Using chart and maps, predict outcome of war	15 minutes
Geographic understanding	Map activity: Comparing the North & South	20 minutes
Day 2		
Songs, lyrics, questions	Guided listening activities	5 minutes
"Battle Cry of Freedom" (Union and Confederate)	Comparing versions	11 minutes
"Johnny is my Darling" (Union)	Discussion: Propaganda	7 minutes
"Bonnie Blue Flag" (Confederate)	Discussion: Propaganda	7 minutes
"Tenting Tonight" (Union and Confederate)	Comparing versions	10 minutes
Assessment	Quick-write	5 minutes
		Total: 90 minutes

Workshop 7: Flutes, Natural Resources, and Trade in the Great Plains

In Workshop 7, *Flutes, Natural Resources, and Trade in the Great Plains*, students explored the concepts of natural resources and trade using the Great Plains tribes as an example. They also listened to Native American music and learned about the Native Americans tribes that had inhabited the United States prior to colonization and read about cooperation and conflict among the Native American nations and between the Native Americans and new American settlers. Students described the purposes, challenges, and economic incentives associated with westward expansion, including the concept of Manifest Destiny, the Lewis and Clark expedition and accounts of the removal of Native Americans (California State Content Standard for Social Studies, 8.8.2. Students discussed the trade assets of Native American nomadic tribes, sedentary

tribes and colonists during the early 1800's (National Geography Standard 11) and considered what natural resources were available in the environment and how those resources limited or permitted the creation of trade goods or musical instruments (National Geography Standard 15). Also, students studied the functions of flute and whistle music within Native American cultures (California Content Standards for Music 3.1, 3.4 and 3.5).

On Day 1, teachers introduced relevant vocabulary, followed by a discussion of an information handout regarding Plains Indians, with accompanying questions. Next, they passed out Culture Area Maps of the United States. Students colored and labeled the culture areas, including five tribes per area. For homework, students read "The Trail of Tears" and completed their maps and the assigned questions.

On Day 2, teachers led a discussion of the reading, "The Trail of Tears." Students traced the route of the forced march described in the *Reader* and examined geographical maps to compare the land that the Cherokee were being moved from and the geography of the land where they were forced to relocate. Teachers led a brief discussion about Native American music, followed by an active listening and drumming activity that enabled students to become acquainted with examples of Native American music.

Table 2.7

Curricular Focus	Activity	Time
Day 1		
Vocabulary & introduction	The Plains Indians PowerPoint	20 minutes
Culture: Plains Indians	Culture Area Maps	20 minutes
Homework introduction	"The Trail of Tears"	5 minutes
Day 2		
Discussion	"Trail of Tears" reading	10 minutes
Geographic Maps	Comparison of environment/geographic areas	10 minutes
Music & culture	Active listening & drumming	20 minutes
Assessment	Collect maps and quick-write	5 minutes
		Total: 90 minutes

Workshop 8: Chinese in America

During Workshop 8, *Chinese in America*, students were introduced to contributions of the Chinese to the settlement of California during the Gold Rush, along with the involvement of Chinese workers in the construction of the transcontinental railroad. Students studied patterns of agriculture and industrial development as they relate to climate, use of natural resources, and markets and trade. Then they located areas on a map where most Chinese worked (California Content Standards for Social Studies 8.12.1) and traced the immigration of Chinese immigrants to the United States and studied the development and construction of the transcontinental railroad (National Geography Standard 1). Finally, they traced the migration of instruments from China to the United States and listened to samples of culturally relevant music that featured instruments from China (California Content Standards for Music 3.5.)

Students learned about the reasons groups of people immigrated from around the world (not just Europe) to North America during the California Gold Rush and the building of the Transcontinental Railroad. Students were asked to consider the circumstances in countries, including China and Ireland that might have had an impact on the large number of people migrating to California. In Southern China in the mid 1800s, widespread famine and tales of getting rich in a land called *Gum San* (the Chinese name for California that meant "Gold

Mountain") contributed to the large number of immigrants from the Guangdong Province in China who came to California. A second wave of migrant workers, from China and other parts of the world, occurred during the building of the Transcontinental Railroad.

On Day 1, students were introduced to vocabulary and "China Facts." Teachers asked students to locate China on a world map and led a brief discussion about recent changes in China, including the long history of the region (studied in Grade 7 in California), and asked students to suggest similarities and differences between the geography of China and California. Teachers showed a short PowerPoint of historical slides and encouraged students to examine each photo, imagining what it might have felt like to leave China and arrive in California in the 1850s. Teachers showed students a geographic map, asking students to consider why San Francisco was a key city in the development of California. Students then read about the Transcontinental Railroad in *American Journey* and studied maps of North America, listing challenges and dangers that faced those who built it. As homework, students were encouraged to learn more about the Chinese contributions to the building of the Transcontinental Railroad by going to the Central Pacific Railroad Photographic History Museum site. Students were asked to read several descriptions and summarize key ideas about one topic (1/2 page). Particularly recommended: "Chinese Laborers and the Construction of the Central Pacific" (Kraus, 1989.)

On Day 2, students shared what they had learned about the Chinese railroad workers. A third of the students had downloaded historic photos that were displayed on the suggested websites. Using a world map, students traced the migration of instruments from China to the United States. Teachers introduced the concept of a "lament," and students discussed multiple dangers that faced railroad workers. Students read "Iron Moonhunter."

Table 2.8

Curricular Focus	Activity	Time
Day 1		
Introduction: China & Immigration	Vocabulary & fact sheet	10 minutes
Historical perspective	PowerPoint slides & discussion	5 minutes
Chinese work on railroads	Page 670 in *American Journey* (Glencoe)	5 minutes
Chinese at Promontory Point	Worksheet and discussion	5 minutes
Geographic Literacy	Map activities (China, California, railroads)	20 minutes
Homework	Online research: Central Pacific Railroad Photographic History Museum site. Read and summarize key ideas about one topic.	
Day 2		
Chinese contributions to building railroad	Discussion of homework information	5 minutes
Transcontinental Railroad	Reading comprehension	15 minutes
Immigrant experience in U.S.	Discussion of Chinese recognition at Promontory Point	10 minutes
Chinese contributions	Declaration: Doolittle, House of Representatives, 1999	5 minutes
Introduce a "lament"	Song: "Iron Moonhunter"	5 minutes
Assessment	Quick-write	5 minutes
		Total: 90 minutes

Workshop 9: The Piano and the Industrial Revolution

In Workshop 9, *The Piano and the Industrial Revolution*, students learned about early mass production in the United States and the developing immigrant labor sources in major urban areas along with major changes in systems of transportation of goods and people. They explored how the Industrial Revolution and immigration affected the living and working conditions of urban populations in the United States. Students also learned that organizations were developed that sought to improve the living and working conditions of Americans through many social, political, and legal avenues.

Students examined the location and effects of urbanization, renewed immigration, and industrialization, located major industrial cities on a map, identified major immigrant groups, and discussed where in the United States these groups settled (California State Standard for Social Studies 8.12.5). They also discussed how human modification of the landscape and the influence of physical geography shaped human actions in certain regions, named significant inventors and their inventions (focusing on the Steinway family and the revolution of piano production), and identified how inventions improved or changed the quality of life (Standard 8.12.6). Students considered how the emigration of the Steinway family from Germany to New York affected the piano industry in New York during the late 1800s. The National Geography Standards fulfilled during this workshop include: Standard 9: the characteristics, distribution and migration of human populations on the earth's surface; Standard 10: the characteristics, distribution, and complexity of the Earth's cultural mosaics (students studied the creation of urban ethnic neighborhoods as a by-product of voluntary mass immigration); and Standard 16: the changes that occur in the meaning, use distribution, and importance of resources (students examined how technology affected the definitions of, access to and use of resources).

On Day 1, teachers introduced vocabulary followed by a reading passage and discussion of "Steinway Pianos –An Industrial Revolution Case Study." Students worked on "Inventors Maps" as a teacher-guided activity. Teachers introduced websites about inventors to show students examples of information that is readily available online. For a homework assignment, students were assigned various websites to visit for which they were asked to take two or three paragraphs of notes, focusing on a significant invention and explaining why the invention was important. Students were encouraged to investigate the achievements of an inventor or industrial leader and be prepared to share that information with the class.

On Day 2, teachers asked students to describe the invention they had learned about as homework, followed by a discussion of the assigned reading, "The Great Bicycle Experiment." Next, working in small groups, students identified advantages (such as improved transportation) and disadvantages (including air pollution) that had resulted from the Industrial Revolution. For the last segment of the lesson, students listened to songs from *American Industrial Ballads* by Pete Seeger (1992) and responded to "Teacher Questions."

Table 2.9

Curricular Focus	Activity	Time
Day 1		
Vocabulary	Introduction to terms and vocabulary	5 minutes
Steinway pianos: a case study	Reading comprehension questions	10 minutes
Significant inventions	Inventors Map activity	20 minutes
Inventors & industrial leaders	Introduce online research	5 minutes
Day 2		
Inventors & leaders	Review homework	10 minutes

Industrial work ballads	Discuss lyrics, listen, questions	20 minutes
Geography: The West	Map, pp. 672-675 in *Call to Freedom*	10 minutes
Songs: American Industrial Ballads	Active Listening Activity	
Assessment	Quick-write	5 minutes
		Total: 90 minutes

Large Group Music Presentations for Treatment Classes

In addition to the nine 90-minute classroom workshops, students participated in three 50-minute large group music presentations with a music specialist. Stephanie Feder had previously developed curriculum units for several *Mapping the Beat* workshops and was invited to provide three 50-minute music presentations for the treatment classes. These large group presentations took place in the school cafeteria during Fall semester, 2008. Each presentation was given twice, with approximately 70-77 students from two of the four treatment classes meeting in the school's multi-purpose room for each presentation.

Major topics from the *Mapping the Beat* workshops were incorporated into each music presentation. Curricular goals included building student engagement and interest, also broadening understanding of connections among music, culture, geography, and history. During each music presentation, Ms. Feder reviewed topics from the social studies curriculum, asked questions, and emphasized the evolution of particular musical forms in the United States.

Group Music Lesson 1

Group Music Lesson 1 had two parts: Part 1, "America's Music," explored instrument migration, using as examples the banjo, the fiddle, and the guitar (20-25 minutes); and Part 2, "American Work Songs," explored American work-songs and rhythmic patterns (35 minutes).

Instrument Migration

Concepts discussed included characteristics of the 13 original colonies; instrument migration of the fiddle, guitar, accordion, banjo, piano, and ngoni; the Atlantic slave trade; development of the American West, including railroads; and American folklore, including John Henry, Paul Bunyan and Johnny Appleseed.

Part 1: America's Music (20-25 minutes).

Students listened to audio examples that combined the use of the guitar, fiddle and banjo; students were asked to describe what they heard. Discussion questions included: "Can you identify what music you were listening to? Is it Irish music? Is this folk music? Is it Country music? Is country music uniquely American, or did it come to America from another country (like so many other types of music we know and listen to today)? Can you identify any of the instruments you heard? Have you ever seen any of these instruments before? "

The class discussed the three instruments that would be explored in this lesson: the banjo, the fiddle, and the guitar.

The Banjo. During the discussion of the banjo, the discussion leader:

- displayed an overhead diagram of the banjo and discussed its construction
- pointed out that the banjo has five strings stretched over a drum head (with no sound hole)
- played an audio sample followed by a video clip of the banjo
- asked students to describe the sounds of the banjo (tinny, metallic, abrasive, loud) and discussed how it is held when played (on the player's lap)

- discussed the history of the development of the banjo and pointed out (on a projection of a world map) the migration route of the banjo from Arabia to West Africa and over to the U.S.
- asked review questions including: “How many strings does the banjo have? What is the banjo made of? How is it held when played? Where does it come from? Why might the African slaves have chosen drums to build the banjos from?”

The Fiddle. Following discussion of the banjo, the discussion leader introduced the fiddle. During the presentation, she:

- displayed an overhead diagram of the fiddle and discussed its construction
- pointed out that the fiddle has four strings, is made entirely of wood with two sound posts on either side of the bridge and strings, is held on the player's shoulder
- explained that there is no difference between a violin and a fiddle (it is just what the violin is called by old-time/country musicians)
- told the students "I once saw a bumper sticker that read: A fiddle is a violin with an attitude"
- played an audio sample followed by a video sample of the fiddle
- asked students to describe the sound of the fiddle (high, smooth, plucked, etc.)
- asked students to imagine they were holding and playing the instrument
- discussed the history of the development of the fiddle and pointed out (on a projection of a world map) the migration route of the fiddle from Ireland & Scotland to the U.S.
- asked review questions including: “How many strings does the fiddle have? What is the fiddle made of? How is it held when played? Where does it come from? And why was the fiddle such a popular instrument for traveling musicians?”

The Guitar. When the guitar was introduced, the discussion leader:

- displayed an overhead diagram of guitar and discussed its construction
- pointed out that a guitar has six strings, is held on the lap when played, plucked or strummed (not bowed), has a sound hole in the center of the body, is made of wood
- played an audio sample followed by a video sample of the guitar
- asked students to describe the sounds of the guitar (low, loud), discussed the history of the development of the guitar and pointed out the migration route of the guitar from Spain to Ireland and the United States on a world map
- asked review questions including: How many strings does the guitar have? What is the guitar made of? How is it held when played? Where does it come from?

The teachers and students enrolled in the school's elective guitar class helped pass out one guitar to each table. The music specialist asked students to identify the parts of the guitar (pegs, strings, frets, finger board, sound hole, bridge). They

- allowed each student to hold the guitar properly and to strum the strings, with assistance from students who were enrolled in the school's guitar class.
- collected guitars from tables at the end of this activity
- displayed an electronic reproduction of a map of early America
- asked students to identify Appalachia and recalled the countries from which each of the instruments originated

- asked students to identify states to which the Scotch-Irish (also known as Scots-Irish) immigrated and states where most slaves were taken (for example, Virginia, West Virginia, North Carolina, South Carolina, and Georgia).

Part 2: American Work Songs (25 minutes).

For this segment, the music specialist reminded students of a *Mapping the Beat* lesson, asking:

> Do you recall the story of John Henry that you reviewed in class last week? Is this a "tall tale" or is it history? Who does John Henry represent? What does the story tell us about the lifestyle and character of people during that era? You've learned songs about John Henry and John Kanaka, but there were many songs composed about those back-breaking, hard-working times. In fact, much of the music that was composed was meant to make light of those dark times and help make the tough days a little easier.

Popular Work Songs. The music specialist focused on popular work songs, beginning with the familiar tune, "I've Been Workin' on the Railroad." She shared information about the song:

> The origin of this tune that we recognize as "I've Been Workin' on the Railroad" is debated. It could be traced back to a "Louisiana Levee" song that was sung by African-Americans, or to an old hymn adapted by the Irish work gangs who worked on the railroads. The lyrics: "Someone's in the kitchen with Dinah" were apparently late additions. It is unclear whether "Dinah" refers to a woman or to a locomotive. The horn signifies the call to lunch. This tune was adapted by Texans for the state song, "The Eyes of Texas are Upon You."

The music specialist played a recording of the song. Perhaps half of the students voluntarily sang along, obviously enjoying this familiar tune:

> I've been workin' on the railroad, All the live long day.
> I've been workin' on the railroad, Just to pass the time away.
> Don't you hear the whistle blowing? Rise up so early in the morn.
> Don't you hear the captain shouting, "Dinah, blow your horn?"
> Dinah, won't you blow, Dinah, won't you blow, Dinah, won't you blow your horn?
> Dinah, won't you blow, Dinah, won't you blow, Dinah, won't you blow your horn?

> Next, the specialist played the tune "Clementine" on the piano and told the students: The words and music to this tune are attributed to Percy Montross, who composed during the late 1800s. It is widely believed that Montross based his composition on the song "Down by the River Liv'd a Maiden," by H. S. Thompson (1863). As "Clementine," the tune has become a popular song with countless different verses.

A recording of "Clementine" was then played, and about 20% of the students sang along:

> In a cavern, in a canyon, Excavating for a mine,
> Dwelt a miner, forty-niner And his daughter Clementine.
> Oh my darling, oh my darling Oh my darling, Clementine
> Thou art lost and gone forever, Dreadful sorry, Clementine.

Rhythmic Patterns. The music specialist introduced rhythmic patterns, sharing a quote from Frederick Douglas: "The composing of work songs, like most African-American folk music, was done spontaneously and collectively; it usually expressed an immediate concern or referred to an event in the lives of the slaves." During this portion of the lesson, the discussion leader:

- repeated several beat patterns and asked students to listen to songs with a beat pattern, including "Chain Gang"
- led a brief discussion, asking if students could identify any applications of work song music
- prompted students to think of types of work that might benefit from work songs. (Students suggested planting/harvesting crops, tree clearing, rowing. driving the team, clearing brush, washing windows, and scraping gum.)

Next, students worked with one or two partners for two minutes, composing call and response work songs based on one of the above. An example included:

Leader:	Ready?	All: Ready!
Leader:	Go! Go!	All: Go! Go!
Leader:	Got your hammer?	All: O yeah! Huh!
Leader:	Got your hammer?	All: O yeah! Huh!
Leader:	Got your hammer?	All: O yeah! Huh!
Leader:	People keep a-workin' 'til the rail get done.	

Students identified their own types of (non-dancing) physical activities. Examples included walking to class, raking the leaves, waxing the car, seeing a friend in the crowd and getting his/her attention, showing off for the teacher/friends, and catching the bus.

In groups at tables, students composed and created a rhythm that suited the intended purpose and created their own holler, solo, or call/response, with four lines of verse and a chorus (as in the example). The finished product was performed for the class.

Making Connections: The music specialist asked questions to wrap up the activity: "How does setting an activity to music influence a person's attitude to the task? What are possible advantages from group and communal singing during work? Were work songs thought of as 'work,' 'performance,' or a kind of 'meditation?'"

Table 3:1

Curricular Focus	Activity	Time
Part 1		
Banjo, fiddle, guitar	PowerPoint with maps to trace origins	5 minutes
Banjo	Listen to recording, watch video, discussion	5 minutes
Fiddle	Listen to recording, watch video, discussion	5 minutes
Guitar	Recording, hands-on activity, discussion	10 minutes
Part 2		
American Work-songs	"I've Been Workin' on the Railroad"	5 minutes
American Work-songs	"Clementine" – listen or sing & discuss	5 minutes
Rhythmic patterns	Introduction & "Chain Gang"	5 minutes
Rhythmic patterns	Call and response activity	5 minutes
Making connections	Questions, discussion, and summary	5 minutes
		Total: 50 minutes

Group Music Lesson 2

Lesson 2 included two parts: a) Polka Music and German/Czech/Polish Immigration to Texas (25 minutes); and b) African American Spirituals and the Underground Railroad (25 minutes). Polka Music was introduced through immigration of Germans and Czechs to Texas, and the African-American Spiritual served as a means of communication and built community for those traveling along the Underground Railroad during the Civil War era.

Previously discussed in class were an introduction to the history of Texas, including an understanding that immigrants who flocked to Texas brought traditions, including dances and music; familiarity with the map of Texas and the location of major cities; an introduction to polka music and the accordion; an introduction to the Atlantic Slave Trade and the harsh realities of Civil War era slavery; the Underground Railroad; and abolitionists and anti-slavery crusaders, including Harriet Tubman.

Part 1: Polka Music & German/Czech/Polish Immigration to Texas (25 minutes)

The discussion leader began by having students listen to a few brief audio examples of polka music, asking students to describe what they heard: "Can you identify the music? Is it European music? American music? Folk music? Country music? Is it meant for dancing? Is dance music like this uniquely American or did it come to America from another country (like so much other music we know and listen to today)? Can you identify any of the instruments you heard? Have you ever seen any of these instruments before?"

Czech Polka and Culture.

The music specialist played an audio sample of polka music in which the sound of an accordion could clearly be heard and asked students: "What is the beat pattern you hear? What instrument do you hear predominantly?" The discussion leader:

- asked students to describe sounds of the accordion. (Students suggested "dense," "loud," "like an organ");
- discussed how an accordion is held when played; showed a video example of an accordion being played
- asked students to locate the Czech Republic on a map of Europe
- discussed the history of Czech immigration to Texas, including where Czech immigrants typically settled and how they organized their communities
- asked questions including: "What is the main instrument associated with the polka?"

German Polka and Culture.

As an introduction to German polka, geography, and culture, the music specialist:

- played an audio sample of German polka
- asked students to locate Germany on a map of Europe
- briefly reviewed the history of German immigration to Texas, asking questions that included: "Where did German immigrants settle? How did they organize their communities? What were the community associations of the German immigrants called?"

Polish Polka and Culture.

Polish polka was contrasted to German polka. The music specialist:

- played an audio sample in which the sound of the fiddle could clearly be heard and asked students to describe the sound of the fiddle. (Students suggested: "high," "smooth," "fast.")
- asked students to locate Poland, using a projected map of Europe;

- discussed the history of Polish immigration to Texas, asking questions that included: "Where did they settle? How did they organize their communities? What is the name of the organization with which local Polish immigrant organizations allied? What was the prominent instrument of Polish polka? In what situations was the polka generally played?"
- explained that polka was the popular music of 19th-century Texas, "Just as your favorite musicians and groups are popular today. Polka was what almost everybody listened to, what they danced to, and what they'd go to concert halls to hear."

Encouraging students to make connections, the music specialist asked:

- "What music do you listen to now that makes you want to dance?
- Do you go to live concerts and hear bands play? What does this have to do with me, or us, as a nation?
- Is there any connection to the world in which we live today?
- How does the arrival of polka from Eastern Europe in the nineteenth century relate to us today?"

Part 2: African-American Spirituals and the Underground Railroad (25 minutes)

As an introduction to Part 2 of the lesson, the music specialist played an audio example of a spiritual, asking students to describe what they were hearing. Questions included:

- "When do you think this song was written?
- Who do you think would sing a song like this?
- How does the music make you feel?
- What do you think the words in the song are trying to convey?"

Spirituals as Coded Communication.

As an overview to "spirituals as coded communication," the music specialist:

- explained that spirituals had many uses. Certain spirituals had embedded coded messages, hidden messages in the song lyrics that served as a form of secret communication on the Underground Railroad
- told students that two common types of coded spirituals were "signal" songs and "map" songs

The music specialist told students that the most famous map song was "Follow the Drinking Gourd." In this song, the drinking gourd is a metaphor that symbolizes the constellation of stars known as the Big Dipper, which contains the North Star, an important guide for slaves and other individuals who needed to be certain they were continuing to travel north as they made their way to freedom. She then:

- played an audio sample of "Follow the Drinking Gourd"
- mentioned that coded communication was included, in varying degrees, in all of the spirituals discussed in the lesson
- described four broad categories of spirituals, including a) singing as an expression of democratic values and community solidarity; b) singing as a source of inspiration and motivation; c) singing as an expression of protest; and (d) spirituals as coded messages.

Spirituals During Slavery.

Spirituals from the slavery period were introduced. The music specialist explained that during the time of slavery spirituals evolved to serve a variety of purposes in the fight for freedom. (Slavery continued until 1865 when legalized slavery ended with the signing

of the Emancipation Proclamation.) *The Spirituals Project* by Arthur C. Jones (2004) provided helpful background information on this topic.

The discussion leader presented four categories of spirituals:

1. Singing as an expression of democratic values and community solidarity (music example of "So Glad I'm Here")
2. Singing as a source of inspiration and motivation (music example of "We Shall Overcome")
3. Singing as an expression of protest (music example of "I've Got Shoes")
4. Singing as coded communication (music examples of "Follow the Drinkin' Gourd" and "Freedom Medley")

The music specialist gave an introduction to each of the above categories of spirituals. To help make connections, students were asked questions that included: "How does setting Bible stories to music help us understand the meaning of the stories? Were spirituals used as work songs as well? And how does the setting of an activity to music influence a person's attitude to the task? What were advantages of group/communal singing during the time of slavery? Why do you think many slaves sang spirituals? Was it to improve work performance, as a refuge from difficult circumstances? Was it as a 'religious meditation,' or was it for other reasons? Do we have music today in our popular culture that fulfills the same purpose? And today, in the 21st century, are there still people who are enslaved anywhere in the world?"

Table 3.2

Curricular Focus	Activity	Time
Part 1		
Czech Polka Music/Culture in Texas	Czech polka & discussion activity	8 minutes
German Polka Music/Culture in Texas	Listen & compare to Czech style	8 minutes
Polish Polka Music/Culture in Texas	Listen, then compare & contrast styles	9 minutes
		25 minutes
Part 2		
Spirituals as coded messages	Listen to "Follow the Drinking Gourd" & discuss	5 minutes
Democratic values	Excerpt from DVD: "So Glad I'm Here"	5 minutes
Inspiration/motivation	DVD example: "We Shall Overcome"	5 minutes
Protest	DVD example: "I've Got Shoes"	5 minutes
Making connections	Discussion questions	5 minutes
		Total: 50 minutes

Group Music Lesson 3

Lesson 3 was divided into two segments: Part 1: Exploring the rich cultural and musical traditions of Great Plains American Indians; and Part 2: Learning about the increasing popularity of the piano among blue-collar families in the early 1900s as a direct effect of the Industrial Revolution. The music specialist engaged the students in a whole class discussion about topics discussed in previous Mapping the Beat workshops and in their social studies textbooks.

In Workshop 7, *Flutes, Natural Resources and Trade in the Great Plains*, students were introduced to the culture and geography of the Native American tribes of the Great Plains, as well as to a variety of musical instruments used in daily activities and ceremonies. In Workshop

9, *The Piano and the Industrial Revolution*, students were introduced to social, economic, and cultural changes that accompanied the Industrial Revolution, including changes that popularized the piano.

Part 1: Music and Dance in the Lives of the "Lakota Sioux" Native Americans

As an introduction to Lakota dance, music, and culture, the music specialist asked questions regarding immigration to the United States, including: "What did the people from West Africa and Europe bring with them?" She then said: "But we haven't mentioned an important part of our country's heritage. What groups were already here when the first Europeans arrived?" (No students raised hands.) The discussion leader played a variety of music selections with examples of songs played on Native American flutes. To continue the lesson, the discussion leader:

- asked if students had studied the Native Americans (Students replied "yes.")
- explained they were going to talk about indigenous Americans who lived on the Great Plains
- asked if students could name one or more tribes who lived in the Great Plains area.
- explained to students that the Sioux Indians:
  were a huge tribe…so large they were known as Northern, Eastern, Southern, and Western Sioux; they were mostly located in the area we call North and South Dakota. The Sioux were similar to a suburban community, located within a larger metropolitan area. "Lakota" is the name of a smaller tribe that lived within the greater Sioux nation.
- asked students what kinds of materials they thought the Lakota may have used to make musical instruments.

The discussion leader answered the last question: "Drums, rattles (made of beads or shells), or any type of hollowed out gourd or tube that has seeds or pebbles inside and can be shaken to make noises." She showed students a rain stick -- a hollowed out tube filled with seeds that flow through a filter, falling slowly to create a rain-like sound. She explained that other instruments and sounds were also used, including flutes, and that these instruments were almost always accompanied by some sort of vocalized sounds and syllables (voices).

The discussion leader told students that music was an extremely important part of the lives of the Lakota, both in daily activities and special occasions, for children and adults. Referring to prior discussions, the specialist asked: "Do you recall the type of singing used by African-Americans that we talked about in the last lesson?" One student raised his hand and volunteered the answer [Call & Response].

Vocables.

The discussion leader explained that the Lakota used "vocables," sounds not actually translated into any words. These sounds were nonsense syllables to them. In English, we can say "ha" or "he." For them, the sounds "he" and "ha" were vocables, sung in rhythmic fashion. The specialist explained that a leader (demonstrated by playing a beat on the bongos) makes sounds, and the group responds or repeats the sound (demonstrated by the group response of repeating the same beat with a rattle). The music specialist demonstrated, asking students to repeat the sounds: "hey ah hey ah…"

The discussion leader informed students that actual words were also used, similar to African-American songs, with a leader and a group, known as "call and response":

> We might call these "Responsorial" songs; the songs of the Great Plains Indians also were call and response songs and included actual words that we call

> vocables, or ululations. An ululation is like onomatopoeia, a word that imitates the source of the that it describes sound, such as "bang" or "zap." An ululation is a repeated sound that goes on in a high pitch.
>
> The discussion leader continued by saying:
> I'm going to lead, and you're going to respond. It was a common practice for participants to cover their mouths and take their hands away as part of sound modulation. The vocalizing of the Indians came from their guts. It had great power and energy when they responded to the call. Does anyone know the name of a dance the Native Americans used? Have you heard the word pow-wow? A pow-wow is a gathering of Native people that features traditional dance and traditional music.

The discussion leader demonstrated a drum and rattle beat and modeled how students can respond to the musical call by repeating the "drum beat" on the tables. As the music specialist chanted "Hey yah…..Hey yah!" the students become extremely animated, beating loudly on the tables: 1-2-3-4. Nearly 100% of the students beat on the table, and many laughed.
After taking a moment to regain attention and control, the music specialist told the students:

> We're going to listen to an actual song that has been sung as a call and response for thousands of years by the Lakota. The Rabbit Dance was very poplar among the Lakota…it's not meant to draw rabbits to the field and is not a prayer…it is a celebratory dance. Why this name? Any guesses? Because rabbits are known to bring good luck, yes, a rabbit's foot. That tradition of a rabbit's foot bringing luck comes from early American Indians.
>
> Next, the music specialist introduced a Native American pow-wow dance called the *ululu*. The dance movements were taught to students using these directions:
>
> > Movement 1: Hold your arms up and wave your hands. Include the *vocables* "woo woo woo woo"
> > Movement 2: Take your right hand and move it in a diagonal line across your body: Hands up, cross over, include the *vocable* "Hee Wah."
> > Put Movement 1 and Movement 2 together.

The teachers encouraged 100% involvement: "Everyone up, please stand, mouths closed!" The music specialist played a DVD sample of a Native American song and dance. Nearly all students joined in, tapping or beating on the tables. The music specialist asked the students "Did you hear the beat? Can you continue this pattern for me?" while demonstrating a particular rhythm on the tables. The specialist asked students to maintain the same steady beat. The specialist called out and students responded. Most were actively involved, with approximately 90% participating. For many, it was difficult to maintain a steady beat. Time did not allow perfection of this skill, and the music specialist moved on.

At this point, the discussion leader checked for understanding by asking a variety of review questions.

> Before we move on, let's see what you remember. What is the name for a nonsense syllable that's used in Native American songs? (Actually, pow wow means "gathering") From what greater tribe was the Lakota? And what is the typical singing style used in Native American music?

Throughout the three large group presentations, the discussion leader frequently checked for understanding, asking questions about what had been taught in earlier workshops or large group presentations, encouraging recall, and helping students to connect new and prior learning. To complete Part 1 of this lesson, the discussion leader asked:

"What do we call those nonsense syllables? What about the high pitched, repetitive sound?"

Part 2: The Piano and the Industrial Revolution

To provide an example of the music specialist's manner of presentation, this section is presented almost entirely in her words:

> We're going to jump forward to the 1900s. This was during the time of the Industrial Revolution. Blue collar families, also called working class families, were starting to have more valuable things in the home. One of the things that was prized and valued was a piano. Do you have a piano or know someone who has one? [Approximately 20 hands were raised.]
>
> During the 1920s and 1930s, a piano was representative of elevated stature. It was a symbol of being comfortably middle class, if not wealthy. Today, is owning a piano considered a symbol of prosperity? [Most students said "No."] What items are symbols of value today? [Students suggested a flat screen TV, fine furniture, or a luxury automobile.] Also, perhaps a powerful computer and fancy electronics. In the 1920s, what kind of a revolution was going on? [Students answered "an Industrial Revolution."]
>
> The 1920s was a time of extremely rapid industrial expansion. The auto industry was still young and growing quickly, new energy sources were being developed, and many new jobs were being created. In the 1920s, many homes did not have a piano. When the smaller, upright pianos were built, even people in small houses or apartments might fit a piano into the home.
>
> The popular music of the time was all on the piano. Have you heard of "ragtime" music? [One hand went up.] Ragtime music was developed as an explosive, exciting way to use all of the piano keys. We are going to hear a tune by Scott Joplin, who wrote piano music for upright pianos, especially for amateur, beginning learners. This music was exciting and fun and it made you want to dance.

The discussion leader played a selection from ragtime music by Scott Joplin, then continued:

> Listen to how he covers the entire piano. Now, listen for that little run. Joplin wrote for the very high and very low register. Throw your hands up in the air

when you hear the run from the low end to the high end. Raise your hands when you hear the run where he covers the keys.

Student Focus Groups

In late May of 2009, two graduate students met with four focus groups of students who had participated in the treatment workshops. Each interview lasted approximately 40 minutes with seven to nine students participating in each group. Most of the students had volunteered to participate when invited by their teachers. The two teachers also asked several students if they would be willing to participate, so as to ensure that the groups were balanced in regard to English-Language Arts proficiency levels, ethnicity, and gender.

The research assistants assured the students that their comments would remain confidential and encouraged them to reflect on, and share impressions about, the *Mapping the Beat* lessons. Students were encouraged to reflect on workshops and comment on how the workshops might have changed their opinions of, or interest in, history and geography. The questions posed to each group, along with representative responses, are provided below.

Question 1. Did your attitude toward geography change as you took part in these workshops?

At first I thought geography was boring and probably not even worth learning about. I thought geography was just about maps and hills but we learned that it includes a lot more, like learning about different cultures and natural resources. That made it more interesting.

I liked geography just a little before these lessons, but after these workshops I became a lot more interested. The music and pictures of other countries, especially, made me want to travel and explore the world. Last week I watched a program about Afghanistan. Wow—talk about a country where geography makes a big difference!

Everyone is pretty much interested in music. I think the music made everyone curious and interested in learning geography. It made places seem more real.

I didn't have any interest in geography. Now, it's not like I suddenly want to be a geographer, but I'm definitely more interested and understand that geography is much more than memorizing map facts.

Question 2. Why do you think music was included in the social studies lessons?

A lot of people who lived during the times we studied expressed how they felt through music. For me, learning about songs and dances made social studies more personal…I felt like people were singing to me from the past.

I liked learning about how music evolved from far away places—such as Africa, Asia, and Europe—and how different types of music mixed and changed into American-style music.

Music made complicated things, like slavery, easier to understand. I don't like it when teachers give a big textbook and say "read this chapter and write out

answers to those questions." For me, it's easier to comprehend when music is part of the lesson. It wakes me up!

At first, when this class started, I didn't like geography or history at all, but I liked music a lot. So, when we started learning about music … I found it super interesting and I wanted to learn.

Question 3. What did you like most about the Mapping the Beat workshops?

I liked the dancing we did with the call and response music. That was so fun! And I loved it when a lot of us sang favorite songs in class!

For me, the combination of music and geography and culture lessons was powerful. I enjoyed learning and talking about lyrics, such as rowdy work songs that coal miners sang, and sea shanties used by sailors on whaling ships, and spirituals and work songs that the slaves sang in the fields.

You can lose notes and forget videos but when you actually do something, you just remember it so much better.

I usually don't like history. Visualizing what happened in the past and making connections to the way things are now is like getting pieces of a huge puzzle and putting it all together. That was really interesting.

The students appeared to be enthusiastic about their experiences in the workshops and were eager to share their explanations for the success of the workshops. Focus group students reported that their attitudes toward geography-related activities had grown more positive as a result of the geography discussions and activities. Without exception, the students who participated in the focus groups indicated that they enjoyed the music. Music not only heightened their interest, but also touched their emotions, broadened their empathy, and helped them better understand the struggles and feelings of the groups they were studying.

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