



This Issue's Theme:

Supporting Project-Based Learning

This issue explores how teachers can use primary sources to enrich students' project-based learning experiences.

Project-based learning, an approach that presents students with a task or challenge with real world applications, is both authentic and relevant. These words also describe primary sources — original photographs, documents, music, film, clothing, and other artifacts which were created at the time under study. When integrated into project-based learning, primary sources prompt students to engage in inquiry, think critically and construct new knowledge about long-standing questions. The feature article in this *TPS Quarterly* issue describes how to enrich a project-based learning experience with primary sources.

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Teaching with Primary Sources

The Library of Congress Teaching with Primary Sources (TPS) Program works with universities and educational organizations to offer professional development that helps teachers use the Library's digitized primary sources to deliver effective instruction.

Teaching with Primary Sources Quarterly provides information and materials that support this goal.

For more information about Teaching with Primary Sources or to identify a TPS consortium member in an area near you, please visit the web site at <http://www.loc.gov/teachers/tps>.

Project-Based Learning with Primary Sources

by Kathleen Ferenz

Project-based learning engages students in meaningful tasks or challenges that connect academic content to real-world applications. Primary sources—original documents and objects which were created at the time under study—lend themselves perfectly to project-based learning’s focus on authentic activities. They provide insight into the ways in which people throughout history have applied their intellect and efforts to actual problems and events.

Project-based learning helps both students and teachers answer the enduring question of all learners: so what? Students are responsible for managing their time, organizing their academic work and collaborating. Teachers guide rather than dictate students’ processes of creating products or performances to build knowledge and skills, demonstrate learning and communicate the results.

What is project-based learning?

There are several variations on project-based learning, also called *project learning*. Each variation has a slightly different approach to instructional strategy and implementation. Such diversity in interpretation and terminology can be confusing, especially when paired with the misconception that project-based learning is just “doing projects” in the classroom. So what are the essential characteristics of project-based learning? Project-based learning has an organizing task or product that coordinates and directs learning, which typically: focuses on authentic learning experiences; demands in-depth inquiry; fosters interdisciplinary thinking; benefits from collaboration; and includes ongoing assessment.

Why use primary sources to support project-based learning?

Supporting project-based learning with primary sources as well as secondary sources, such as textbooks, encourages students to engage in in-depth inquiry and analysis. Primary sources can provide students with direct access to the record of artistic, social, scientific, and political thought and achievement produced by people living in the specific time period under study, allowing students to develop and apply interdisciplinary thinking and skills. Since primary sources are often incomplete and have little context, students may encounter contradictions when comparing multiple sources that represent differing points of view, and discover the past to be as complex as the present. To better understand how primary sources can support project-based learning, let’s consider each essential characteristic of this instructional approach, in greater detail, illustrated by a case study using digitized primary sources from the Library of Congress.

Authenticity

To be meaningful and worthy of extended study, a project must present students with a task or challenge with real world relevance. Primary sources provide students with unique opportunities to interpret meaning for themselves and to relate what they are required to learn in school to their own lives and the world.

Case Study A high school U.S. history teacher is beginning a unit on the rise of American industry during the late 19th and early 20th centuries, and how political issues reflected resulting social and economic changes. She wants to capture and sustain students’ interest, especially those who complain that studying history is “boring” and “a waste of time” because it has “nothing to do with my life.” The teacher starts by asking groups of students to investigate a set of primary sources for clues to a problem from our nation’s past. For this activity, she selected five photographs from the Library of Congress’s [National Child Labor Committee Collection](#) by investigative photographer Lewis Hine, who documented working conditions of children in America for the National Child Labor Committee between 1908 and 1924. Using the [Primary Source Analysis Tool for Students](#) and [Teacher’s Guide to Analyzing Photographs and Prints](#), the teacher leads the class in analyzing one photograph to model the activity.

Students analyze remaining photographs in groups before discussing findings as a class guided by their teacher. What challenges do students think the photographs document? What evidence supports their hypotheses, i.e., how do they know? What questions do students want to investigate further? The teacher prompts to expand thinking beyond child labor. Next, she distributes the photographs’ bibliographic records, and this additional information prompts students to ask questions about the work of Hine and the National Child Labor Committee. The class reads assigned secondary sources, including the Library of Congress’s [National Child Labor Committee Background and Scope](#) for historical context. Investigating primary sources serves as a springboard to dive deep into the challenges relating to the rise of American industrialization.

The class generates a list of political, social, economic and environmental challenges related to the rise of American industrialization in the late 19th and early 20th centuries. The teacher prompts students to list challenges they believe are related to the emergence of today's global economy. She posts lists of past and current challenges for reference in coming weeks. The teacher poses the unit's two guiding questions, How did citizens help solve challenges relating to the rise of American industrialization? How might we apply their strategies to meet challenges posed by globalization? These are posted throughout the project.

In-depth inquiry

Inquiry plays a critical role in project-based learning because it encourages students to identify which aspects of the overall topic they would like to investigate further. Students actively process information through investigative activities that promote questioning, analysis and synthesis of complex information and evaluation as they create and share their learning outcomes.

Case Study Analyzing Hine's photographs provided an entry point for the unit's theme: the rise of American industry and its political, social, economic, and environmental implications. Through this activity, the teacher assessed prior knowledge and students began generating related research topics based on their interests. The teacher prepares students for in-depth inquiry by reviewing history of American industrialization using both primary and secondary sources. When students have sufficient historical context and understand the expected learning outcomes of the unit, they identify relevant research questions tied to the first guiding question: How did citizens help solve challenges relating to the rise of American industrialization? For example, a student interested in social history may want to research, "How did Mary Harris Jones (a.k.a. Mother Jones) influence the national labor movement?" A science-focused student might investigate, "What impact did Edison's inventions have on lives of American industrial workers?" A student interested in journalism asks, "What role did Sinclair's investigative reporting play in establishing U.S. food safety regulations?"

Students individually investigate topics using primary and secondary sources with teacher guidance. She directs the student researching Upton Sinclair to the historic newspaper database, Chronicling America, where he finds a series of 1906 articles about Sinclair's writing of *The Jungle*. The teacher models how to interrogate primary sources, using such strategies as thinking like a historian (i.e., sourcing, contextualizing, close reading, using background knowledge, and corroborating). As students begin to synthesize information and draw hypotheses, she challenges them to support initial conclusions with evidence from primary sources.

Interdisciplinary Thinking and Skills

In project-based learning, what students need to know can spill over into more than one domain of content. As students engage in authentic problem solving, opportunities arise for them to apply, practice and acquire interdisciplinary thinking and skills.

Case Study While planning this unit, the teacher collaborated with a language arts teacher so students would focus on the same historic period and have time to work on projects in both classes. In language arts class, students read literature from the late 19th and early 20th centuries and examine a variety of informational texts, such as letters, journal entries, newspaper articles and reports written during that period. Students' projects must include a written component incorporating information gained from their readings. For example, the student researching Upton Sinclair plans to compare descriptions of Chicago's meatpacking industry from *The Jungle* to writings by critics, including President Theodore Roosevelt, who claimed that Sinclair exaggerated or lied about working conditions. The student wants to write an imaginary conversation between Sinclair and Roosevelt based on these texts.

Collaboration

Often facilitated in the style of a workshop, project-based learning is active and collaborative with the teacher and students engaging in ongoing dialogue about individual or group projects. In this classroom, the teacher (lead-learner) guides the learning toward the goals and outcomes identified originally in the curriculum. Students, in turn, help guide one another with structure and purpose to inform their learning.

Case Study Throughout the unit, the teacher has assigned students to work in groups at key intervals, as a way to provide one another with feedback and support on their individual projects. She follows some common strategies to create a positive collaborative learning environment by: setting guidelines for group work and interaction; modeling for students how to work together; shifting learning responsibility to the students; and, creating diverse-ability working groups.

For one collaborative activity, groups host poster sessions showing research to date. Each student presents key ideas, along with supporting evidence from primary sources, to group members. In turn, they challenge their peers' findings and offer suggestions for additional evidence and investigative strategies that would strengthen conclusions. Later, each group will compile individual members' research findings and develop a product or performance to highlight successful strategies from the late 19th and early 20th centuries with supporting evidence from primary sources.

As the culminating activity, the teacher asks students to design a class project in response to the second guiding question: How might we apply these citizens' strategies to meet challenges posed by today's emerging global economy? Students research the effects of globalization using primary sources created in the last several years, such as newspaper and magazine articles, news footage, blogs, or documentaries, to learn about some of the effects of the global economy. They use this understanding to revise the list of related problems created at the start of the lesson. Students work together to identify a specific challenge, select the appropriate strategies to meet it and explain how they will adapt them using 21st century technologies. For example, social networks such as Facebook are ideal platforms for organizing large groups of people quickly. Imagine if Mother Jones had been able to harness the power of this technology for her activism!

Students return to original lists of current challenges related to globalization and select the issue of greatest importance to them: global warming. The class designs a plan (which may or may not be implemented) that promotes development of local transportation alternatives in response to global warming. Students decide to focus on three strategies: exposure (Hine, Sinclair), invention (Edison) and activism (Jones). To expose the problem, the plan calls for photographing roads without sidewalks or bike lanes, interviewing people who want local government to fund these improvements and posting information to a website along with data about the global impact of auto emissions. The plan includes a recommendation that the city council sponsor a contest for designing a new system of biking and walking trails within local parks. Finally, the plan calls for citizens to organize and demonstrate in support of such measures to raise awareness and funds. The teacher guides students as they design this plan but allows them to decide which strategies to include and how.

Ongoing Assessment

The teacher's role in project-based learning is to provide students with continuous feedback and guidance throughout the learning experience. Just as important, however, is ongoing self-reflection and assessment from peers. While not always possible, inviting observers from outside the classroom, particularly subject experts, to provide feedback and encouragement can also be a powerful learning experience for students.

Case Study From early planning stages of this project-based learning experience through its completion, the teacher followed assessment guidelines, specifically by: clearly communicating expected learning outcomes to students; planning multiple assessment points throughout the project (formative and summative); using a variety of assessment techniques to gain a full picture of student learning in progress and its outcomes; and building in time for ongoing feedback and revisions. Throughout, the teacher set up structures that enabled students to assume responsibility for checking in with their group and with her. She set realistic project management deadlines and used project checklists, timelines and, when possible, digital collaboration tools to make student learning more visible and easy to track. She recognized that frequent checking for student understanding of content under study is essential to project-based learning.

Conclusion

Through project-based learning, students can acquire a personalized understanding of new content based on their participation, inquiry and investigation of primary sources and other learning materials. They build and demonstrate new knowledge and skills through self-directed learning and active engagement with content. Projects, by design, need to be worthy of the time required to complete them. Since projects can take days, weeks, or longer, planning is essential to success. Planning a project-based learning experience involves: designing a specific learning objectives and outcomes; using primary sources often to support student interpretation and discovery; providing students with ongoing and constant feedback; helping students with time management; using digital collaboration tools when appropriate; allowing sufficient time for in-depth inquiry and project development; and providing ample opportunities and encouragement for ongoing collaboration among students.

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Research and Current Thinking

For each issue, Teaching with Primary Sources Consortium members submit summaries of and links to online resources—articles, research reports, Web sites, and white papers—that provide research and current thinking relating to the theme. This Research & Current Thinking focuses teaching project-based learning using primary sources.

Implementing Project-Based Learning to Create "Authentic" Sources: The Egyptological Excavation and Imperial Scrapbook Projects at the Cape Cod Lighthouse Charter School In this article from the journal *The History Teacher*, a seventh-grade charter school teacher describes her positive outcomes with the use of project-based learning to teach about ancient civilizations, helping her students become more knowledgeable about the rise and fall of these civilizations.

Powerful Learning: Studies Show Deep Understanding Derives from Collaborative Methods (Barron & Darling-Hammond, 2008) This Edutopia review of research literature on project-based learning highlights significant benefits derived from cooperative learning and inquiry-based teaching that are hallmarks of project-based learning. For example, the authors cite research demonstrating that a deeper level of learning is achieved when students apply knowledge gained in the classroom to problems they face in the real world.

Project-Based Learning (David, 2008) This Association for Supervision and Curriculum Development (ASCD)'s *Educational Leadership* online publication column compares the core idea of project-based learning with its reality in contemporary classrooms and summarizes research on the effects on student achievement.

Project-Based Learning This resource demonstrates numerous ways in which project-based learning (PBL) can be implemented in small schools while also taking into account the fact that instilling PBL into the school environment is an evolving process. This process "changes and grows incrementally with the amount and nature of choice students are granted in their learning, with the scope of the projects, and with the role of the teacher in project development and execution." In order to demonstrate this process, schools that have exhibited success in taking PBL to new levels have been highlighted.

Project-Based Learning in Social Studies from the Vermont Alliance for the Social Studies provides a step-by-step outline of the phases of project development and information on designing integrated assessment using multiple sources of evidence.

Project-Based Learning: The Online Resource for PBL This web site from the Buck Institute for Education provides educators with a variety of resources to implement project-based learning within the classroom. Teachers are able to download a project planning form to aid them in designing their projects, search for projects developed by others and contribute their own work.

Project-Based Learning Space is a website designed to enable teachers to "do sustained inquiry on extended problems and projects, get background knowledge on its [project-based learning] theory and use in classrooms, and revisit generic teaching concepts." The site provides teachers with five classroom projects, teaching concepts, and background information and knowledge about project-based learning.

A Review of Research on Project-Based Learning (Thomas, 2000) "This review examines research related to a teaching and learning model popularly referred to as 'Project-Based Learning' (PBL). All of the research on Project-Based Learning has taken place in the past ten years and most of it in just the last few years." This review covers eight topics ranging from a definition of PBL and the role of student characteristics in PBL, to future directions for PBL research.



Grammar school children gathered around a table doing woodworking projects while teachers watch nearby in a classroom. Library of Congress American Memory Photographs from the Chicago Daily News, 1902-1933.

To access links to resources cited above please visit the online version of this edition of the Teaching with Primary Sources Quarterly online at <http://www.loc.gov/teachers/tps/quarterly>

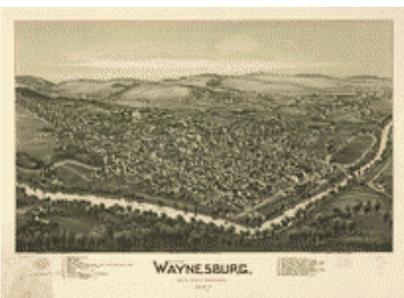
Learning Activity - Elementary Level

INVESTIGATING THE BUILDING BLOCKS OF OUR COMMUNITY'S PAST, PRESENT AND FUTURE

Overview

In This activity is intended to introduce a project-based learning unit on the *built environment*—all buildings, spaces and products created or modified by people. Students analyze a historic map of their local community to better understand its evolving built environment, and identify questions for research based on findings. The class develops a plan for investigating how their local community's built environment reflects its past, present and future.

Project-based learning extension ideas include facilitating a community walking tour led by a local historian and hosting a culminating community event for students to share their primary source-based research.



Waynesburg, Greene County, Pennsylvania, 1897. Drawn by T. M. Fowler. Library of Congress Geography and Map Division,

Objectives

After completing this learning activity, students will be able to:

- analyze a map as a primary source;
- locate and describe components of the built environment using a historic map; and,
- develop a plan for investigating a variety of primary sources to better understand how their local built environment reflects their community's past, present and future.

Time Required

One or two class periods (45 minutes); extension ideas require additional time

Grade Level

4 - 6

Topic/s

Architecture, Landscape; Cities, Towns; Maps

Subject/Sub-subject

Geography

Standards McREL 4th Edition Standards and Benchmarks

Historical Understanding

Standard 2. Understands the historical perspective.

Geography

Standard 4. Understands the physical and human characteristics of place

Standard 6. Understands that culture and experience influence people's perceptions of places and regions

Credits

Adapted from "Windows on Waynesburg, Windows on Your Town," a unit plan created by Andrea Buchanan, a participant in the TPS program at Waynesburg University, Pennsylvania.

View and Print the complete learning activity:

<http://www.loc.gov/teachers/tps/quarterly/pdf/Spring2010ElementaryLevelLearningActivity.pdf>

Learning Activity - Secondary Level

UNDERSTANDING IMMIGRATION THROUGH POPULAR CULTURE

Overview

This activity is intended to introduce a project-based learning unit on the history of U.S. immigration. Students analyze sheet music published in 1916 and a historic sound recording of the same song to discover one perspective on immigration from this time period. Students then analyze a variety of immigration-themed primary sources from the early nineteenth century to the middle of the twentieth century. They compare and synthesize evidence from these primary sources to better understand how immigration created new social patterns, conflicts and ideas of national unity and to generate related research questions.

Project-based learning extension ideas include students researching an immigration-related question or topic both in a time period of their choice and in current times.

Objectives

After completing this learning activity, students will be able to:

- examine purpose of music;
- analyze a primary source;
- compare findings from a variety of primary sources; and,
- generate research questions based on evidence from primary sources.

Time Required

One or two class periods (45 minutes); extension ideas require additional time

Grade level

9 - 12

Topic/s

Immigration, American Expansion; Performing Arts, Music

Subject/Sub-subject

U.S. History

Standards McREL 4th Edition Standards and Benchmarks

Historical Understanding

Standard 2. Understands the historical perspective

United States History

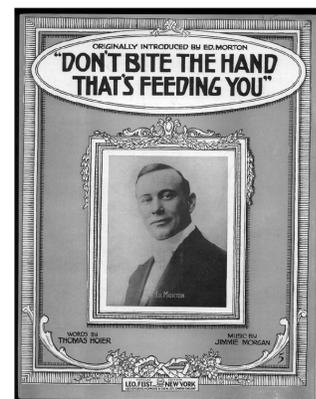
Standard 17. Understands massive immigration after 1870 and how new social patterns, conflicts, and ideas of national unity developed amid growing cultural diversity

Music

Standard 7. Understands the relationship between music and history and culture

View and Print the complete learning activity:

<http://www.loc.gov/teachers/tps/quarterly/pdf/Spring2010SecondaryLevelLearningActivity.pdf>



Morgan, Jimmie. *Don't Bite the Hand That's Feeding You*. Sheet music. 1916. Library of Congress American Memory *Inventing Entertainment: The Motion Picture and Sound Recordings of the Edison Companies*.

Teacher Spotlight

**Connie
Lawson**



In each issue, we introduce a teacher who participated in Teaching with Primary Sources (TPS) professional development and successfully uses Library of Congress primary sources to support effective instructional practices.

This Spotlight features elementary teacher Connie Lawson. The TPS program at Middle Tennessee State University nominated Connie for her effective classroom use of primary sources to support project-based learning. A 13-year veteran teacher at Richard Hardy Memorial School in South Pittsburgh, Tennessee, Connie currently teaches fourth grade math, social studies, science and writing. She previously taught second, third and fifth grade and is trained to work with special education and visually impaired students. In this interview, Connie discusses teaching strategies and favorite Library of Congress online resources.

How did you learn about the Library of Congress TPS Program? Through participation in academic and curriculum workshops, I was introduced to the Library of Congress Web site and its millions of primary sources, such as political cartoons, historical documents, photographs, manuscripts, and artifacts.

What motivated you to participate in the TPS workshops in your local area? I occasionally used primary sources in my classroom. I wanted to improve my teaching techniques and learn new methods and strategies to enhance and motivate students' learning. A colleague recommended the introductory-level workshop. Teaching with primary sources was a way to connect curriculum content to students' real life experiences, and guide my students toward higher-order thinking skills.

Tell us about the first time you used primary sources in the classroom. I began implementing primary sources into units such as "Our Colonial Heritage," "New Nation," and "Our Nation Grows." Students engaged in learning about early U.S. history by analyzing historical documents, poems, political cartoons and artifacts. For example, Benjamin Franklin's famous "Join or Die" cartoon captured their interest. Students had only thought of cartoons as funny, not political, so analyzing this image of the snake in pieces representing the colonies challenged their assumptions and helped them to grasp its historical significance.

How do primary sources help you support project-based learning? I use primary sources to develop learning experiences that connect historical events or processes with students' everyday lives and the world around them. My "Lewis and Clark Expedition" lesson plan uses maps and written accounts to help students imagine what the exploration was like, while learning historical content at the same time. I guided students to closely observe each primary source and develop hypotheses about its content through questions such as: Why were maps and journals essential to the expedition? What did these explorers encounter on their journey? How did recording maps influence settlers to move westward? How did journals influence expansion? Next, students conducted "expeditions" around school grounds to experience how an explorer observes flora and fauna, and what an explorer decides to record as data. Later, students compare journal notes of what they encountered during the journey to Lewis and Clark's mission. Lessons like this help students learn more than one subject as part of a larger project and work in cooperative learning groups. Project-based learning motivates students to "think outside the box" and investigate additional primary and secondary sources. Students solve problems and achieve collective goals while creativity is encouraged.

What is your favorite resource available on the Library of Congress Web site? I enjoy the variety of other teachers' lesson plans and units available. As a teacher, lesson plans and units shared by peers are extremely helpful in planning group activities and engaging students in critical thinking challenges. It's hard to pick a favorite resource from the unlimited materials available but recently I used photographs of Lookout Mountain in Chattanooga, Tennessee from the Selected Civil War Photographs Collection. I guide students to search this and other collections to research topics and create projects using primary sources, which increases and expands curiosity and knowledge about history.

What advice do you have for teachers who have never tried teaching with primary sources? Dive in and explore intriguing adventures of the past! The more I implement primary sources into teaching, the greater students' motivation and eagerness to learn about historical topics. It can be difficult to maintain students' attention, especially when teaching about the past; however, primary sources offer opportunities to connect real-life current events with historical events. Incorporating primary sources inspired me to teach content across academic subject areas. As a mentor teacher and cluster leader, I provide colleagues with information and resources to help students become life-long learners and responsible citizens.