Voices of Opportunity

Industrialization Comes to Tennessee

Teaching Tennessee History: Lesson Plans for the Classroom
Volume VIII

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The History of Education in Campbell County
Submitted by Ann Browning, Jacksboro, TN

Objectives/Purpose: Students will:
1. Interview family and friends pertaining to personal school experiences.
2. Gather photos, yearbooks, memorabilia, etc. related to those experiences.
3. Differentiate between primary and secondary sources.
4. Locate and map schools, past and present, in Campbell County.
5. Discuss impact of industrialization on education in Campbell County.
6. Assemble and display information into a “mini museum” for display in school.

Grade Level: 8th Grade (This project could also be adapted for 7th Grade Geography and Tennessee History.)

Group Size: One class (thirty to thirty-five students)

Lesson Time: One class period (one hour) per week for eight weeks.

Background Information: During the course of this project, students will interview several members of the community in three different age groups with regard to educational experiences in Campbell County. Along with the interviews, students will collect photos, yearbooks, and other memorabilia related to those experiences. They will work on this project in stages with each stage being assessed on its own. Students will begin to relate their experiences to those of family and friends in previous generations. Through discussion, use of primary and secondary sources, and research, students will gain an understanding of how industrialization changed education and culture as a whole. The culmination of the project is to be a “mini museum” which will be displayed in a common area of the school. NOTE: If students have difficulty finding subjects to interview, teachers within the school have agreed to participate. Recommend that students look to their church families as well.

Materials:
- One folder per student
- Page protectors
- FoamCor (for mounting photos and documents)
- Double-sided tape
- Colored paper
- Handouts, including
  - Parent letter
  - Grading rubrics
  - Interview questions
- Map of Campbell County
**Strategies/Procedures:**

**Week One:**
1. Teacher will introduce project and hand out materials.
2. Students will work in groups, brainstorming to form interview questions.
3. Students will begin work on first of three interviews – one adult aged 35 to 49.
4. Students will be asked to collect a photo or artifact from that adult. Copying will be available should originals need to be returned (be sure to document or cite source).

**Week Two:**
1. Students will turn in and discuss first interviews.
2. Discuss results of interviews and what can be learned from them.
3. Look at and analyze any photographs, etc. that were collected.
4. Students will begin work on second interview – one adult aged 50 to 65.
5. If possible, students will collect a photo or artifact from that adult.

**Week Three:**
1. Students will turn in and discuss second interviews, following same protocol as with first.
2. Discuss similarities and differences in information gathered.
3. Look at and analyze any photographs, etc. that were collected.
4. Students will begin work on third interview – one adult aged 66 to 80. Artifacts should be collected if possible.
5. At this time, ask for volunteers to interview someone over the age of 80.

**Week Four:**
1. Students will turn in and discuss final interviews.
2. Working in groups, have students design a graphic organizer that shows similarities and differences in each educational experience.
3. Each group will share their graphic organizer with the other groups in class.

**Week Five:**
1. Have students make a list of all the schools that were mentioned during the course of their interviews. Divide that list into schools in Campbell County and schools outside of the county.
2. Using a large map of Campbell County, have students locate each school.
3. Students will design markers for each school and place them on the map.

**Week Six:**
1. Students will begin mounting photos and artifacts on FoamCor.
2. Students will work together to design layout for display.

**Week Seven:**
1. Students will finish mounting photos and artifacts.
2. Display will be hung in common area of the school.
Week Eight:
   1. Students will organize a “museum opening”, designing and writing the invitations, making out the guest list, deciding on refreshments, etc.
   2. A date will be selected for the opening and approved by the principal of the school. Invitations will be mailed to guests.

**Tennessee Social Studies Curriculum Correlations:** 8.3.2; 8.6.4; 8.6.5; 8.5.3; 8.5.12; 8.6.2

**Tennessee Reading/Language Arts Curriculum Correlations:** 8.1.3; 8.2.11; 8.2.15; 8.2.1; 8.2.3; 8.2.4

**Evaluation/Assessment:** Each component of the project will be assessed individually, based upon a pre-determined rubric. At the culmination of the project, each student will be asked to evaluate the project as a whole. This will provide feedback to the teacher for future similar work, as well as enable the students to reflect on their own work.
The Cotton Industry in Tennessee
Submitted by Michael Frazier, Lenoir City, TN

Objectives/Purpose: The student will:
1. Develop a basic understanding of the technological, social, cultural, and economic impact of the cotton industry in Tennessee.
2. Locate the West Tennessee Plain, and understand its importance to agriculture in the state of Tennessee.
3. Analyze photographs of the Bemis Cotton Mill.
4. Pin jigsaw activity with their document

Grade Level: 7th Grade

Group Size: Fifteen to thirty students

Lesson Time: Two 50-minute class periods

Background Information:
The West Tennessee Plain, which was bought from the Chickasaw in 1818, includes the area between the Tennessee and Mississippi rivers. Known as the agricultural heart of Tennessee, the fertile land of the West Tennessee Plain has made cotton producing a major industry for many years. The region’s rivers flow west into the Mississippi. Memphis, the region’s largest city, is one of the most important inland shipping ports in the nation. Due to its fertile soil, West Tennessee became an ideal location for cotton plantations. African slaves were purchased in Memphis and Nashville to work the plantations throughout the West Tennessee Plain. After the Civil War and the abolition of slavery, sharecropping became the norm throughout Tennessee. The plight of the freed slaves did not improve as most became indebted to the same landowners that owned them prior to the Civil War.

The community of Bemis and the Jackson Fiber Company, which was later to be called "Bemis Cotton Mill," were born of the efforts of Judson Moss Bemis and the company he had founded in 1858, now known as Bemis Bros. Bag Company. Realizing that his company's bag factories must have a dependable supply of high-quality cotton, Mr. Bemis decided to build a cotton mill near the cotton fields. Built on the original 300-acre site donated by the forward-thinking citizens of Jackson and Madison County through county appropriation, the first mill of 21,000 spindle capacity was erected in 1900. The cotton industry has always meant hard work and long hours for the people in the fields and in the mills.

Materials:
- Transparencies/Overhead
- Map of Tennessee
- Pencil, paper
**Strategies/Procedures:**
1. Ask students the pros and cons of living in a rural and urban area today. After recording responses on the board, ask students which of the list would be similar during the early twentieth century.
2. Lecture/discussion/questioning using transparencies
3. Divide class into groups for a jigsaw activity. Distribute a copy of the same photograph to all members in each group along with photograph analysis worksheet. Explain to the students that the task is becoming “experts” in their group’s particular photograph using the worksheet, and supplementary resources.
4. Summarize details and answer questions that arise from the photograph.
5. After 10 minutes count-off students to redistribute them into new groups with one “expert” on each photograph represented in each new group. Each student will report on the significance citing specific details of their particular photograph for two minutes.
6. Debrief the activity with a class discussion.

**Tennessee Social Studies Curriculum Correlations:**
Social Studies - Seventh Grade:
- 7.1.01 e
- 7.1.03 c
- 7.1.04 a,b
- 7.2.01 a,b,c,d
- 7.2.02 a,b,d
- 7.3.06 d
- 7.4.02 e
- 7.5.01 a,b,c,d
- 7.6.03 a,b

**Evaluation/Assessment:**
- Teacher will ask questions randomly during lecture.
- Students will participate in the group activity.
- The photograph analysis worksheets will be graded.
- Students will write a 3-4 sentence response on what it would be like to work in the Bemis Cotton Mill at the turn of the twentieth century. Ask for volunteers to share their responses with the class

**Author’s Evaluation:**
Any time that I can get students to look at visuals, especially of everyday life, I feel it makes history personal for them. My students seemed to really enjoy this activity. Many of my students could relate to their parents or grandparents working long hours at low paying jobs which these photographs also depict.
Photograph Analysis Worksheet

1. Observation
   - Study the photograph for 2 minutes. Form an overall impression of the photograph and then examine individual items. Next, divide the photo into quadrants and study each section to see what new details become visible.
   - Use the chart below to list people, objects, and activities in the photograph.

<table>
<thead>
<tr>
<th>People</th>
<th>Objects</th>
<th>Activities</th>
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2. Inference
   Based on what you have observed above, list three things you might infer from this photograph.
   - ________________________________________________________________
   - ________________________________________________________________
   - ________________________________________________________________

3. Questions
   - What questions does this photograph raise in your mind?
     ________________________________________________________________
     ________________________________________________________________
     ________________________________________________________________
   - Where could you find answers to them?
     ________________________________________________________________
     ________________________________________________________________
     ________________________________________________________________
Industry and Commerce in Lenoir City, Tennessee
Submitted by Rachel Frazier, Lenoir City, TN

Objectives/Purpose:
1) Students will be able to identify and describe the types of industries that were developed in Lenoir City from the late 1800s to the early 1900s.
2) Students will be able to evaluate the effects of industry on the Lenoir City economy.
3) Students will create a scrapbook that highlights the history and the effect of at least one industry that was established in Lenoir City or Loudon County during the era of industrialization.

Grade Level: 11th Grade

Group Size: Thirty to thirty-five students

Lesson Time: Three ninety-minute class periods

Background Information: The late 1800s through early 1900s saw a marked increase in the development of industry across the United States. Local communities began to rely on industry as a means of employment and commerce. The rather small, rural communities of Lenoir City and Loudon saw the development of the Lenoir Car Works and the Loudon Hosiery Mill. These two industries, along with others, provided a much needed economic base for the community that would sustain its economy and provide for further economic development in the future. It is vital that students learn, not only about the industrialization that took place throughout the United States, but right here, in their local community. Students will gain a personal perspective on history throughout this lesson and the development of their projects.

Materials:
1. Computer
2. Projector
3. Lenoir City High School Library
   1485 Old Hwy. 95
   Lenoir City, TN 37771
   (865) 986-2072
4. Lenoir City Public Library
   100 W. Broadway
   Lenoir City, TN 37771
   (865) 986-3210
5. Lenoir City Museum
   Joe Spence
   110 Depot St.
   Lenoir City, TN 37771
   (865) 986-9169
6. Scrapbook Materials
7. Construction Paper
8. Colored Pencils/Markers/Crayons
Strategies/Procedures:
1. Lecture/Note taking – Students will take notes on the increase of industrialization in the United States that took place around the turn of the century.
2. Introduce Project – Students will be responsible for researching one industry that was established in the local area (Lenoir City or Loudon County) during the era of industrialization. Students will be placed in groups, and each group will develop a scrapbook of one industry that was established in Lenoir City or Loudon County based on their research.
3. Field Trip – As a class, we will visit the local history museum, and we will retrieve data and information that is relative to industrialization in Lenoir City. Joe Spence of the Lenoir City Museum will provide a tour of the Lenoir City Museum.
4. Research – Students will use the information they have already obtained to develop a scrapbook that highlights the history of one industry that was established in Lenoir City or Loudon County in the late 1800s or early 1900s. Students will be given at least two ninety-minute class periods to conduct their research at the Lenoir City Public Library and/or the Lenoir City High School library. Both libraries will provide information which students can use to create their scrapbooks.

Tennessee Social Studies Curriculum Correlations:
1.1; 2.1; 3.1

Evaluation/Assessment:
1. Chapter Test
2. Projects/ Scrapbooks - Student groups will be graded based on the completion, quality, and accuracy of their scrapbooks. A rubric will be used to grade each of the projects.

Author’s Evaluation: Although I have not yet had the opportunity to use this lesson in my U.S History class, it is one that students will enjoy because it involves getting outside the classroom and deviating from the norm. Students will enjoy going to the museum and looking at artifacts and information that pertain to their local area, and I know that they will take this lesson more personally. Hopefully, they will put a lot more thought and care in the creation of their projects.
Objective/Purpose: The student will:
1) Understand the difference in living in Anderson County, Tennessee, before industrialization and after industry (especially TVA) enters Anderson County.
2) Work cooperatively in small groups.
3) Demonstrate knowledge of industrialization.
4) Accurately decide if pictures from Anderson County during the early 1900’s until the late 1900’s are pre-industry or post-industry in Anderson County.
5) Order the pictures chronologically.

Grade Level: 5th Grade

Group Size: 26 students

Lesson Time: 45 minutes

Background Information: This is lesson 4 in a week long unit of study. Day one is an overview of industrialization. Day two is a lesson on industry in Tennessee. Day three will make a timeline of industry in Tennessee and compare it to a timeline of industry in the United States. Day four is this lesson. Day five is a review and quiz.

Materials: This lesson requires pictures that depict pre-industry and post-industry. I used pictures from two different Anderson County history books. I made sure to pick pictures of places that will be familiar to most students. They may not recognize the places in the picture but they will when I reveal it to them in the end. The pictures were scanned and blown up on the computer. I then laminated them so I can use them again.

Books:

Strategies/Procedures:
1) Review with students what we have learned in previous days about industry and industrialization.
2) On chart paper make a chart listing what life looked like pre-industry in the area. Then make another chart listing post industry in this area.
3) Place the charts on opposite sides of the classroom.
4) I explain to the students that they have some local pictures that we will be using for an activity. At the end of the lesson we will guess and see who knows where their picture is from.
5) Put the students in groups of two (or more) for this activity
6) Tell the students that each group will be responsible for deciding if their picture is pre- or post-industrial Anderson County. The students will need to be able to explain their decision. They will present their picture and decide where to place it after about 10 minutes.

7) Randomly select groups to present their findings after the allotted time. After discussing their findings, the group will place their picture on the side of the room to which it belongs.

8) Reveal to the students what their picture is of and the date it was taken.

**Tennessee Social Studies Curriculum Correlations:**
5.2. spi6
5.2 tpi5
5.03
5.05
5.503

**Evaluation/Assessment:**
I will evaluate the students’ class participation. I will also evaluate their team work and effort. There will be a test at the end of the unit.

**Author’s Evaluation:**
The lesson was fun. The kids enjoyed being detectives with their pictures. It was hard finding appropriate pictures to use. I also had a hard time providing them with enough background in the previous lessons to help them discover their picture. The students really enjoyed finding out the date of their pictures. If I do this lesson again I think I will use the pictures as I discuss pre- and post-industry and let them make notes about each picture. Then, I would let the students put the pictures in chronological order.
**Eras of Change Apartments**
Submitted by Kimberly Hurst, Clinton, TN

**Objectives/Purpose:**
Students will gain an understanding of changes through time by using primary sources, research methods, and scientific knowledge to design, decorate, and wire an apartment building with apartments ranging from 1800 to the present day. The apartments will show how Edison’s work at Menlo Park changed American culture.

**Grade Level:** 5th Grade

**Group Size:** Twenty-eight

**Lesson Time:** Six one-hour sessions

**Background Information:**
The invention of a usable electrical lighting system paved the way for conveniences powered by electricity in the home. The use of electricity in homes greatly changed the way Americans interacted with one another within and outside the family unit. It changed the social life of Americans and what was socially “acceptable”. The economy and the environment were also forever changed.

**Materials:**
- Cardboard box with lid (1 ½ per group)
- Insulated copper wiring
- Solar panel (1 per group)
- Miniature lamps and sockets (3 per group)
- Paper clips (3 per group)
- Brads (6 per group)
- “Decorating” materials such as fabric, paint, miniature furniture, carpet, miniature appliances, phones, televisions, etc.
- A computer, access to the internet, and a printer (preferably color)
- Scissors, tape, staples, etc.
- Reference materials

**Strategies/Procedures:**
Students will be placed in groups of four to construct an apartment building. The apartment building will be divided into four apartments. Each apartment will be decorated in accordance with the time period (1800-1850; 1900-1920; 1920-1950; present day). Each student within the group will be responsible for completing one apartment. Special attention will be given to electrical devices.

Part 1:
Students view a slideshow presentation: “Electrical Lighting System: The invention that changed America.”
Part 2:  
Students use the internet to research a given time period. Students print pictures of appliances, furniture, and décor of the period.

Part 3:  
Students are given a primary reading sample (time period advertisements—http://memory.loc.gov/learn/lessons/99/edison/gallery.html) to analyze for cultural clues. They complete a primary source analysis sheet.

Part 4:  
Students learn the basics of electricity and how to create parallel and series circuits, and open and closed circuits. Students also learn the basics of solar panels and the need for alternative energy sources.

Part 5:  
Students create parallel circuits to light two of the apartments. They install the wiring, miniature sockets and lamps, and switches. Both apartments are powered by a nine-volt battery. The apartment from the 1800-1850 era does not have electricity. In the modern apartment, students install a solar panel, wiring, miniature socket and lamp, and switch.

Part 6:  
Students use various “decorating” materials plus printed images to decorate each apartment. Images can be glued to small pieces of cardboard and made to stand in order to create a three-dimensional look.

Tennessee Social Studies Curriculum Correlations:

5.1.2  
5.5.7  
5.1.1

Evaluation/Assessment:  
The teacher will evaluate the Primary Source Analysis worksheet. The teacher will use a rubric to assess the Eras of Change Apartments.

Author’s Evaluation:  
Primary Source Analysis:  
The students had a difficult time analyzing a primary source even after I modeled the activity and we did one together. As this is an important aspect to learning history, more time should be spent teaching this skill.

Eras of Change Apartments:  
The motivation level for this project began high and stayed there. The students were actively engaged throughout the project and even did extra research work on their own! Analysis of the evaluation rubric showed that students mastered the concept of change as a result of technology.
Industrialization in East Tennessee
Submitted by Courtney Mansell, Knoxville, TN

Objectives/Purpose: The objective of this lesson is to expose students to the types of occupations and lifestyles in East Tennessee during the Industrial Revolution by using primary and secondary sources.

Grade Level: 5th Grade

Group Size: Students will work in 4 groups of 5-6 students per group. The background information and instructions will be presented to the class as a whole.

Lesson Time: One hour

Background Information: During this time, many people had to give up the way of life that they had always known – farming. They began to move and centralize in certain areas for the opportunity to work in different industries. Logging, textiles, coal mining, and the railroad were the primary industries in East Tennessee. Therefore, the location and type of industry played an important role in the lifestyles of individuals and families.

Materials:
- Butcher paper
- Crayons, markers, or colored pencils
- Primary and secondary source documents
- Thesauruses and dictionaries
- www.volunteervoices.org

Strategies/Procedures: Each group must determine a color that will represent their group. Once the students have determined their color, distribute that color of a crayon, marker, or colored pencil to their group. The students will rotate to four different tables or areas of the room. Each area must use one piece of butcher paper and primary and secondary sources from the industry it is representing (one area for the railroad, one area for textiles, and one area for logging). The students should be instructed to write one adjective, one verb, and one sentence (they may not repeat anything already written on the paper from other groups) on the butcher paper regarding their observations of the items displayed in each area. Explain to them that the idea is to see how creative they can get with their writing. As the students are in their groups, the teacher should promote discussion about industrialization and how it was unique to certain areas in East Tennessee. Students should be instructed to rotate to a different area every 7-10 minutes until they have completed all four areas. The students will then take a “museum walk” around the room to study the documentation on the butcher paper that was made by the other groups.

Tennessee Social Studies Curriculum Correlations: 5.1.1; 5.1.2; 5.1.3; 5.1.4
**Evaluation/Assessment:** Students will be in groups of 5-6 and share their inferences as well as their questions and answers within their groups. There are no right or wrong answers, but students should be able to support their answers. They are “digging” for answers just as historians must do. Evaluation and assessment can also be made through the documentation that students made on the paper provided.

**Author’s Evaluation:** The lesson was a great opportunity to practice their writing skills within a social studies lesson. The students were excited and felt connected with industrialization of Tennessee through the use of primary and secondary sources in the book and volunteervoices.org. It is important to keep the students moving through this activity. Too much time in one area can lead to off-task students. I did not have access to a computer or projector at the time of the lesson; next time, I plan to add some footage from United Streaming.
Using Primary Sources
Submitted by James Mansell, Knoxville, TN

Objectives/Purpose: Students will learn to use, read and interpret a variety of primary sources. Social studies is a subject that can utilize primary sources in many ways. The purpose of the lesson is for students to realize the importance of primary sources in learning about history. The students will also be able to tell the difference between true primary sources and other types.

Grade Level: Intermediate and middle school students (it could be modified for use at the high school level)

Group Size: Twenty-five children

Lesson Time: Forty-five minutes

Background Information: The most valuable resource when teaching history is the use of primary resources. It is important for students to decipher what a primary source is. Having a full lesson on this topic will help students use primary sources and understand the importance of them. By using a wide variety of primary sources, students are exposed to the different types out there.

Materials:
Several different primary sources such as:
- Photos
- Written Documents
- Artifacts
- Maps
- Quotes
- Several secondary sources to compare
- T-chart

Strategies/Procedures: Students will be shown samples of secondary sources and asked to interpret what they see and/or read. After this is done, students will then be shown samples of different primary sources and asked to make interpretations about them. The lesson will be guided by the teacher in a share-and-tell, question-answer style format. It is important that the teacher points out the differences between the primary and secondary sources.

Tennessee Social Studies Curriculum Correlations: 5.5.7

Evaluation/Assessment: At the end of the lesson the students will be using a T-chart to complete. Ten sources will be given to the students and they will have to decide if it is a primary or secondary source on the T-chart.

Author’s Evaluation: Not only will students be able to identify and use a primary resource, but they will also improve their research skills, learn to differentiate fact and opinion, and begin to use independent critical thinking skills.
How Life has Changed for Children
Since the Early Days of the Industrial Revolution
Submitted by Julie S. Perkins, Brentwood, TN

Objectives/Purpose: The students will:
1. Discuss the primary sources (tombstone, coal).
2. Create a time line.
3. Interview and record elderly aged (eighty or beyond), about what life was like as a child growing up during their lifespan.
4. Create a scrapbook with pictures and information about the people who were interviewed.
5. Share interesting facts from interview.
6. Compare and contrast time periods.

Grade Level: 3rd, 4th, and 5th Grades

Group Size: Class of twenty to twenty-eight students

Lesson Time: One to two class periods (forty-five to sixty minutes) to teach the basics of interviewing and researching materials. Allow at least two weeks for students to do the research and prepare their materials.

Background Information: The purposes of this lesson are to provide an introduction to using primary sources as a means of creating greater student interest in early Tennessee history and a better understanding of Tennessee during the early years of the Industrial Revolution. This program is also designed to meet the goals and expectations of the Tennessee TCAP achievement test. The student unit covers Industrialization of then and now. Students need to grasp the understanding of how difficult it was for a child growing up during the time of the Industrial Revolution. Child labor laws were non-existent. Children were treated much differently than children today.

Materials:
- Instructional Handouts
- Cameras
- VCR Camcorder
- Tape Recorders
- Journals
- Scrapbook
- Rubric
- Maps
Strategies/Procedures: Classroom Strategies: The teacher will explain the proper techniques for conducting an interview and what type of questions to ask. Students can use a variety of sources such as:

- Primary Materials
- Discussion
- Mapping
- Comparison (Compare the old way of life to the new; compare the past to the present.)

Students are expected to have their projects done in two weeks. Students will present their projects and will be scored using a rubric.

Tennessee Social Studies Curriculum Correlations:

3.5.1 Label historical events as past, present and future
3.5.2 Use a timeline to determine the order of a historical sequence of event

Evaluation/Assessment: Students will be evaluated on several assignments such as the timeline, the scrapbook, and mapping using different grading scales.

Author’s Evaluation: Tennessee has a rich history of labor movements to improve working conditions and eliminate child labor. This lesson provided culture, economics, history, and group interactions. I thought the lesson was great because it kept the children focused on what life was like back in the years of industrialization.
SESSION OVERVIEW/DESCRIPTION:
How Life has Changed for Children Since the
Early Days of the Industrial Revolution

This lesson is an introduction to using primary sources as a means of creating greater student interest in early Tennessee history and a better understanding of Tennessee during the early years of the Industrial Revolution. This program is also designed to meet the goals and expectations of the Tennessee TCAP achievement test.

GOALS AND OBJECTIVES
• Teachers will be able to use Primary Sources such as:
  Pictures, maps, or artifacts to introduce the subject matter.
• Teachers will be better able to help students place the time frame of events when given historical information and to more easily connect various things that were happening during that era.

CONTENT OUTLINE
Handouts would be given at the beginning of session
I. Topic of Lesson
   A. Primary source would be given. (Pictures, Artifacts)
      1. Teacher Inquiry
      2. Observations
         (a) Data collected
         (b) Interviews
   B. Discussion
      1. Questions
      2. Ideas
      3. Brainstorming (How can we use this in a lesson by connecting it to science or making it thematic?)
II. Development of Lesson
   A. Sources
   B. Types of Primary materials used
   C. Where do you want the lesson to go?
III. What can we do as teachers to keep our past alive.
   A. Timelines
   B. Talk with elderly people, great-grandparents, people in the nursing home. (Tape their conversations.) Ask them what their life was like as a child. Ask them what a child’s life was like growing up during the Depression or anytime. Note the year, time period, and other information given.

ACTIVITIES/PROCEDURES
• Primary Materials
• Discussion
• Mapping
• Comparison, Old-New
QUESTIONS

- What was your great grandparents’ life like growing up?
- What jobs did they have?
- What was the wage back then?
- What do we know about industrialization then and now?
- Why should we know about our past?
- What should we learn from our past?
- What should we be teaching our students about industries? Farming? Craftsman?
- What are thing we can do as teachers to utilize the past information to help our students know what the past was like growing up?
- What is child labor?
HOW LIFE HAS CHANGED FOR CHILDREN SINCE THE EARLY DAYS OF INDUSTRIAL REVOLUTION

TEACHER /LESSON OUTLINE

SKILLS
MATH
READING

I. Photo of Tombstone (Harvey Elbert Vowell)
   A. Age (fourteen years old)
   B. When lived (1888 - 1902)
   C. Gender (Male) Name suggests it.
      *Can not get location/industry/cause from tombstone

MAP READING
ORIENTATION
PLACE AND TIME

II. Map of Tennessee (Can acquire as many needed from Tennessee Welcome Station)
   A. Show location of the city in which the grave is located
      (Longfield Baptist Church Cemetery in Briceville)
   B. Show lump of coal taken from local mine in Eastern Tennessee

HISTORICAL SENSE

C. Arrive at conclusions that:
   1. Coal was mined in Eastern Tennessee early in the Twentieth century
   2. Boy was working in coal mine
   3. Boy died in a mine accident

SOCIAL STUDIES

III. Photo of old mine
   A. Discuss hardships of mining
   B. Discuss child labor practices in early twentieth century
   C. Discuss hazards in mining

SCIENCE & TECHNOLOGY

IV. Brainstorm uses of coal
   A. Burn for heat
      1. Heat homes
      2. Heat cooking stove
      3. Heat blacksmith forge
   B. Burn to produce steam
      1. For locomotive on railroad
      2. For powering electric generator
SCIENCE & TECHNOLOGY

V. Tie to modern practices
   A. Diesel Trains
   B. Still use coal for electric generators, but have other sources as well.
      1. Hydro electric
      2. Nuclear

MODERN DAY

C. Cook with
   1. Microwave
   2. Electric
   3. Gas

SOCIAL STUDIES

D. Social Changes since early twentieth century
   1. School for kids, not work
   2. Higher safety standards-fewer accidents
   3. New sources of power

Students will write a few paragraphs about how life has changed for them since the early days of industrial revolution.

Students will label similarities and differences on butcher paper. (Then & Now)

Students will visit nursing home or elderly who are aged 80 or beyond and interview them about what it was like growing up.

Teacher directed questions given and students can add as many other questions as they would like. (Cam cord, Tape record, journaling, etc.)

*THIS PLAN WOULD BE THE MOST VALUABLE SOURCE TO HAVE FOR THIS SPECIFIC TOPIC. Teacher could follow the plan and incorporate his or her own ideas within the lesson.*
Roane County Transportation Museum Project
Submitted by Celia Simon, Kingston, TN

Objectives/Purpose:
• Identify different forms of transportation used in Roane County throughout its history.
• Design museum exhibits to illustrate various forms of transportation used in Roane County throughout its history.

Grade Level: 9th to 12th Grades (mostly 9th)

Group Size: One hundred and five students, working in self-chosen groups

Lesson Time:
• One period (fifty-five minutes) for presentation of virtual museum tours by teacher
• One period for internet research in school computer lab
• Two periods for students to work in their groups, planning and designing projects
• One period for group presentations

Background Information:
• Roane County Heritage Commission owns the historic Old Courthouse in Kingston. (In 1974, when the officials moved into the new Roane County Courthouse, they made plans to demolish the antebellum 1853 courthouse in order to build a parking lot. Several local residents protested this plan and proposed that the county commission deed the Old Courthouse to the non-profit Roane County Heritage Commission to renovate and maintain.)
• In recent years, the Heritage Commission has received two Tennessee Department of Transportation (TDOT) grants to help with the preservation of the historic building. We have made plans to build the Roane County Transportation Museum.
• Since historic preservation is so dependent on local citizens’ commitment to the cause, I am convinced that we must get young people involved in saving our history.

Materials and Resources:
• Smartboard presentation equipment
• “Virtual Museum Tours” links
• Student-provided poster board or PowerPoint presentations
• http://www.lenoircity.com/museumvirtualtour.htm
• http://www.lenoircity.com/lccottonmillvirtual.htm
• http://www.littleriverrailroad.org
• http://www.discoveret.org/beckcec/welcome.htm
• http://www.east-tennessee-history.org/index.cfm/m/5
• http://www.childrensmuseumofoakridge.org/exhibits-index.html
• http://museum.scottcounty.net
Strategies/Procedures:
- Presentation of virtual museum tours by teacher and explanation of project
- Internet research in school computer lab
- Students work in their groups, planning and designing projects
- Students present their designs with posters or with PowerPoint Presentations

Tennessee Social Studies Curriculum Correlations:
World History: 5.1, 5.5, 5.8, 5.9, 5.10, 5.11

Evaluation/Assessment:
Grade based on:
- Attractive design
- User-friendly design
- Photos/models
- Explanation of photos/models

Author’s Evaluation:
Since group presentations will be in February during my four World History classes, I cannot comment on the quality of projects. However, I have noticed that many students who do not usually get involved in history class are involved in this project. They seem to be more interested because they know their projects might be chosen for the actual Roane County Transportation Museum. They seem to feel the challenge of designing something that will be used by others to understand their own county’s history.

I am glad that I heard about the Scott County Museum that was designed, was built, and is staffed by Scott County High School students. If we do not inspire young people to become involved in historic preservation, then all of our work will be lost.
Exploring the History of the “Brickyard”
Submitted by Diane Smith, Robbins, TN

Objectives/Purpose:
Students will explore the history of "The Brickyard," an industrial site where the making of bricks once thrived in Robbins, Tennessee and determine the impact of its presence on the lives of the people, the economy, and the culture of the community.

Grade Level:  5th Grade

Group Size:  Fifteen

Lesson Time:  Three class periods of fifty-five minute sessions and ending with a two hour field trip to site:  First period—Teach basics of brick making, resources available, etc.; Second period—Have Mrs. Maggie Barger in to speak to class; Third period—Share interviews

Background Information:
Mrs. Maggie Barger, retired teacher, will be invited to share her knowledge, experience, pictures, and other memorabilia of this once thriving industry.

Materials:
Three different samples of bricks that were made in this factory
First National Bank Chronicle detailing the history of the “Brickyard”
Marbles that were made from material for the children

Strategies/Procedures:
Discuss what resources were available for starting a brick making factory in area (natural resources, railroad, and manpower).
Students conduct a question/answer session following Mrs. Barger’s presentation.
Students will develop questions for oral interviews and will conduct the interviews with former “Brickyard” workers or their descendants.
Students will search for business records and photographs of the “Brickyard” and trace its impact on other developing industries in the area.

Tennessee Social Studies Curriculum Correlations:  5.510a; 5.510b

Evaluation/Assessment:
Students will transcribe the oral interviews which will be organized and combined into a written history—perhaps published into a book which will be supplemented by copies of the photos, business records and other primary sources.  Students will also write a short paper describing what they learned about historical research and about their local history.

Author's Evaluation:
Scott County has a rich heritage of industries that provided livelihood to area families.  Because of the tremendous resources available, many factories dotted our Appalachian region.  Students showed great enthusiasm in learning about their heritage.
Using Local Primary Sources to Teach the Industrial Revolution
Submitted by Elizabeth Thomas, Clarksville, TN

Objectives/Purpose: To assess the students’ understanding of primary sources and the Industrial Revolution.

Grade Level: 5th Grade

Group Size: Twenty-five students

Lesson Time: One hour

Background Information: Students are required to identify primary sources. Additionally, they are to identify the changes that resulted from the Industrial Revolution. The purpose of this lesson is to combine the information in a culminating activity.

Materials:
- Photographs depicting Clarksville, TN, pre-and post-Industrial Revolution:
  - Chart for dividing pictures into pre-and post-Industrial Revolution

Strategies/Procedures:
- Students are given ten photos from the books to categorize into pre-industrial revolution and post-industrial revolution.
- Once they have separated the photos, they must justify in writing why they placed each photo in the category they chose.
- Finally, they must explain why the photograph is a primary source.

Tennessee Social Studies Curriculum Correlations:
- 5.5.7 – Interpret a primary reading source
- 5.5.3c – Explain how industry and mechanization changed ways of life in America and Tennessee.
Evaluation/Assessment:
Students will be evaluated in two parts.

- The first part will be whether or not they have placed the photographs in the appropriate classification. Each proper placement of the photo is eight points for a total of 80.
- They then will receive ten points for their explanation as to why they placed the photographs where they did. As long as the explanations are logical, they will receive the ten points, even if the photographs were not properly placed.
- Finally, they receive ten points for explaining why copies of photographs are still primary sources.

Author’s Evaluation:
The students did fairly well on the placement of photographs and their reasoning. One aspect that I did not take into consideration was that there were a few photographs that could logically fit into either category. The students were given credit for the placement if they could defend their decision. The explanations for the primary source were for the most part valid; however, there were a few students who did not agree that copies were primary sources. A review of primary sources helped them understand the concept better. Overall, the lesson was an effective way to culminate the Industrial Revolution unit.
Thomas Edison and the Experience of Electric Lighting
Submitted by Marcia Whetsel, Morristown, TN

Objectives/Purpose:
The students will:
1. Be able to identify Thomas Edison, his role in the development of electrical power and his major inventions.
2. Discuss some of the first reactions to Thomas Edison and electricity through primary source documents.
3. Complete an interview with a person who remembers their first experiences with electric lights and appliances OR research the history of early electrical appliances.

Grade Level: 11th and 12th grade U.S. history

Group Size: A regular class of 25-30 students

Lesson Time: 3 to 5 days (Note: interview oral reports and research papers could be due after Thomas Edison lesson is taught and the class is studying other aspects of industrialism.)

Background Information: In this lesson that is part of a bigger unit on the Industrial Revolution in the United States, students will participate in a discussion of Thomas Edison’s life, inventions and famous quotations through an illustrated MS PowerPoint presentation. They will then view an A & E Biography video, Thomas Edison: Father of Invention. Lastly, they will choose to interview an older relative or family friend about their first experiences with electricity OR write a paper based upon research of the early forms of electrical appliances.

Materials:
1. Computer with Microsoft PowerPoint presentation software
2. TV and VCR/DVD player
3. A & E Biography VHS or DVD episode, Thomas Edison: Father of Invention
4. Eleven primary source documents of Experiences with Electrical Lighting from 1878 to 1886 obtained from ProQuest Historical Newspapers collection on Columbia University’s website: http://www.columbia.edu/cu/lweb/eresources/databases/3262558.html
Note: The website is only accessible by faculty, staff and students of Columbia University, however Dr. Ernest Freeberg, History Professor at the University of Tennessee, provided 2007 ETHS Teacher Institute participants with a copy of these documents and gave us permission to use them with our students.
Dr. Freeberg Contact information: The University of Tennessee, 600 Dunford Hall, 915 Volunteer Boulevard, Knoxville, TN 37996-4000
5. One primary source document found on www.wikipedia.com article on Thomas Edison is a picture of electric lights at the Parthenon in Nashville, TN during the 1897 Tennessee Centennial.

Strategies/Procedures:
1. Teacher will present an overview of Thomas Edison’s life, his invention of the electrical light bulb and selected famous quotations with teacher-created MS PowerPoint Presentation, “Thomas Edison and the Experience of Electric Lighting.”
2. Students will view A & E Biography, Thomas Edison: Father of Invention, and complete worksheet finding examples of Edison’s personality and life experiences that demonstrate his perseverance, industriousness, proficiency, assertiveness, ingenuity, aptitude and audacity.
3. Students will complete ONE of the following projects:
   A) Interview a grandparent or older family friend who remembers when his/her family first experienced electricity in their house and present oral report to class.
   B) Research and write an illustrated paper on the early forms of electrical appliances.

Tennessee Social Studies Curriculum Correlations:
Era 6: Industrial Development of the United States (1870-1900)
1.0 Culture
1.1 Understand how industrial development affected the United States culture.
   • match innovators to their industrial and technological contributions (i.e., Vanderbilt, Westinghouse, Carnegie, Pullman, Hershey, Dupont, Bell, Edison, Rockefeller, Swift, and Armour).
   • assess the effect of late 19th century technological innovation on the daily lives of American people (i.e., electricity, indoor plumbing, communication, transportation).

Evaluation/Assessment:
1) Students will choose one of the following projects to complete:
   • Interview a grandparent or older family friend who remembers when his/her family first experienced electricity in their house and present oral report to class.
   • Research and write a paper on the early forms of electrical appliances.
2) Students will complete multiple choice, matching, definition and discussion questions on U.S. History Unit Test on industrialization, urbanization, and immigration.
Author’s Evaluation:

I look forward to teaching this lesson this semester since a student teacher taught the industrialism, urbanization and immigration unit to my U.S. History classes in the fall of 2007. However, I have had great success in showing A & E Biography episodes and conducting class discussions with illustrated MS PowerPoint presentations in the past, and I anticipate success with this lesson. I believe students will be successful and enjoy discussing the primary source documents about the first experience of electricity in the late 1800s. I have also had success with students’ oral reports about family artifacts and grandparent interviews in the past, so I believe some students will enjoy hearing about and reporting on older family members’ stories about early electrical appliances to the class. The research paper on early forms of electrical appliances is intended as an alternate assignment for students who do not have access to an older person to interview.
Interview an older family member or friend about his/her first memories of ELECTRICITY

Plan to INTERVIEW one of your GRANDPARENTS or an elderly relative or family friend who remembers when electricity was first installed in his/her home. In Tennessee, many homes did not receive electric power until after the Tennessee Valley Authority dams began operating in the late 1930s. If you know someone over 60 or 70, chances are that they may remember their childhood days before electricity and their first experiences with electric lights and electrical appliances. Your grandparents may have always had electricity in their lifetime, but you could ask them to compare electrical appliances from their childhood to today’s appliances.

Grade – Plan to turn in your written notes of their answers, along with a 3-4-paragraph summary of the ideas and stories you discovered during this interview and be prepared to share the highlights with the class in a brief oral report.

**Suggested interview questions:**
(You do NOT have to ask ALL of the questions below. You may ALSO ask him/her additional follow-up questions.)

**Your first experience of electricity**
Do you remember when your house first was wired for and received electricity or did your parents ever tell stories about the experience? Explain.
Where was this home?
Describe family members’ attitudes as they anticipated electricity.
Describe any old fashioned light bulbs, light fixtures, electrical outlets and lamps at your house when you were a child.
Describe any old-fashioned electrical appliances that you remember from your childhood.
Describe any ways that having electricity in your house made life easier.
Describe any ways that having electricity in your house made life more difficult.
Describe the reaction of friends or family members when they discovered your family had electricity.

**Your thoughts about electricity today:**
Would you like to return to a time with no electricity or electric bills? Why or why not?
When you were young, which electrical appliance or application was your favorite, and why?
Can you explain any improvements in electrical appliances today that you like?
Today, what is your favorite electrical appliance or application, and why?
Are there any electrical appliances today that you think are silly or a waste of time and money? Which ones, and why?

East Tennessee Historical Society
Early Electrical Appliance Research Project

Research and write an illustrated 2-page report on ANY early electrical household appliance from the late 1800s or early 1900s.

Your report needs to include:

- A brief history of the appliance (even before there was electricity).
- A brief summary of HOW the electrical appliance works.
- An explanation of the improvements and enhancements on modern day versions of the appliance.
- At least two pictures - - - one of an early version of the appliance & one of a modern day appliance.

List of possible household appliances to choose from:

- electric blender
- electric coffee maker
- stove
- oven
- dishwasher
- washing machine
- clothes dryer
- refrigerator
- freezer
- toaster
- vacuum cleaner
- hot water heater

List of resources to consult:  History textbooks, library books, Internet websites

Grade – Plan to turn in your illustrated written report and to share the highlights with the class in a brief oral report.
Suggested Readings


