Thinking Like a Historian

Using Digital Newspapers in the Classroom
by Ruth Chandler Ferris

Newspapers do more than provide particulars in the lives of our ancestors—obituaries, births, deaths, wedding anniversaries, accomplishments, interesting happenings and occasional bits of wrong doing. They also provide a glimpse into life as it was at the time. What world events shaped their lives? What neighborhood happenings touched them? What were the fashions being advertised, and what did they cost? How much was a loaf of bread? What movies might they have gone to see on a Saturday night? What opportunities would they find in the want ads? Was there a letter waiting at the post office?

—from Bobbie’s Genealogy Classroom (http://www.barbsnow.net/Newspapers.htm)

Grade Level
Easily adaptable 4–8

Time Needed
Two hours, if you only use the scavenger hunt; up to two weeks for entire activity

Goal
There is something exciting about looking at original sources, old newspapers especially. By reading pages from historic newspapers digitized in Chronicling America, students will be able to exercise their historical imaginations while being introduced to the research process and learning more about gold rush–era Montana, especially Virginia City in the 1860s and 1870s, before the coming of the railroad.

Objective
Students will be introduced to the research process, from asking questions, logging research efforts, and citing sources. They will make connections, compare and contrast information, and notice patterns before integrating data into a finished project.

Standards
Social Studies Standard 1: The student will access, synthesize and evaluate information to communicate and apply social studies knowledge to real world standards. (See Appendix 1: Curriculum Map)

Essential Questions
How has life changed and how has it remained the same? How does transportation affect daily life? What would it have been like to live in Virginia City during the gold rush?

Recommended Materials
- Student Handouts (Appendix 2)
- Links to Interesting Newspaper Pages from Chronicling America (Appendix 3)
- Touchstone texts, optional (Appendix 4)

Building a bridge between the present and the past is easier if you use a touchstone text. A touchstone text gives the whole class a common reference point and vocabulary, providing students with background knowledge that will make it easier for them to engage in this research project. A list of potential touchstone texts is available in Appendix 4. Teachers may want to develop mini-lessons that show students how other authors approached historic facts and wove them into the stories, providing a writing model that students can imitate. Another benefit of using a touchstone text is that it provides an initial format for discussion. Students also have a way to compare their research experiences with the books’ descriptions.
Vocabulary Games, optional (Appendix 5)

High tech option: Computer terminals with internet access (one for each group of students) to access the Chronicling America website (For more on this resource see Appendix 6.)

Low tech option: Pre-printed and tiled copies of selected newspaper pages. See Appendix 7 for suggestions on how to print the newspapers.

Procedure
Tell your students that they are going to explore what life was like in the 1860s-1880s in Montana and compare it to life today. Virginia City had a large population after gold was discovered. At the height of the boom, 24,000 people lived there. To discover what life was like in Virginia City, they will be collecting information from a primary source (newspapers).

Introduce your students to the Virginia City Post (either online or the printouts) and have them complete Handout 1: Newspaper Scavenger Hunt (in Appendix 2). (You can stop here if you don’t have time for the rest of the lesson.) Otherwise, let your students know that they will be conducting more in depth research, following a Research Plan. They will

- Develop focus questions
- Retrieve and collect data to answer their questions
- Synthesize their data into a product
- Share their products with peers and peer edit
- Create, share, and celebrate a final product
- Reflect on the process

Step 1: Developing Focus Questions
Using life today as a comparison, have the students generate a list of general topics and categories that they will need to learn about to develop a snapshot of life in the 1800s. Possible topics to consider: food, clothing, transportation, communication, technology.

Then have students ask questions about these topics. You may want to have students use a question matrix, which helps students write deeper thinking questions, to develop their own guiding questions. (See Appendix 8.)

Possible guiding questions include:

- How did Virginia City get food during the gold rush? How do you feed 10,000 miners?
- What types of clothing could they buy?
- Who bought freight to Virginia City, and from where?
- How did residents get news from home?
- What could be grown locally and what type of groceries were available?
- Why would people choose to sell groceries or other merchandise instead of mine for gold?
- How did people travel?

After developing a list of questions, students are ready to begin researching to discover more about what life was like in this instant city.

Step 2: Retrieving and Collecting Data
To gather more information about life in Virginia City, and to answer the questions they’ve asked, students will use Chronicling America: Historic American Newspapers as their research source. They will either use the actual website (high-tech option), or they will use the newspaper pages you have printed and provided (low-tech option).

Management: Provide students with a Research Log (Student Handout 2 in Appendix 2) on which to record the information they collect.

Then, have each student team use the newspapers (either online or printed out) to find information about three topics of their choice. Ask them to record the information they find in their research log. (You may wish to have students work with a partner, one to locate information, one to act as secretary. The interaction
itself will help them process the information as well as learning how to work in a small group.

As a starting point, I’ve selected pages of the (Virginia City) Montana Post that include articles and ads I think would be of interest to students and can help answer likely questions. A list of these pages, with links, is included in Appendix 3.

For students using the website: Copy the links I’ve provided in Appendix 3 into a document that the student teams can open on their computers. Then show them how to follow those links to particular newspaper pages.

If you are planning on providing printed copies of the newspaper pages for your students to work from, see Appendix 7 for detailed instructions.

Given time and mastery of the Chronicling America interface, you may want to have students continue searching on their own, using their own search terms. Information about how to use the Chronicling America site is included in Appendix 6.

Debrief students and ask, “how can the information you gathered help you answer your guiding questions?” “What information do you still need to fill in missing gaps?” Discuss possibilities.

Talk about vocabulary: Examine unfamiliar words in the newspaper and their common meaning during that time period. There are many games available to help students master the new vocabulary. (See Appendix 5.) A list of interesting vocabulary words is included as Student Handout 3 (in Appendix 2).

Step 3: Creating a Product
We have all this information. Now what?

Each student will integrate the information they gather into a creative presentation. Their task will be to make connections, compare and contrast information, and notice patterns. Students can choose how they want to share their information and understanding. Here are some ideas to get you started.

Low Tech
¬ Make a poster advertising a business that existed in Virginia City during the gold rush.
¬ Write a letter about what life is like for a young person in Virginia City, Montana Territory.
¬ Write a blog post to be displayed on the bulletin board.

High Tech
¬ Write a post to a classroom blog.
¬ Make a trailer for one of the touchstone books and put it online.

Step 4: Sharing with Peers
Have students share and review their work. This is a very important step. This is a great time to let kids read their writing aloud. When other students ask clarifying questions and offer feedback to their peers, it is easier for students to see the need to revise their work.

Step 5: Creating, Sharing, and Celebrating a Final Product
Have students use the feedback they received from their peers to revise their work. Then find a way to share the final products publicly and celebrate their accomplishments. Publicly sharing their work will help students see themselves as “real writers and researchers.” The celebration may be as simple as sharing their finished products with other classes, or something more elaborate, like inviting community members and parents in to view their work.

Step 6: Reflecting on the Process
Have each student write a final reflection piece examining what they learned, what they liked, and what they would do differently. Remind students that, when it comes to research, process is sometimes more important than success.
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**Appendix 1**

**Curriculum Map**

**Standard 1:** The student will access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world standards.

<table>
<thead>
<tr>
<th><strong>Enduring Understanding</strong></th>
<th><strong>Essential Questions</strong></th>
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<tbody>
<tr>
<td>Students will make connections between the past and present. They will compare the relationship of a historical time to their own lives, helping them better understand our world.</td>
<td>1. Why should we study the past?</td>
</tr>
<tr>
<td></td>
<td>2. How can studying the past help us understand the present world and the future?</td>
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<td></td>
<td>3. How can the study of history help us compare and contrast the relationship between the past and the present?</td>
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</tbody>
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<tr>
<th><strong>Essential Knowledge</strong></th>
<th><strong>Essential Skills</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pose questions about the past using available sources.</td>
<td>1. Investigate independently or collaboratively a problem, issue, or concern.</td>
</tr>
<tr>
<td>2. Identify and compare objects from the past and present.</td>
<td>2. Gather Information.</td>
</tr>
<tr>
<td>3. Develop a narrative about the past.</td>
<td>3. Classify Information.</td>
</tr>
<tr>
<td>4. Use historical terms and concepts.</td>
<td>4. Analyze data.</td>
</tr>
<tr>
<td>5. Locate information related to inquiry question.</td>
<td>5. Think critically.</td>
</tr>
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<table>
<thead>
<tr>
<th><strong>Vocabulary</strong></th>
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<tbody>
<tr>
<td>drayman</td>
</tr>
<tr>
<td>dry goods</td>
</tr>
<tr>
<td>implements</td>
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Appendix 2: Student Handouts

Newspaper Scavenger Hunt

Directions: Answer all starred questions. Then choose 3 other questions to answer.

*1. Name and date of newspaper.

2. Find a fruit or vegetable advertised. Tell about it.

3. What kind of things were reported in the section titled “Local”?

4. Find an event that you may have read about in a textbook or other book. What was the event? How was the event described?

5. Find two words you are unfamiliar with. Write them down. What do you think they mean?

6. Find a form of entertainment mentioned in the paper. What was it?

7. Find a form of communication mentioned in the paper. How did they use it?

8. Find an advertisement for a confection (candy) or a toy. Were there any illustrations?

9. Was there anything about the weather?

10. Find a report on this page that came from another paper. What was the paper and where did it come from? Why do you think they reprinted articles?

11. Find an occupation or type of job that is mentioned.

12. Find a grocery ad. What kinds of food were they selling?

13. Find an example of clothing. How was it described? Was there an illustration or picture?

*14. What surprised you about this newspaper? How is it different from today? When you were reading it, what did you wonder about?
Appendix 2: Student Handouts

Student Research Log

Topic (for example, food, transportation, entertainment):

Name and date of newspaper 1:
Describe what you found on your topic.

Name and date of newspaper 2:
Describe what you found on your topic.

Name and date of newspaper 3:
Describe what you found on your topic.

Think about the questions we listed together. What question could this information help answer? What else do you need to know to answer that question fully?
blacksmith  a person who forges objects of iron. A person who makes horseshoes and shoes horses.

boardinghouse  a private house in which accommodation and meals are provided for paying guests

confectionary  candy, or candy store

cotillion  a type of social dance

dray  low flatbed wagon without sides, usually pulled by horses or mules and used to transport goods. (Our modern equivalent is a flatbed trailer.)

drayman  driver of a dray

dry goods  fabric, clothing and related merchandise

foundry  an establishment where metal is melted and poured into molds

freight  goods that are transported, and the systems for moving these goods

greenback  paper money originally issued during the Civil War. Today it is slang for a dollar bill.

gunsmith  someone who makes and repairs guns

icehouse  a building for storing ice

implements  a tool or instrument for doing work

livery  the feeding, stabling and care of horses for pay. (Also called livery stable or livery barn.)

pack train  a line of animals, such as horses or mules, loaded with supplies

parlor  a room in a home used to entertain visitors

proprietor  owner of a business establishment

staple  major item of trade. Raw material or commodity grown or produced in a region.

teamster  a driver of a team of horses

telegram  a message or communication sent by telegraph

telegraph  form of long-distance communication that transmits electric coded signals over wires from location to location

velocipede  an early form of tricycle or bicycle
The following topics and links are starting points for student research. I selected pages that I thought students would be successful with. Later as they gain experience and confidence they can use the full site and choose their own search terms.

If your students will be conducting the research on the computer, copy the links you would like them to explore into a separate document. Make that document accessible to them, so they can click on the links to get to the appropriate pages.

The first seven links are to the newspapers I chose to use with my class. (If your connection is slow, the browser may “time out” before the PDF loads. In that case, simply copy and paste the link into your browser.)

You may also want to look at the newspaper links that follow. You will encounter two types of links below (sometimes more than one for the same newspaper page). Links ending in “pdf” will take students to a PDF. Links ending in “seq-#” will take students to the live link. Some students may find the PDFs easier to navigate (I do). Others may prefer the live link. In the PDF file, you can use “control F” (or “command F” on a Mac) to find a particular search term.

Food/Shelter/ Lodging

Search term: grocery ads

Montana Post, September 1, 1866, p5

http://chroniclingamerica.loc.gov/lccn/sn83025293/1866-09-01/ed-1/seq-5/

Montana Post, February 3, 1867

http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-02-03/ed-1/seq-4/

Search term: apples

Montana Post, January 26, 1867


Montana Post, June 15, 1867


(Aug. 12, 1865: lots of ads)

(April 22, 1865: article on camels)

(Jan. 26, 1867: ads for candy and fruit)

(Aug. 17, 1867: confectionary ad and article about Wells Fargo dumping mail)

(March 21, 1868: ads)

(May 7, 1869: freight ad)

(July 28, 1866: stage and freight information)
Search term: candy
Montana Post, July 28, 1866

Search term: staples
Montana Post, June 4, 1869

Search term: hotel
Montana Post, June 4, 1869

Search term: furnished rooms
Montana Post, October 13, 1866
http://chroniclingamerica.loc.gov/lccn/sn83025293/1866-10-13/ed-1/seq-8/

Search term: flour (flour riot)

Search term: flour and canned fruit

Search term: furniture
Montana Post, November 23, 1867

Search Term: toys
Montana Post, September 7, 1867

Montana Post, July 28, 1866

Search term: freight
Montana Post, May 4, 1869 (This talks about the upcoming change of shipping by rail.)

Search term: stage
Montana Post, December 29, 1866
http://chroniclingamerica.loc.gov/lccn/sn83025293/1866-12-29/ed-1/seq-3/

Search term: stage line
Montana Post, May 12, 1866

Search term: steamboats
Montana Post, March 23, 1867
| Search term: **travel (hotel)**  
| Montana Post, May 11, 1867  
| [Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-05-11/ed-1/seq-2)  
| [PDF](http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-05-11/ed-1/seq-2.pdf) |

| Search term: **pack train**  
| Montana Post, May 14, 1869  

| Search term: **train**  
| Montana Post, April 20, 1867  
| (article about wagon train)  
| [Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-04-20/ed-1/seq-6)  
| [PDF](http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-04-20/ed-1/seq-6.pdf) |

| Montana Post, November 10, 1866  
| (trains arriving)  
| [Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1866-11-10/ed-1/seq-5)  
| [PDF](http://chroniclingamerica.loc.gov/lccn/sn83025293/1866-11-10/ed-1/seq-5.pdf) |

| **Technology / Inventions / Communication**  
| **Search Term: Wells Fargo** (Wells Fargo had the contract for the mail)  
| Montana Post, August 17, 1867  
| [Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-08-17/ed-1/seq-7)  
| [PDF](http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-08-17/ed-1/seq-7.pdf) |

| **Search term: letter list**  
| Montana Post, September 14, 1867  
| [Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-09-14/ed-1/seq-5)  
| [PDF](http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-09-14/ed-1/seq-5.pdf) |

| **Search term: mail coaches**  
| Montana Post, November 10, 1866  
| (description of area)  
| [Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1866-11-10/ed-1/seq-6)  
| [PDF](http://chroniclingamerica.loc.gov/lccn/sn83025293/1866-11-10/ed-1/seq-6.pdf) |
Search term: **telegraph**  
Montana Post, April 15, 1865  
(Grant telegraphed Lincoln)  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1865-04-15/ed-1/seq-1.pdf)

Search term: **mail**  
Montana Post, February 29, 1868  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1868-02-29/ed-1/seq-6/)
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1868-02-29/ed-1/seq-6.pdf)

**Education**

Search term: **school**  
Montana Post, December 3, 1864  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1864-12-03/ed-1/seq-3.pdf)

Montana Post, February 18, 1865  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1865-02-18/ed-1/seq-4/)
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1865-02-18/ed-1/seq-4.pdf)

Montana Post, October 9, 1868  
(Appealing to public for schools in the territory)  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1868-10-09/ed-1/seq-2.pdf)

Search term: **academy**  
Montana Post, July 1, 1865  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1865-07-01/ed-1/seq-4.pdf)

**Jobs**

Search Term: **blacksmith**  
Montana Post, February 16, 1867  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-02-16/ed-1/seq-5.pdf)

Montana Post, March 11, 1865  

Search term: **drayman**  
Montana Post, June 3, 1865  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1865-06-03/ed-1/seq-1.pdf)

Search term: **gunsmith**  
Montana Post, June 03, 1887  
[Link](http://chroniclingamerica.loc.gov/lccn/sn86075021/1887-06-03/ed-1/seq-2.pdf)

Search term: **teamsters**  
Montana Post, October 26, 1867  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-10-26/ed-1/seq-2.pdf)

**Entertainment**

Search term: **dance**  
Montana Post, January 22, 1869  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1869-01-22/ed-1/seq-2/)
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1869-01-22/ed-1/seq-2.pdf)

Montana Post, January 28, 1865  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1865-01-28/ed-1/seq-3/)

Search term: **bowling**  
Montana Post, July 29, 1865  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1865-07-29/ed-1/seq-3.pdf)

Montana Post, November 19, 1864  
[Link](http://chroniclingamerica.loc.gov/lccn/sn83025293/1865-07-29/ed-1/seq-3.pdf)
Search term: theater
Montana Post, June 5, 1868

Vigilantes

Search term: vigilantes
The Vigilantes of Montana, Preface
http://chroniclingamerica.loc.gov/lccn/sn83025293/1865-08-26/ed-1/seq-1/

The Vigilantes, Chapter 1
http://chroniclingamerica.loc.gov/lccn/sn83025293/1865-09-30/ed-1/seq-4/

Reprinted article from Utah about Montana Vigilantes
http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-10-12/ed-1/seq-1/

Advertising the book The Vigilantes of Montana

Current Events (These are articles that I stumbled upon during other searches.)

Gold at Emigrant Gulch
Montana Post, August 17, 1867
http://chroniclingamerica.loc.gov/lccn/sn83025293/1867-08-17/ed-1/seq-7/

Last Rail, Completing the
Transcontinental Railroad
Montana Post, May 14, 1869
http://chroniclingamerica.loc.gov/lccn/sn83025293/1869-05-14/ed-1/seq-6/

Lincoln Assassination
Montana Post, April 28, 1865

Mrs. Lincoln trying to raise money (after Lincoln was shot she faced financial hardships)
Montana Post, October 26, 1867

Killing of Booth (the man who shot Lincoln)
Montana Post, May 20, 1865
Recommended Touchstone Texts

Books are important connections for showing what life was like in other times. They can be adapted into mini-lessons to show students how other authors approached historic facts and wove them into stories. Reading one or more of these books aloud, or as a class, offers the opportunity to develop student background knowledge and to have a writing model that students can imitate. It also provides an initial format to discuss and compare their research experiences. A touchstone text provides students with a common memory and a common history to draw upon as they think like historians.


This reminiscence is also a great piece of Montana literature. It recounts Mary Sheehan Ronan’s childhood growing up in Colorado and Montana mining towns and gives a firsthand view of what it was like for a child in the mining camps. Told from the perspective of a young person, this book talks about the events that the *Montana Post* reported on. Teachers using this book may want to consider doing keyword searches in Chronicling America to get a second perspective on some of the things Mary describes.


Thirteen-year-old Genevieve Welsh is looking forward to summer vacation until her mother plans for the family to participate in Camp Frontier. The idea behind Camp Frontier is that everyone will have the opportunity to experience life as it would have been lived in the 1890s. Genevieve is not thrilled. She smuggles in her cell phone and texts her friends with daily updates from "Little Hell on the Prairie." Her friends successfully make her posts into an Internet sensation. Chapters 2 and 3 set the stage and talk about the transition between modern times and the 1890s. There is lots of humor in the story, as well as events that introduce thought-provoking discussions.


Jessie lives in a frontier village called Clifton, Indiana, where she and all the other children believe the year is 1840. When a diphtheria epidemic breaks out, children start dying, and Jessie’s mother reveals a secret: the year is actually 1996 and Jessie has been living in a historical preserve. Now Jessie must escape to a foreign world with cars, televisions, and telephones to bring back help. Chapters 3 and 4 include terrific passages that show how language changes along with the technology it represents.

**Can a video be a Touchstone Text?** These movies will also provide background knowledge and fodder for discussion:


This is a great documentary piece that shows Virginia City and Nevada City as they are now and how they were preserved. It also talks about ongoing events that are important to the community.

▶ **Frontier House**, PBS, 2002.

Filmed in Nevada City, Montana, this series tracks three modern families trying to live as families did in 1883. You can purchase the series from PBS. [https://www.thirteen.org/wnet/frontierhouse/frontierlife/index.html](https://www.thirteen.org/wnet/frontierhouse/frontierlife/index.html)

In addition to the touchstone texts listed above, teachers may also want to consider sharing picture books about the gold rush, of which there are many.
Vocabulary Games

To develop content-specific vocabulary, teachers need to talk about the words often. As I read the newspapers, I chose words common to that time period and provided working definitions (see page 8). Most of these words will be unfamiliar to many students. By working with the words and the definitions, students will build background knowledge and improve comprehension strategies.

Resources for studying new vocabulary include the following:

Games

Balderdash
https://boardgamegeek.com/boardgame/163/balderdash

Flash Card Game http://quizlet.com

Review Games http://www.davidson.edu/math/chartier/pff/index.html

Resources

Create Flash Cards http://www.syvum.com/cgi/online/serve.cgi/squizzes/history/hist3.tdf

History Lab Vocabulary http://www.wshs.org/education/labvocab.aspx

Online Dictionaries


Merriam Webster http://www.merriam-webster.com/
Appendix 6

Chronicling America Tutorial

Using the Chronicling America site has been great fun. I discovered that the Weather Service has already celebrated 150 years. I learned how maps were made in previous years. I also learned that in 1888 dogs had to be licensed in Miles City, MT, my hometown. I hope your research uncovers equally interesting finds. For the screenshots I used http://awesomescreenshot.com/.

**Chronicling America Advanced Search**

Open up a window and go to [http://chroniclingamerica.loc.gov/](http://chroniclingamerica.loc.gov/). Look for the tab that says Advanced Search and click on it.

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[Image of Chronicling America Advanced Search screen]
On the left side is a list of the states. In the middle section is a list of the newspapers. In the right section of the screen is a tool to select specific years.

I am going to use the key word “road agents” to do an advanced search.

Since I want information about road agents in Montana, I first need to select a state or newspaper. I select Montana. From there I move to the date range. If I am looking for specific information, I will click on the bottom part of the dates and type a beginning date. A calendar will appear. Choose the month day and year. I choose January 1, 1863.

Then type in the ending time for your search. A calendar will pop up for this also. For my ending date, I choose December 31, 1864.

After you have chosen your date range, select your key words. You can enter them in one of four search areas.

1. “Any of the words”: this will get the most hits, and every page that has either the term “road” or the term “agents” will appear.

2. “With all the words”: this will refine your search. Each newspaper chosen will have all the words you enter, not necessarily together. Thus, you will get pages with stories about road agents, but you will also get pages that have two stories—one on constructing a road and the other talking about business agents.
3. “With the phrase”: This gives you fewer, more relevant hits. Only stories that contain the phrase “road agents” will appear.

4. “With the words within” (enter a number): In this case, you choose how close the words need to appear in the article. This is a good choice if you want a story about “road agents” that also mentions “Henry Plummer”, or an article on the boycott of Chinese businesses (since a paper reporting on this may not have used the exact phrase “Chinese boycott”).

For road agents I choose “With the phrase.”
I get three pages.

When I do the search again, in the same date range, using “Within five words,” I get four pages.
If you wish, you can sort your search results by relevance, title, date, state. This gives you another way to fine tune your search.

A final way to fine tune your search is to ask Chronicling America to search ONLY the front page (or only page 2 or only page 8).

With my “road agents” search, this nets me zero results, but the strategy can be useful for other searches—for example, if I only want information about Abraham Lincoln that is important enough to hit the front page—or if I only want to read editorials and I know a particular paper always places them on page 8.

Some districts have large format printers. If so, you can send a PDF to the person who controls that printer (usually to create posters), to print out a newspaper-sized print. If your district does not have a large-format printer, your local newspaper or mortuary may have one. Often they will print items as a public service.

If you do not have access to a large format printer, you will need to print sections of the paper and tile them. These instructions show how to print a newspaper page in Chronicling America using Internet Explorer. The instructions explain how to “tile” your printout across four or nine sheets of 8½ x 11 paper.

1. Make sure the newspaper page you want to print appears in the image viewer.
2. Click the PDF link above the image. The PDF will now appear in your browser window.
3. At upper left of the browser window, click the File menu.
4. In the File menu, click Print.
5. In the Print dialog box, under Printer, select your printer from the list.
6. At bottom left, under Page Handling, locate the Page Scaling dropdown list.
7. In the list, click Tile large pages.
8. In the Overlap box, enter 0.005.
9. Check the image under Preview: Composite at bottom right. To print the newspaper page across four sheets of paper, you should see two dotted lines: one vertical and one horizontal, like this:

   Figure 1 Newspaper page shown divided into four sections.

If you do not see the page divided into four sections, as shown above, you can rescale it. In the Tile Scale box, replace the 100 with a lower percentage, for example, 90.

**Note:** The percentage required in the Tile Scale box will vary from one printer to the next, so be prepared to enter different numbers until Preview: Composite shows the desired segmentation.

10. Now examine the image in Preview: Composite. If you see four sections, you are ready to print. To print, click OK.

**Hint:** If you want the type to be even larger—and you don’t mind printing more than 4 sheets of paper—you can rescale the newspaper page so that it prints across nine sheets of paper. In the Tile Scale box, replace the 100 with a larger percentage, for example, 125 or 150.
To confirm, check the image in **Preview: Composite**. You should see four dotted lines: two vertical and two horizontal, like this:

![Figure 2](image_url)

**Figure 2** Newspaper page shown divided into nine sections. It will print across nine sheets of 8½ x 11 paper.

**Note:** The percentage required in the **Tile Scale** box will vary from one printer to the next, so be prepared to enter different numbers until **Preview: Composite** shows the desired segmentation.
Appendix 8

Using Question Matrices to Ask Better Questions

Once you have learned how to ask relevant and appropriate questions, you have learned how to learn and no one can keep you from learning whatever you want or need to know.

—Neil Postman and Charles Weingartner

Interesting research starts with great questions—which act as roadmaps along the information highway. As Jamie McKenzie has said, "Without strong questioning skills students are unlikely to exercise profitable search strategies." But many students need help learning how to ask good questions.

Spending time developing students’ ability to format good questions pays big dividends later on.

One tool for assisting students to develop deeper questions is the Q-Matrix that was developed by Dr. Chuck W. Wiederhold. The Q-Matrix uses question stems and the topic of your choice. I use Question Dice from Kagan Publishers (http://www.kaganonline.com/catalog/higher-level_thinking.php#MLQ). The teacher (or a student) rolls the dice for the question words, and then students use those words to design their topic question.

Read more about the use of Q-Matrix: