

Analyzing Water Tales

Katy Wilson, Wasatch Range Writing Project

Summary:

Students will read a story from the book *Water: Tales of Elemental Spirits* (McKinley & Dickinson, 2009) and analyze a chosen element of the story. They will write an explanation that includes an introduction, text evidence, analysis, and a conclusion about the chosen element.

Objectives:

- UT 11: ELA: RL 1: Cite strong and thorough evidence to support textual analysis. Include inferences drawn from the text and determine where the text leaves things uncertain.
- UT 11: ELA: RL 2: Determine two or more themes/central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.
- UT 11: ELA: RL 3: Analyze the impact of the author’s choices regarding story development and how it relates to elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).
- UT 11: ELA: RL 10: Read and comprehend literature, including stories, dramas, and poems, in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range.
- UT 11: ELA: W 9: Draw evidence from literary or informational texts to support analysis, reflection, and research.
- UT 11: ELA: W 10: Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (single sitting or a day or two) for a range of tasks and purposes.

Context:

11th grade

Materials:

- A copy of *Water: Tales of Elemental Spirits* (McKinley & Dickinson, 2009) for each group (6)
- Pen/pencil
- Notebook/paper/computer/mobile device

Time span:

120 minutes

Procedures:

1. Read the prologue (“The Water Sprite”) in the book *Water: Tales of Elemental Spirits* (McKinley & Dickinson, 2009, pp. 1-20) aloud to the whole class.
2. As a class, choose a story element (characters, setting, etc.) from the text and write an analysis of the chosen element. Then provide evidence to support the analysis in paragraph form. Next, the teacher and class create a question about the chosen story element (Alrubail, 2014), then find three pieces of text evidence to support/answer the question. The



explanation should include an introduction, text evidence, analysis, and a conclusion about the chosen element.

Examples of questions: http://coursecontent.learn21.org/ENG3x-HS-U10/a/unit03/resources/docs/E3HS_3.B_GUIDINGQUESTIONS_PDF.pdf

3. Explain to the students that they will be reading a story aloud from the book as a group.
4. Organize the class into 6 groups and assigns their stories as follows:
 - a. Group 1: “Mermaid Song” pp. 21-50
 - b. Group 2: “The Sea-King’s Son” pp. 51-97
 - c. Group 3: “Sea Serpent” pp. 98-138
 - d. Group 4: “Water Horse” pp. 139-189
 - e. Group 5: “Kraken” pp. 190-227
 - f. Group 6: “A Pool in the Desert” pp. 228-286
4. Each student (or the group as a whole) chooses a main story element (characters, themes, literary devices, setting or narrative) to write about from their assigned story and brainstorms ideas.
5. The students form their story element choice into a question (Alrubail, 2014). See the examples from the link in step #2.
6. The students find at least three pieces of textual evidence from their assigned story to support/answer their question in step #5. They can quote, summarize, or paraphrase text from the story (Alrubail, 2014).
7. Students use analysis to answer the question that they asked in step #5 and push beyond the surface parts of the element.
8. The students conclude their explanation with what they hope to get out of the analysis, provide closure, and include reflection and opinion (Alrubail, 2014).
9. Students then develop a multimedia presentation as a group about their story to present to the rest of the class.

Extensions:

Students may read their explanation to a partner for feedback.

Rationale:

High school students need to be able to analyze what they read and have a lot of opportunities to practice that skill. This activity provides students the chance to read and analyze a story about water.

Resources:

Alrubail, R. (2014). “Teaching Literary Analysis”. Edutopia. Retrieved from:
<https://www.edutopia.org/blog/reaching-literary-analysis-rusul-alrubail>

Mckinley, R. & Dickinson, P. (2009). *Water: Tales of Elemental Spirits*. New York, NY: Penguin Group, Ltd.

UEN. (2014). *Utah Core Standards*. Utah Education Network. Retrieved from: <http://www.uen.org/core/>

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Balancing Water Needs
Writing a Balanced Essay about the Colorado River
Dee Anne Squire, Wasatch Range Writing Project

Summary:

Students will sharpen viewing skills, gather evidence, organize, and write a balanced essay on the Colorado River and how it should be managed in the years to come.

Objective:

- Students will be able to understand the arguments for river use on both sides of the issue.
- Students will write arguments to support their claims based on valid reasoning and evidence.
- Students will be able to interpret words and phrases within video clips and historical contexts. They will discuss the connotative and denotative meanings of words and how those word choices shaped the opinion of Americans about the Colorado River.

Context:

Grades 7-12 with the depth of the discussion changing based on age and ability.

Materials:

- Ability for all students to view two short documentaries on YouTube
- Paper/ Pencil
- Essay writing materials

Time Span:

Three 50-minute class periods with some possible time at home for students to write.

Procedures:

Day 1

1. Begin class by asking students to write a memory that is linked to water in some way. Give students 5-8 minutes to write. After the time is up have the students turn to a neighbor to share their experience (1-2 minutes). Find a new neighbor and share again (1-2 minutes). If time allows, share again with someone else (1-2 minutes). Finally ask a few members of the class to share with everyone. Discuss the variety of memories and emotions. Point out the importance of water in our lives.
2. Introduce students to a map of the Colorado River, point out areas of interest that students might be familiar with. Allow sharing to link any of their experiences that might have occurred on this river to the map. Briefly help students to see the impact the Colorado River has on their lives, for example recreation, geology, family history, or other historical events.



3. Instruct students to create a T-chart to use as they watch the film. Students should be looking for the pros and the cons of damming the Colorado River. The film looks at the dams as being more favorable, especially for the time period. Encourage students to be critical thinkers as they watch and include information that they infer from this film as well. At the bottom of the page students should record questions they have while watching. www.youtube.com/watch?v=aTkOKns3YwY
4. Students will watch a short film from 1947 on the Colorado River that details the building of dams, their purposes, how the course of the water has been changed, why it has been redirected, and how it is being used. They should list information on the chart as they are watching.
5. Finish with a class discussion. Students may continue to add information to their charts as we talk. Start by asking students about their observations. Then use the following questions as needed:
 - i. Summarize the main points of this movie.
 - ii. What are the purposes for building dams on the river?
 - iii. How was this movie organized to make it easier to follow?
 - iv. What was the purpose of the film maker in creating this movie?
 - v. Who was his intended audience?
 - vi. Would audiences today accept and support this movie?
 - vii. What evidence did the film maker present to support his purpose?

Day 2

1. Begin class by having students review their T charts from the previous day. As a group, summarize the film, discuss what students learned, and get a general feeling from the class about the dams on the river and their effect on humans.
2. On the back of their paper have students draw a second T-chart. Again students are going to watch a movie, this time “Chasing Rivers.” Again students should be listing the pros and cons of damming the Colorado River. Pay special attention to the effect those dams have had on the river and the communities it serves over the past 70 years. List questions at the bottom of the page. <https://www.youtube.com/watch?v=xt5UjRWW1gE>
3. Finish with a class discussion. Allow students to share their observations. Encourage students to compare and contrast the two movies. Use the following questions as needed to continue the discussion:
 - i. Summarize the main points of this movie.
 - ii. What have been the long term results of building dams on the river?
 - iii. How was this movie organized to make it easier to follow?
 - iv. What was the purpose of the film maker in creating this movie?
 - v. Who was his intended audience?
 - vi. How does the **word choice** vary between the two films? Does this variation in anyway influence the ideas and beliefs of the audience?
 - vii. How would audiences from the past feel about this movie?
 - viii. What evidence did the film maker present to support his purpose?
 - ix. What do you see will be the future of this river?
 - x. How have our ideas about dams and water changed in the past 70 years?

Day 3



1. Ask students to review their T-charts from the previous two days. After reviewing the information, students should record their own opinion about the future of the river in their journals. How do you think the water in the Colorado River should be used and distributed? After 10 minutes of writing time, ask students to put away their journals.
2. Review/teach how to write a balanced essay. The following sites may be helpful:
 - a. https://www.youtube.com/watch?v=-e_5CgYvovA
 - b. <https://englobex.ru/blog/ielts-writing-2-balanced-essay-lesson/>
3. Give students time to write. Their balanced essays should include an introduction with a clear thesis, paragraphs that focus on the pros of damming the Colorado, and paragraphs that focus on the cons. Students may use multiple paragraphs to present this information, as long as there is equal information for both sides. Finish with a paragraph of the student's opinion (this can come from the journal writing early in the day) and end with a conclusion. Essays maybe due at the end of class or the next day depending on time.

Extension:

- Research and implement a school wide campaign to conserve water.
- Research current legislation concerning the Colorado River. Write a letter to members of congress expressing your opinion on how they should vote.

Rationale:

Students will be able to see the various ways the Colorado River has been used to satisfy the water needs of various communities in the Western United States. They will be able to identify the problems that have arisen and will arise in the future. The balanced essay approach helps students understand the need for a balanced solution that will consider all groups that will be affected. In the coming years, it will be important for the next generation of leaders to be prepared to tackle these difficult problems with an understanding of the needs and compassion for all involved.

Resources:

Geographic, National. "Chasing Rivers, Part 1: The Colorado | Nat Geo Live." [YouTube](#). 10 Nov. 2014. YouTube. 02 July 2019 <<https://www.youtube.com/watch?v=xt5uJrWW1gE>>.

Travelfilmarchive. "The Colorado River 1947." [YouTube](#). 28 May 2008. YouTube. 02 July 2019 <<https://www.youtube.com/watch?v=aTkOKns3YwY>>.

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Exercises in Finding Evidence

Dee Anne Squire, Wasatch Range Writing Project

Summary:

Students will sharpen their evidence finding skills by locating supporting evidence in written works, photographs, and science experiments.

Objective:

- Students will be able to recognize evidence that supports their claim.
- Students will verify the credibility of the sources they use for evidence.
- Students will be able to use words and phrases that clarify the relationship between the claim and the evidence that supports the claim.

Context:

Grades 5-8 with the depth of the discussion changing based on age and ability.

Materials:

- 2 plastic cups for each group
- Water for the cups
- Paper Towels
- Paper/ Pencil
- Visual display of Black Rock photos

Time Span:

Three 50-minute class periods – one period for each of the evidence exercises. The exercises are all independent, so they don't all have to be completed in order.

Procedures:

Evidence in Close Reading

1. Use the book, *Song of the Water Boatman: & Other Pond Poems*. This book has both a poem and a paragraph describing each of the pond creatures. The following poems will work well for this activity: Wood Duck, Diving Beetle, Duckweed, Water Bear, Cattails, and Painted Turtle.
2. Begin by showing the descriptive paragraph for one of the creatures on the white board. Read through it once with the students.
3. Read through it a second time and have students underline specific words in the paragraph that describe the creature. Make a list of possible synonyms for these words.
4. Hand out a copy of three of the poems above; one of the poems should match the description that you read as a class. Have students use the clue words they underlined to figure out which poem matches the descriptive paragraph. Remind them the poet might use a synonym instead of the exact word.



5. After the students have selected a matching poem, they should write a brief paragraph claiming which poem matches the description. Students should also include a list of words that act as evidence in supporting their claim.
6. The activity may be repeated with other descriptive paragraphs and poems.

Evidence in Science

1. Set up the experiment for capillary action found on page 19 of *Explore Water*. This will allow students to see results of the experiment if they are not in class for a 2 hour period of time.
2. Ask students to look up and define Capillary Action. Discuss it briefly as a class. This definition will be their claim statement.
3. Pass out the supplies for the experiment to small groups of students. Give specific examples of how to set up the experiment.
4. Instruct students to take very careful notes as they watch the experiment progress. What happens? How quickly does it happen? This will become their evidence. Allow students time to watch and record observations.
5. Show the results of the experiment you set up before school and have them add this to their notes. These notes will become their evidence. Discuss as a class how this experiment illustrates Capillary Action.
6. Students should write a brief paragraph using the definition as a claim statement and observations of the experiment as evidence to support that claim. Help students use transition words to connect these ideas.

Evidence in Pictures of History

1. Show each of the following three pictures to students. Point out the famous Utah landmark Black Rock as a prominent feature in each picture.
 - a. <http://www.tooelepioneermuseum.org/images/2015021003.jpg>
 - b. <http://www.tooelepioneermuseum.org/images/2015021004.jpg>
 - c. <https://www.youtube.com/watch?v=AcOf8k-kVlg>
2. Have students write words that describe each of the pictures. These words should help point out the differences between each picture.
3. Use these words to prompt a class discussion about the differences in the pictures. After discussing the differences, consider the possible reasons why there are differences.
4. Students will write a brief paragraph claiming the reason for the landscape change, and will use the describing words from the pictures as evidence to support the claim. They will make a claim about the reason for the change in landscape and give evidence from the pictures that can support that claim.
5. This same activity can be repeated with other landmarks students are familiar with that have changed over time.

Extension:



- “The Water Energy Nexus in Utah” is a 2012 report that shows charts/graphs that collect data on water and energy. Students could use these charts as evidence to support argumentative papers about the connection between water and energy in our state. These graphs and charts will speak to the more mathematically minded high school students. It will help them practice turning numbers into sentences that can be easily understood.

Rationale:

Language Arts teachers ask students to find supporting evidence for the argumentative essays they write. It is often difficult for students to locate and use this evidence appropriately. We fail to see that all of the other disciplines ask students to support their findings with evidence as well. Therefore, completing these activities in the Language Arts class room will help students connect the evidence finding skills they have developed in other disciplines to argumentative writing.

Resources:

Sidman, Joyce, and Beckie Prange. *Song of the Water Boatman: & Other Pond Poems*. Houghton Mifflin, 2005.

Wick, Walter. *A Drop of Water*. Scholastic, 1996.

Yasuda, Anita, and Bryan Stone. *Explore Water*. Nomad Press, 2011.

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Exploring Water

Katy Wilson, Wasatch Range Writing Project

Summary:

Students in eighth grade will pick a resource about water to research, and then design an experiment that answers a question relating to the chosen property of water.

Objectives:

- UT 8: ELA: RIT10: Read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.
- UT 8: ELA: W 7: Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
- UT SCI: 8.1.2: Obtain information about various properties of matter, evaluate how different materials' properties allow them to be used for particular functions in society, and communicate your findings. Emphasize general properties of matter. Examples could include color, density, flammability, hardness, malleability, odor, ability to rust, solubility, state, or the ability to react with water.
- UT SCI: 8.1.3: Plan, investigate, analyze, and interpret data to identify patterns of change in a substance's properties to determine if a chemical reaction has occurred. Examples could include changes in properties such as color, density, flammability, odor, solubility, or state.
- UT SCI: 8.1.5: Develop a model that uses computational thinking to illustrate the cause and effect relationships in particle motion, temperature, density, and state of a pure substance when heat energy is added or removed. Emphasize molecular-level models of solids, liquids, and gases to show how adding or removing heat energy can result in phase changes and changes in calculating density of a substance's state.
- UT SCI: 8.1.7: Design, construct, and test a device that can affect the rate of a phase change. Compare and identify the best characteristics of competing devices based on data analysis, and modify them to improve the device to better meet the criteria for success.

Context:

8th Grade

Materials:

- A copy of *Explore...Water!* (Yasuda, 2011); use to make copies of an experiment in each section for the groups listed in procedure #7.
- Picture and video of brinicles (see resources)
- Pen/pencil
- Notebook/paper/computer/mobile device
- Lab materials (see a science teacher to borrow what is needed)

Time span:

90-120 minutes



Procedures:

Day 1:

1. The teacher shows the students a picture of a brinicle (<https://www.ripleys.com/wp-content/uploads/2014/02/binicle2.jpg>).
2. The students write three observations and three questions about the picture.
3. The teacher calls on students to share their observations and questions.
4. The teacher leads a discussion and asks the students how this phenomenon relates to the properties of water.
5. Give students time to research their questions and figure out how the phenomenon is happening (15 minutes).
6. The teacher calls on students to share their findings. Possibly show a video to further understanding (<https://www.youtube.com/watch?v=93oz36zFuiA>).
7. The teacher assigns the students into eight groups, with each group in charge of a water topic listed below. Groups will research and design an experiment based on their assigned topic using the book *Explore... Water!* (Yasuda, 2011).
 - a. Salt vs. Freshwater-Chapter 1, pp. 1-10
 - b. Water Properties (I.E. states of matter)-Chapter 2, pp. 11-19
 - c. Water Cycle-Chapter 3, pp. 20-30
 - d. Weather-Chapter 4, pp. 31-41
 - e. Water Works (inventions)-Chapter 5, pp. 42-52
 - f. Water Pollution-Chapter 6, pp. 53-65
 - g. Water Conservation-Chapter 7, pp. 66-74
 - h. Water and Art-Chapter 8, pp. 75-83
8. The teacher passes out copies of an experiment from each section of *Explore... Water!* (Yasuda, 2011) for the groups to study as an example, but not use to experiment.
9. The students have time to research their topic in the book and other sources (like an encyclopedia or science textbook) and design a simple experiment to test their topic (30 minutes).
10. The students tell the teacher which materials they need for their experiments.

Day 2:

11. The students carry out their experiments and collect and analyze data on their lab sheet (see resources).
12. The students summarize their findings in a group discussion space (I.E. Canvas, OneNote, etc.).
13. The students read through the group findings and vote for their top three favorites.
14. The top three groups present their information for the whole class and share what they have learned about water properties.

Extensions:

- This lesson can also fit with science and ELA standards in 6th and 9th grades.
- Students can use their experiment to display at STEM/science fair.

Rationale:

Students can be curious about a science topic and have questions that can be researched and tested. The teacher can facilitate this curiosity by presenting natural scientific phenomena and providing resources/time for students to design and carry out experiments about scientific topics.



Resources:

FK Television. (2013). "Time-Lapse Camera: Underwater Icicle 'Finger of Death'". Retrieved from: <https://www.youtube.com/watch?v=93oz36zFuiA>

Suzanne. (2014). "The Science of Brinicle: Ice Stalactites". Ripley Entertainment, Inc. Retrieved from: <https://www.ripleys.com/weird-news/brinciles-ice-stalactite/>

UEN. (2014). *Utah Core Standards*. Utah Education Network. Retrieved from: <http://www.uen.org/core/>

Yasuda, A. (2011). *Explore...Water!* White River Junction, VT: Nomad Press.

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Name:

Period:

Date:

LAB REPORT FORM

Research Question: (What is the question you are trying to address?)

Hypothesis: (If...then...because)

Methods:

Materials (What materials will you use?)



Procedures

(Describe the process you used with enough specific detail so the experiment could be replicated by someone. The who, what, when, where and why of your experiment. What are your controls? What are your independent and dependent variables?)



Findings: (Table/Graph)

Conclusions and Questions: (Please refer back to your data)

What we know	Questions we still have
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.



Image Journal: *A Long Walk to Water*
Gwen Romero, Wasatch Range Writing Project

Summary:

Students create a journal including images, summaries, and reflections to process the events/details in a work of literature.

Objectives:

- Develop critical thinking skills through analyzing, synthesizing, and conceptualizing information.
- Evaluate the effects of water shortages and cultural conflict.
- Analyze the literal and metaphorical uses of water in a literary work.

Context:

A sixth to tenth-grade English/literature class or struggling readers through twelfth grade.

Materials:

- Copies of Linda Sue Park's *Long Walk to Water* for whole class.
- Assignment handout. **Note:** Based on the level of your class, determine how many journal entries per chapter you will require (requiring 2-3 each has worked well for me in my eleventh-grade classes—depth without filler or frustration) and how many chapters you will read each day, including in class and as homework. Fill in the blanks on the assignment sheet: required number of entries per part, first journal check, and final journal check.
- Pens/pencils, colored pencils, and paper (students may choose to use a memo book or sketchpad).

Time Span:

Approximately two weeks.

Procedures:

1. Day 1: Introduce author and work (brief background—see cover notes). Also briefly introduce context: conditions, national/tribal conflicts, droughts, wars, etc. that contrast with our experiences. Introduce the assignment by reviewing the handout with the class.
2. Begin reading book, together or individually. Have students mark their places when you reach the end of the first chapter or have 10 minutes remaining of class time. Have a student summarize what has happened so far. Have others share thoughts/feelings/themes. Then, have students suggest possible key images for this chapter as well as the relevance/significance of each image. Each student should have the first entry ready to share start-of-class the following day.
3. Day 2: Have students share entries, leading into class discussion. Students should write discussion notes on back of entry or on the following page.
4. Continue daily with journal sharing and discussion until finished with book.

Follow up:

Each student selects one thread from his/her journal, theme, symbolism, etc., for the formal paper--expository, argumentative, or analytical, depending on the needs of your class.



Note: I check journals half-way through the unit, while students are working on small-group discussion questions, and at the end of the unit. Journals are graded on the quality and depth of responses to the literature, the quality of the images/photos, and the additional notes from class discussion.

Extensions:

- Have students research more about the related topics—images and information to share with the class: the countries, weather, conflict, specific people or places referenced in the book, governmental policies, etc.
- Have students research news articles about other incidents of heat waves, droughts, flooding, hurricanes, or other natural disasters and the effects on the people/communities.

Rationale:

Having students incorporate imagery into written responses appeals to visual learners and strengthens personal connections for all students while challenging them to evaluate the text in a symbolic mode.

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Image Journal Assignment

While reading, you will be required to keep an image journal—a combination of sketches about and written responses to the book. You will be required to make _____ entries for each of the chapters of the book. You will be required to read _____ chapter(s) each day and be prepared to share your entries for each.

You may use lined paper, a tablet, or a sketchbook. Each entry should include the following: title, key image (sketch of detail or scene or comparable photo from a magazine or the internet), two-sentence synopsis, and observations (see below).

Observations: The written entries should focus on the events of the book, significance of details, insights to the effects of conditions—nature and human—on the characters, and your thoughts and feelings while reading; questions for class discussion; notes on characters, mood, and themes; and connections to your own life/experiences and current events. Each written entry should be at least the equivalent of a half a page of standard notebook paper. To show depth and understanding, vary your entries: write about more than just the plot.

On the back of each entry, you are expected to include additional notes and observations from class discussion. You will use these notes to write a formal paper.

Your final journal should include a cover that includes the book title and author, your name, and a design/sketch/image that conceptualizes a central theme.

First journal check: _____ (date)

Final journal: _____ (date)

You will be called on to share entries during our study of the book.



John Wesley Powell: Text Jigsaw

Gwen Romero, Wasatch Range Writing Project

Summary:

Students will study, synthesize, and share parts of a work to help them achieve greater understanding of the text/event/concept.

Objectives:

- Read, discuss, and synthesize informational text.
- Present/share synthesized information with the whole class.
- Make inferences and draw conclusions from the work as a whole, based on each group's information.
- Work collaboratively.
- Practice research skills.

Context:

Grades 11 and 12 English Language Arts or Social Studies, or advanced class grade 9 or 10.

Materials:

- Class set of Wallace Stegner's *Beyond the Hundredth Meridian: John Wesley Powell and the Second Opening of the West*.
- Pens/pencils, sticky notes (approx. 30 per student), a board or wall space per class section, computer and internet access.
- Before Day 1, designate the board or wall space for each section and label headings: Summaries, Quotes, Big Questions.

Time Span:

Six 45-minute sessions with homework; more if the work is done exclusively in-class.

Procedures:

Day 1

1. Introduce the Stegner text and topic (can use biography in book and overview on cover). Overview the project: a jigsaw study of the work and the impact of the subject and related issues. Distribute text and make sure students have sticky notes.
2. Read Author's Note with class and model note-taking: Summary, 3 key quotes, and big question (see attached sample).
3. Divide class into groups and assign Part I. Have students count off #1-12 (or use class roster); repeat until all students have an assigned section, ideally two students per section (adjust for larger or smaller class sizes). Have students begin reading and note-taking in class; be ready to share and discuss for Day 2.

Notes: Exit ticket for the day is to show one or two notes. Vocabulary can be incorporated as an extra note that includes the word, sentence from the text, definition, and paraphrase of meaning with context.



Day 2

1. Have students meet in groups to compare notes from their assigned reading to share with the class in sequential order: tag-team the summary (one partner starts, another adds to the summary), then each group shares a key quote and its relevance—done by whichever group member spoke less during the summary. Finally, they share one of their big questions.
2. Have each group place its notes on the board/wall after sharing.
3. Take a few minutes for class discussion: observations, clarifications, anything that seemed weird or distinctive.
4. Assign groups for Part II, #1-11 this time; follow same directions as for Part I, set due date for next session.

Day 3

1. Follow the same procedures as for Day 2.
2. After discussion, divide class into 3 groups and assign each group one of the remaining three parts. Each group decides who will read which subsection within each part, due for next session.

Day 4

1. Follow the same procedures as for Day 2, moving through Part 3, Part 4, and Part 5 in order.
2. Extend class discussion after the sharing section and have students respond to some of the Big Questions that have been posed: what their initial thoughts and observations are, any experiences they have had or heard of that relate to those questions, etc.
3. Have each student select one Big Question to research and answer. Guide students to select questions raised throughout the work, not all from one part. Also, guide a few students to research Powell's conclusions about water and the Southwest if no one has already chosen those.
4. Begin research. Have students start a slide show, Word, or Docs page to document their research.

Day 5

Today is a work day. Students should research their questions, including documenting sources (webpage/article name, provider, and website minimum), as well as images that support their findings. They then create a brief slideshow or digital flyer to share their findings with the class, due for next session.

Note: Between Day 5 and Day 6, I take a day to work on something else, a related news article or video usually, for students who need to juggle homework.

Day 6

Each student shares his/her question and answer. Students take notes on insights, connections, new information, and additional questions to turn in as their exit tickets.

Extension:

Have students research one of the following topics for an informative or an argumentative paper, editorial, or debate.

- Whether to drain or not to drain Lake Powell—pros and cons/reasons for and against.



- The impact of Lake Powell on surrounding communities: who is affected and how, including wildlife.
- The impact of Lake Powell on Utah's economy.
- The impact of Lake Powell on the environment.
- The impact of Lake Powell as a source of water for Utah and Colorado and for those farther south along the Colorado River.

Rationale:

Independent study, followed by discussion with others and presentation of information strengthens students' understanding as well as developing communication skills.

Resources:

Stegner, Wallace. *Beyond the Hundredth Meridian: John Wesley Powell and the Second Opening of the West*. Penguin Books, 1992.

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Sample Notes: Author's Note

*Quotes should include comments on meaning/significance.

Author's Note Summary—

Stegner introduces Powell and overviews who he was: a Civil War veteran and amateur scientist, who charted the Grand (Colorado) River and Canyon to inform westward expansion and governmental policy.

Key quote from Author's Note—

“Man [is not] the pawn of evolutionary forces. In [Powell's] view, man escaped the prison in which all other life was held because he could apply intelligence and will to his environment and bend it.”

Humanity as a species has more control over its destiny because it can understand and manipulate its environment.

[changed for clarity]

Key quote from Author's Note—

“ . . . Powell's party in 1869 survived by the exercise of observation, caution, intelligence, skill, planning—in a word, *science*. A man or a civilization could do the same . . . ”

Although Powell's expedition was materially unprepared for what they experienced, they were successful due to their use of reasoning; an attribute that Stegner feels more people could benefit from.

Key quote from Author's Note—

“And if he was more optimistic about the future of America than is now fashionable . . . a large amount of his work both for science and for democracy has not only lasted but has generated more of the same.”

Stegner (1953-54) seems to be throwing a little shade on McCarthyism and Joseph McCarthy by emphasizing that Powell's lasting influence was the result of his positive attitude toward the nation and its people, suggesting McCarthy's importance will be short lived.

Big Question from Author's Note—

How do Powell's research and discoveries influence the U.S. today?

