

Lewis and Clark's Adventure of a Lifetime Compliments of President Jefferson!

Rationale:

Students tend to romanticize the journeys of explorers and do not have a clear idea of the complexities and risks of exploration. They also have difficulty relating these adventures to their own lives.

These lessons are aimed at helping students realize that the exploration of the land west of the Mississippi was a long held dream of President Jefferson and that he had attempted expeditions several times prior to Lewis and Clark. Students will come to see President Jefferson as a visionary, a man of planning and perseverance. Although serendipity is part of the fun and wonder of life, most memorable trips or other experiences do not just happen. They require detailed planning.

The NEH Institute has helped me to see Thomas Jefferson as quite an amazing man with many interests and a great hope and vision for the future of America. It has also helped me to understand his humanity and the fact that my students need to know the many sides of Thomas Jefferson. Students need to understand that Jefferson was not perfect; no hero is perfect. A hero is simply someone who is just like us, works hard and makes mistakes but still accomplishes great, remarkable things.

The Institute has helped me to realize that there is something about Jefferson that I can teach to all my elementary school students. He left to us, through his letters and other writings, his great legacy of successes and failures, civic duty and family life, and a detailed description of the simple joys, triumphs, contradictions and great tribulations inherent in life. His character, personality and interests are slowly revealed, illuminating his curiosity, perseverance and full participation in life.

I am excited and plan additional units to share what I have learned with my students, especially Jefferson's qualities of perseverance, persistence, his love of reading, his beautiful writings, his love of nature and his ever-seeking, questioning spirit. I will also share his weaknesses and failures in the hope that students may begin to have a clear picture of Thomas Jefferson – a man who was fully human and did not always get it right the first time but continued to strive for excellence. He was a lifelong learner who continued to do his best work, navigate the hurdles of life and never gave up.

Learners:

Students are fourth graders divided into three class groups of twenty each. They have been studying the early explorers and are ready to begin the Lewis and Clark Expedition. These lessons will introduce the expedition, Jefferson's interest in the West, the planning and desired outcomes of the exploration.

Teaching setting:

Lessons will take place in the library which has a large teaching area equipped with a computer integrated with a document camera for projection of books or other print materials, and SmartBoard for use as an interactive white board and for whole-class

display and teaching activities such as accessing web-sites and library resources and viewing video or DVDs.

Big Ideas:

- The exploration of the land west of the Mississippi was important to President Jefferson. So important that he never lost sight of his goal and persevered through many obstacles to finally launch the Lewis and Clark Expedition.
- The expedition did not “just happen.” It required much planning and preparation.
- Lewis and Clark meticulously recorded information of the weather, plants, animals, soil, minerals and Native Americans. They collected, preserved and brought home specimens and documents of their findings.

The big ideas stem from the following questions:

- Why was exploration of the West important to Jefferson?
- What is perseverance and why is it an important quality?
- Why is planning important?
- How can we preserve and share our discoveries with others?
- Is the Lewis and Clark Expedition important to us?

Learning strategies for the unit:

- Viewing/listening to the video for information
- Beginning note-taking (underlining topics/main idea)
- Planning and organizing
- Comparing information
- Summarizing information
- Presenting information

By the end of this unit students will be able to:

- Imagine/predict/ visualize possible experiences/events/opportunities/difficulties that may arise during an excursion
- Plan an excursion and predict needs and experiences they may encounter.
- What will be needed to successfully manage these events?
 - How much food and water will you need?
 - How will you prepare for possible illness or injury?
 - How will you clear trees or other obstacles from your path?
 - How will you collect and preserve specimens?
- Thoughtfully observe the natural world
- Provide accurate and detailed recording of data from natural world
- Present findings to the learning community

Lesson One

Introduction to Lewis and Clark Expedition

(And what does Thomas Jefferson have to do with this expedition anyway?)

Resources:

- *Lewis and Clark: A Great Journey West* – National Geographic (video)
- *Thomas Jefferson: A Picture Book Biography* by James Cross Giblin, c 1994
- Excerpts from various Thomas Jefferson letters and biographies that bring out his character and interests
- *New Found Land: Lewis and Clark's Voyage of Discovery a novel* by Allan Wolf. Cambridge, Massachusetts: Candlewick Press, 2004.
- Chart paper, white board or SmartBoard

Main Ideas:

- What part did President Thomas Jefferson play in the Lewis and Clark Expedition?
- Would the Louisiana territory have been explored without President Jefferson's interest and perseverance?

Instructional Strategies:

- Show the five minute introduction to *Lewis and Clark: A Great Journey West* National Geographic (video). Stop at the mention of President Jefferson sending Lewis and Clark on the expedition.
- Class Questions and Discussion (Assessing prior knowledge)
 - Who was Thomas Jefferson?
 - Why was he interested in the NW territory?
 - Why did he send Lewis and Clark to the NW territory?Note: (Remember to allow "wait time" so students can consider question and form a response)
 - Write title, Thomas Jefferson then two headings: (SmartBoard/chart paper)
 - Characteristics
 - Interests
 - Take all answers from student volunteers
 - Write student responses under proper heading
- Read with the class:
 - Project on SmartBoard and read excerpts and paraphrase Jefferson's story from the picture book: *Thomas Jefferson: A Picture Book Biography* by James Cross Giblin. New York: Scholastic Publishing, 1994.
 - Students underline key words that describe characteristics and interests as the excerpts are being read.
- Groups of 4 students (previously selected by teacher to be heterogeneous mix of abilities) discuss and then list what they have learned about Thomas Jefferson and his interest in the NW territory.

- One person from each group presents to the class what they have learned about Jefferson from the readings and group discussions
- Teacher writes main characteristics and interests under each heading (SmartBoard/chart) as they are revealed through the student presentations (Some possible answers appear below)
 - Good student
 - Very curious
 - Visionary
 - Louisiana Purchase
 - Lover of the Western territory
 - 3rd President
 - Scientist - amateur scientist
 - Lover of nature/naturalist
 - Plants
 - Animals
 - (Numerous other possibilities)

Lesson 2:

Preparing for a Journey

(What do I need and why do I think it will be needed?)

Objective:

- To understand the importance of planning
- To gain a beginning understanding of the complexities involved in planning an excursion into the unknown.

Materials:

- Copies for students
 - Handout #2.1: Letter from Jefferson to Lewis (p. 11) in *New Found Land: a novel*, by Allan Wolf
 - Handout #2.2: Expedition Needs Chart
 - Handout #2.3: “Excerpts from Lewis’s List of Requirements” from: Jackson, Donald Dean. Letters of the Lewis and Clark Expedition with related documents, 1783-1854. Letter 53. Downloaded from: www.lewisandclarkexhibit.org
- *Lewis and Clark: A Great Journey West* – National Geographic (video)

Instructional Strategies:

- Read:
 - Letter from Jefferson to Lewis (p. 11) in *New Found Land: a novel*, by Allan Wolf
- Discuss the preparations:
 - How do you prepare for any journey?
 - What do you need to know that will help you prepare?
 - Where can you find more information to help in your preparations?
- View short section of video covering preparations of the Lewis & Clark team
- Plan for the needs of the Lewis & Clark Expedition. Predict possible events that may occur. What will be needed to successfully manage these events?
 - How much food and water will you need?
 - How will you collect and preserve specimens?
 - How will you prepare for possible illness or injury?
 - How will you clear trees or other obstacles from your path?
 - How will they travel?
 - How will they protect themselves from danger? (animals, hostile Indians)
- Small Group Activity:
 - Brainstorm a list of items that Lewis and Clark would need to take on their expedition.

- Record your items under the headings on Handout #2.2, Expedition Needs Chart
 - Survival
 - Measuring and recording information
 - Collecting and preserving specimens
 - Gifts for Indians

- Large Group Activity
 - Project document of Lewis & Clark requirements
 - Compare class lists of needs with those of Lewis and Clark
 - Share pictures of items used in the Lewis and Clark expedition from:
www.lewisandclarkexhibit.org

- Present your plans to the class
 - Students support their choices
 - Student groups may add other items/information gleaned from other groups

Lesson 3:

Living History

(Making discoveries through observation and preserving them by recording)

[There will be additional lessons given by the science teacher to aid students in practicing measuring, identification of plants, animals and insects, and from the art teacher on drawing from observations in nature, as well as collaboration and assistance from the science and art teachers during the two-week observation and recording period of the project. Additionally, the fourth grade teachers will assist students with writing detailed description and help as needed with the journal writing.]

Big Ideas:

- What were some of the benefits of the Lewis and Clark Expedition?
- How do we know what they did or what they discovered?

Objective:

- To practice careful observation and attention to detail
- To practice measuring skills (additional lesson by science teacher)
- To record findings in a journal
 - Written descriptions
 - Charts
 - Drawings
- To form a beginning understanding of the likenesses and differences found in techniques for recording observations and information now and in the past (no digital camera or any camera in the time of Lewis and Clark)

Materials:

- *Lewis and Clark: A Great Journey West* – National Geographic (video)
- Handouts of sample pages from Lewis and Clarks journals
- Sample of what a few pages of a students journal may resemble (teacher made or secure the help of a fourth or fifth grade student)
- Primary documents online at the Lewis and Clark Exhibit Website
 - http://www.lewisandclarkexhibit.org/interactive_index_flash.html?2_1_0
 - These resources are in the “collecting” section
- Handout 3.1 - Project Guidelines
- Handout 3.2 - Assessment Rubric

Instructional Strategies:

- View video excerpts showing Lewis and Clark on the trail and detailing their discoveries, recording in journals, pressing plants, securing writings and specimens from the weather.
- Pause video and discuss the maps, meticulous measurements, drawings and detailed descriptions taken by the explorers
- Share:
 - copies of pages from the expedition journals
 - pictures of the specimens, samples and artifacts
 - primary documents dealing with collecting at the Lewis and Clark Exhibit Website (link given above in the materials list)

- Discuss: How valuable would the exploration of the NW territory be without written and pictorial documentation? How believable are your discovery claims if you have not documented them?

- Explain Project Activity:
 - Pass out student copies of project guidelines for environmental journal
 - Two week project focused on observation and recording of data
 - Read through and explain:
 - the project
 - expectations
 - time frame
 - due date
 - grading rubric
 - Share sample journal and artifacts (pressed flower, leaves etc.)

Lesson 4:

Sharing Discoveries with the World

Objective: To demonstrate how we disseminate or share information

Materials:

- Student observation journals and artifacts from their environmental study
- Projection device to enlarge and project journal for whole class viewing
- Display tables or cases

Share with students:

- Information gained, new plants, animals or lands discovered are meaningful and of personal value to the discoverer.
- This new information will also be of great value to the community.
- This information must be shared, in a timely fashion, to allow the whole community to gain from the experiences of the researcher, observer or discoverer.
- We know that Lewis and Clark did not publish the description of the plants and other discoveries of their expedition in a timely fashion. Thus, depriving the world of valuable information. In fact, the full publication did not take place until 100 years after the expedition.
- We are gathered today so that you may share your journals and artifacts with your small groups, whole class and later this week with the entire school community.

Activities:

- Students share their journals with their small groups, allow each student time to share their journal and artifacts
- Students make constructive comments on each other's journals and artifacts
- Presentation of journals to the full class group will take place later in the week with faculty in attendance
- Journals will be on display for the entire school community (in a prominent area such as the library, hallway display cases etc...)
- Ask faculty members to provide positive feedback to the class by way of written letters stating their enjoyment, interest, new insights etc... gained from the students work and presentation of their work.

Pattie Raymond

August 1, 2008

Handout 2.1 for Lesson #2

Students will have Xerox copy of Thomas Jefferson's letter to Lewis (reproduced below) that appears on page 11 of the book: *New Found Land: a novel* by Allan Wolf

To Captain Meriwether Lewis esq.

Captain of the 1st Regiment of Infantry of the U.S. of A.

The object of your mission is to explore the Missouri River, & such principal stream of it, as, by it's course and communication to discover the most direct & practicable all water route across the continent to the waters of the Pacific ocean (the so called Northwest Passage) for the purposes of commerce.

At all remarkable points on the river you are to take careful observations of latitude & longitude and compass. Along the way you should also endeavor to make yourself acquainted with the names and nature of any Indian nations you encounter. Treat them in the most friendly & conciliatory manner which their own conduct will admit and make them acquainted with the peaceable & commercial dispositions of the U.S.

As it is impossible for us to foresee in what manner you will be received by those people, whether with hospitality or hostility, to your own discretion therefore must be left the degree of danger you may risk, only saying we wish you to err on the side of your safety.

Given under my hand at the city of Washington
This 20th day of June 1803,
Thomas Jefferson
President, U.S. of A.



Excerpts from Lewis's List of Requirements

Mathematical Instruments

- 1 Hadley's Quadrant
- 1 Mariner's Compass and 2 pole chain
- 3 Thermometers
- 1 Cheap portable Microscope
- 1 Pocket Compass
- 1 brass Scale one foot in length
- 6 Magnetic needles in small straight silver or brass cases opening on the side with hinges.
- 6 papers of Ink powder
- 4 Metal Pens brass or silver
- 1 Set of Small Slates and Pencils
- 2 Creyons
- Sealing wax one bundle
- 1 Miller's edition of Lineus in 2 Vol:

Books

Maps

Charts

Arms & Accoutrements

- 15 Rifles
- 15 Powder Horns & pouches complete
- 15 Pairs of bullet molds
- 24 Pipe Tomahawks

Ammunition

- 200 lbs. Best rifle powder

Clothing

- 15 3 pt. blankets
- 15 Woolen Overalls
- 30 Pairs of Socks or half Stockings
- 30 Shirts of Strong linen
- 30 yds. Common flannel.

Camp Equipage

- 6 Copper kettles
- 25 falling Axes
- 4 Drawing Knives, short & strong
- 24 Files
- 10 Nails
- 2 Steel plate hand saws
- 3 Coils of Rope
- 2 Spades

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1 Iron Mill for Grinding Corn
24 Iron Spoons
Provisions and Means of Subsistence
150 lbs. Portable Soup
3 bushels of Allum or Rock Salt
Spicies assorted
Indian Presents
5 lbs. White Wampum
5 lbs. White Glass Beads mostly small
20 lbs. Red Glass Beads Assorted
30 Calico Shirts
12 Red Silk Handkerchiefs
144 Small cheap looking Glasses [mirrors]
100 Burning glasses [magnifying glasses]
288 Steels for striking fire
144 Small cheap scizors
288 Common brass thimbles
10 lbs. Sewing Thread assorted
288 Knives Small such as are generally used for the Indian trade
36 Large Knives
6 Belts of narrow Ribbons colours assorted
3 Groce hooks assorted
18 Cheap brass Combs
24 Blankets
36 Ear Trinkets
4 doz Rings for Fingers
Means of Transportation
1 Keeled Boat light strong at least 60 feet in length her burthen equal to 8
Tons
1 Large Wooden Canoe
2 Chains & Pad-Locks for confining the Boat & Canoes &c.
Medicine
10 lbs. Epsom or Glauber Salts
4 oz. Calomel
12 oz. Opium
8 oz. Borax
8 oz. Powdered Rhubarb
6 Best lancets
3 Clyster pipes

Jackson, Donald Dean. *Letters of the Lewis and Clark Expedition with related documents, 1783-1854*. Letter 53.

Document downloaded from: www.lewisandclarkexhibit.org

Handout: Project guidelines

Environmental Journal

- Students select an environment to observe (their yard, a natural area at school, other natural area such as a pond or swamp.)
- Students will carefully observe a selected environment on a daily basis
- Students record observations in a journal.
 - Include a map of the area being observed
 - Writings in the journal shall include:
 - time of day
 - temperature,
 - rainfall,
 - animals,
 - insects, spiders and other bugs
 - plants and vegetation (living, dead, decomposing) etc.
 - Include drawings of plants, insects, birds or other creatures
 - Include specimens taken from the area. These may include (but are not limited to)
 - Soil samples
 - Rocks or minerals
 - Leaves, pine needles etc
 - Butterflies, spiders, insects
 - Pressed plants or flowers

Rubric for Content and Conventions : Nature Observation Journal

Teacher Name: Mrs. P.A. Raymond

Student Name: _____

CATEGORY	4	3	2	1	NS/0
Content: FOCUS 1	Topic/subject is clear, though it may/may not be explicitly stated.	Topic/subject is generally clear though it may not be explicitly stated.	Topic/subject may be vague.	Topic/subject is unclear or confusing.	This code may be used for work that is entirely illegible or otherwise unscorable: blank responses, etc.
Content: ORGANIZATION 1	Organizational structure establishes relationship between/among ideas/events.	Organizational structure establishes relationships between ideas/events, although minor lapses may be present.	Organizational structure establish some relationship between/among some of the ideas/events. The structure is minimally complete.	Organizational structure does not establish connection between/among ideas/events. The overall structure is incomplete or confusing.	This code may be used for work that is entirely illegible or otherwise unscorable: blank responses, etc.
Content: STYLE - Vocabulary	Exhibits skillful use of vocabulary that is precise and purposeful.	Exhibits reasonable use of vocabulary that is precise and purposeful.	Exhibits minimal use of vocabulary that is precise and purposeful.	Lacks use of vocabulary that is precise and purposeful.	This code may be used for work that is entirely illegible or otherwise unscorable: blank responses, etc.
Content: ELABORATION	Elaboration consists of specific, developed details.	Elaboration consists of some specific details.	Elaboration consists of general and/or undeveloped details, which may be presented in a list-like fashion.	Elaboration is sparse; almost no details.	This code may be used for work that is entirely illegible or otherwise unscorable: blank responses, etc.
Content: STYLE Sentence Fluency	Demonstrates skillful sentence fluency (varies length, good flow rhythm, and varied structure).	Demonstrates reasonable sentence fluency.	Demonstrates minimal sentence fluency.	Sentence fluency is lacking.	This code may be used for work that is entirely illegible or otherwise unscorable: blank responses, etc.
ILLUSTRATIONS	Illustrations are used extensively to clearly identify plants, animals and other parts of the environment	Many illustrations are used and are sufficient to help identify plants and animals.	Illustrations are created for several plants and animals in the environment.	Very little illustration has been attempted	illustrations are absent, not attempted

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Created at <http://rubistar.4teachers.org> and adapted from The North Carolina Writing Standards for Content and Conventions