

Westward Ho!

4th Grade STEAM Lesson

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Big Idea: Westward Expansion

Essential Questions: How did the Louisiana Purchase impact territorial expansion? What challenges did Lewis and Clark face during their exploration of the new territory? How did the Louisiana Purchase come about? How did westward expansion impact Native Americans?

Objectives: Students will use their knowledge of life in the west to create items that would have improved life. Students will apply mathematical skills and problem solving skills to build a scale model of a stagecoach. Students will analyze possible solutions to problems and determine which solution will benefit all parties. Students will understand the importance of the Louisiana Purchase.

Vocabulary:

Oregon Trail, westward expansion, interdependence, Corps of Discovery, Louisiana Purchase, stagecoach, buffalo box

Learning Experience	Standards Addressed	Assessment
<p>Experience 1: Procedures:</p> <ul style="list-style-type: none">• Begin by displaying a picture of a famous sports team/player. Ask the students to discuss their thoughts regarding how a sports organization works. Make a list of their thoughts and ideas. Be sure to guide the instruction to include:<ul style="list-style-type: none">- The important roles within the organization- How money is made by all parties- Who is benefits from the organization as a whole?- How is the organization interconnected and interdependent?• Next, divide students into 4 groups (grouping dependent upon class size). Provide each group with a graphic organizer that depicts the interdependence of a sports organization. Students work together to put the pieces in the blanks to complete the flow chart correctly. Teacher should facilitate the process by asking guided questions to ensure an understanding of the interdependence of an organization. This lesson will build the foundation for the interdependence evident in the Louisiana Purchase. See Resource Packet• Once graphic organizer is complete, introduce challenges to each group and have them discuss how each challenge will impact the whole.	<p>SS4H6 The student will explain westward expansion of America between 1801 and 1861.</p> <ul style="list-style-type: none">a. Describe territorial expansion with emphasis on the Louisiana Purchase, the Lewis and Clark expedition, and the acquisitions of Texas (the Alamo and independence), Oregon (Oregon Trail), and California (Gold Rush and the development of mining towns). <p>SS4E1 The students will use the basic economic concepts of trade, opportunity cost, specialization, voluntary exchange, productivity, and</p>	<ul style="list-style-type: none">• Evaluate flow charts and determine if the students understand the concept of interconnectedness and interdependence.• Observe student conversation regarding questions posed throughout the lesson. Determine if more direct instruction is needed regarding the concept of economics.

- **Challenges:**
- The team owner grows angry with the coach and wants to make changes but the owner of the NFL has not given permission for such changes to be made.
- NFL transfers power to team owners.
- Team owners shut down facilities
- NFL needs money to compete with Soccer programs.
 - As a class, discuss how each challenge faced impacted the organization as a whole.

Experience 2

Procedures:

- Begin by displaying a piece of artwork that depicts the farmers at the Louisiana Port. Explain to students that today, they will be studying a different kind of organization...one that was around early in our country's history.
- Divide students into four groups (grouping will vary depending on class size). Provide each group with an informational text that contains information about the Louisiana Purchase as well as a flow chart similar to the one used in the first learning experience.. Groups will use text features to read the informational text and attempt to complete the flow chart correctly by putting the correct people or groups in the correct spot on the flow chart. Teacher should facilitate the process by asking questions like, "Who would be the team owner in this situation?" or "Who would be Thomas Jefferson in the sports scenario?"

See Resource Packet

- Once graphic organizer is complete, teacher will introduce challenges to each group and students will discuss how the characters involved in the Louisiana Purchase are related to the sports scenario from the previous lesson.
- **Challenges**
- Spain gives France ownership of the port in Louisiana
- Napoleon is going to war
- France closes the port
- Jefferson is facing the threat of war
- As a class, discuss how the Louisiana Purchase benefited our Nation as a whole but also how the transaction benefited France. Were there any possible downsides to the purchase? What new challenges did the Louisiana Purchase bring to the colonists?

price incentives to illustrate historical events.

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- a. Describe territorial expansion with emphasis on the Louisiana Purchase, the Lewis and Clark expedition, and the acquisitions of Texas (the Alamo and independence), Oregon (Oregon Trail), and California (Gold Rush and the development of mining towns).

- Evaluate flow chart and determine if students are able to clearly define the roles involved regarding the Louisiana Purchase.
- Observe student conversations and determine if they are making connections between why conflict occurred at the port in Louisiana.

Experience 3

Procedures:

- Begin by displaying art work depicting Louisiana Purchase. Ask students to analyze the art work and jot down things that they notice. During this process, students can notice anything from the colors used in the painting to the kinds of humans and animals that they see in the painting. Honor all answers in an effort to build their confidence in analyzing art. Teacher, you can guide the students to deeper thinking after surface answers have been honored. Ask about the expressions on the faces of people in the painting or maybe question what the people might be doing.

See Resource Packet

- Jot students' answers and thoughts down on a chart.
- Next, display pictures of different tableaux for students to analyze. Explain to students that a tableau is a technique used in theater to convey an important message or feeling. It is a frozen picture with no dialogue so the facial expressions must communicate the appropriate emotion. Explain to students that a tableau must contain varying levels as well (tall, medium, and low). Divide students into groups. Provide each student group with a common event from the school day. Each group will practice creating a tableau for their event. Allow them three to five minutes to create. Students should share each tableau with the class.

See Resource Packet

- Next, each group will create a tableau that represents one perspective (French, Farmers, Spain, Jefferson, etc.) involved in the Louisiana Purchase. Allow students to choose their perspective but tell the group to keep it a secret from other groups.
- Allow students five minutes to create their tableau.
- Pause and have each group analyze the other tableaux and determine which perspective is being represented.
- If time allows, students can regroup and choose another perspective to represent.
- Create a chart that includes each participant involved with the Louisiana Purchase. Ask students to share what words they think would best describe the perspective of each participant represented:

- French
- Farmers
- Napoleon

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- Evaluate student's responses to the art displayed in class.
- Evaluate tableaux and determine if important aspects of each point of view are represented.
- Tableaus can be a good tool to determine if more direct instruction is needed regarding this standard.

- Spain
- Jefferson

Experience 4:

Procedures:

- Begin by explaining to students that since the US purchased the new territory, someone needed to explore it, President Jefferson created a team called the Corps of Discovery. They were given a very specific list of tasks to complete as they explored the new territory.
- Display different photographs/art pieces around the classroom in a gallery style. Divide students into groups and have them walk around the classroom and study each piece of art. Students will work with their groups or partners to think about what challenges the Corps of Discovery might face on their journey. What are possible solutions for each challenge? **See Resource Packet**
- Create a list of challenges that the students believe that the Corps of Discovery will face on their journey. Also include possible solutions for each challenge listed.

Experience 5:

Procedures:

- Begin by displaying the Instagram Icon. Have students discuss what this icon means and how this social media tool is used in our culture. Display a few examples of Instagram pictures for students to analyze. Guide students to think about how an Instagram post summarizes what is going on in that moment. Make sure that students evaluate the captions and hashtags as well.
- Explain to students they will each be documenting a character's journey in the discovery of the new territory as if each character had an Instagram account. Within each group, students will choose a character to represent (Lewis, Clark, Sacajawea, and Jefferson).
- Divide the room into stations that target one task the Corps of Discovery was supposed to complete. After

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- Evaluate students responses to the question, "What challenges did the Corps of Discovery face?" and determine if answers are reasonable.
- Evaluate possible solutions students develop throughout the lesson and determine if they are reasonable.
- Evaluate students Instagram photos and determine if they summarize or capture a main idea from the social studies text.
- Evaluate the hash tags and captions to ensure that they are valid and match the Instagram photo created.
- Observe student conversation and thought process to determine if students are understanding content. Determine if more direct

students read and study information located in each station, they will create a photograph that will be posted on the class Instagram account. Pictures can be created in any fashion (photographs, pencil, crayons, etc.). Each picture must contain a caption and a hashtag to summarize the photograph. **See Resource Packet**

Experience 6:

Procedures:

- Begin by displaying a picture of the Stagecoach (or remind students of the stagecoach they viewed at the Booth) Discuss all the disadvantages to the stagecoach. Discuss how and why the stagecoach was used.
- Students will act as entrepreneurs and develop a plan for a new and improved stagecoach. As they draw the design (blueprint) of their new stagecoach, they will need to think about all the ways they will improve it for their clients. Students will need to make a list of materials they think they will need to create their vision. They will present their plan and list of materials to the investor (the teacher) for approval. They should create a design that includes possible solutions to challenges of the original design. Their design should include how the changes will benefit the people using the stagecoach.
- Each group will build a replica of the stagecoach. The teacher will be responsible for obtaining materials requested by groups in order to build the product. Please keep in mind that you can simply use straws and strings or stop the lesson at the design stage. A 3-D replica is not necessary for the final product but is encouraged.
- Students will present their designs to the class. Classmates can provide feedback to the design using their knowledge of the needs of the Oregon Trail.

(the Alamo and independence), Oregon (Oregon Trail), and California (Gold Rush and the development of mining towns).

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- C. Describe the impact of westward expansion on Native Americans.

instruction on content is necessary.

- Evaluate student work to determine if pictures are representative of the point of view the student is portraying.
- Evaluate stagecoach designs. Determine if students made reasonable adjustments to the original design. Are their arguments for changes to the design valid?
- Use rubric provided to assess final product.
- Observe student interaction in groups and determine effectiveness of group work skills
- Evaluate students' use of math concepts and problem solving and provide direct instruction in areas as needed.

Experience 7:

Procedures:

- Begin by viewing short clips of commercials. Discuss what commercials are for and why we have them.
- Students will create a commercial for their stagecoach using relevant school technology. They must film their commercial and present it to the class. If technology is not available, then students can act out their commercials to a group.
- Students will share their commercials with another class. Students in the viewing class will judge the commercials and choose the best stagecoach to buy.

Experience 8

Procedures:

- Begin by analyzing the art work The Oregon Trail. In this work, life on the trail appears to be happy. Remind students of our discussion of commercials and ads (recall lesson from the Booth if applicable). Ask students to decide if the painting is a true reflection of life on the trail.
- Explain to students that artists and writers create a certain mood in their artwork or writing. Display some examples of artwork that reflect different moods and ask students to determine what the artist did to make us feel a certain way (What kinds of colors? What kinds of lines?). Explain to students that a monochromatic piece of art is one that is done in varying shades of one color (show examples for consideration).
- Each student will create a monochromatic piece of art that reflects the authentic mood of life on the Oregon Trail.
- Students share their artwork and defend their choices.

Experience 9

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- Evaluate student commercials and determine if reasonable arguments were made for the purchase of their stagecoach

- Evaluate the student artwork and determine if they have reflected the proper mood of life on the Oregon Trail.

- Use rubric provided to score Buffalo Box activity

- Remind students that the American Indians were very resourceful. They used every part of the animals they killed. (Remind them about the Buffalo Box at Booth Museum).
- Divide students into four groups. Each group represents one of the following:
 - Farmer in Louisiana
 - Mountain Man
 - A member of the Corps of Discovery
 - Family on the Oregon Trail
- Provide students with a shoe box full of miscellaneous items
- Groups will use all items in the box and determine how their group would use them in daily life. Students must list all items and describe the use and purpose of the item as well as why the item meets a particular need for their group.
- Share their Buffalo Boxes with the class.

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- c. Describe the impact of westward expansion on Native Americans.