



Rocky Mountain Mapping Center

Isn't That Spatial? # 3: Teaching About Lewis and Clark

Note: This column originally appeared in the November-December 2003 issue of *Perspective* from the [National Council for Geographic Education](#).

Author:

Dr. Joseph J. Kerski

USGS

Geographer

Box 25046 - MS 507

Denver CO 80225-0046 USA

jjkerski@usgs.gov

Tel 303 202 4315

Introduction

My last column explained how to access and use data from the National Atlas ([nationalatlas.gov](#)) in the geography curriculum. This column will focus on a series of sites to help geography educators teach about Lewis and Clark.

Why Teach about Lewis and Clark?

Geography is Adventure. Most of us were drawn to geography in part because of its tenacious quest to discover and explore the unknown. The Lewis and Clark expedition of 1803-1806 from Virginia to the Oregon Pacific Coast is high adventure. Students can tap into a rich set of resources unfolding on the Internet, paper maps, as well as hands-on field trips sponsored by a variety of nonprofit, private businesses, tribal, state, and federal organizations to mark the 200th anniversary of the trek.

Teaching about Lewis and Clark allows students to be engaged in exciting projects and investigations that are connected to national and state educational content standards. Students can explore physical geography, investigating how landforms, climate, vegetation, river systems, and other processes and locations influenced the journey. Through cultural geography, students can examine the interaction between Native Americans and European-Americans, the past and present-day settlement patterns of each, as well as population

change on the Great Plains, Rocky Mountains, and Pacific Coast. Bridges with other disciplines can be built. For example, a geographic perspective in environmental studies can enable students to examine flora and fauna of the regions and consider current environmental concerns in the regions. Through history, students can research the reasons for the expedition, why and how events unfolded as they did, and how the expedition affected the cultural and political geography of the region for decades to come. Mathematics plays a role in investigating the route and distances of the expedition, particularly in terms of latitude-longitude, measurements, cartographic methods. Studying Lewis and Clark through civics can help understand the political climate of the newly formed United States, while activities using economics can include an analysis of the commodities exchanged and cataloged on the expedition, and a comparison of historical to current economic activities in the region.

Resources for Teaching about Lewis and Clark

The USGS Rockyweb site for teaching about Lewis and Clark:

http://rockyweb.cr.usgs.gov/public/outreach/lewisclark/lc_usgseducation.html

begins with several USGS maps. First, four excellent maps showing Indian tribes, culture areas, and linguistic stocks are listed on:

<http://rockyweb.cr.usgs.gov/public/outreach/lewisclark/indianlandsmaps.html>

Second, the "Lewis and Clark: A Legacy of Science" map features two maps in parallel view: Above is a beautiful reproduction of "Lewis and Clark's Track Across the Western Portion of North America from the Mississippi River to the Pacific Ocean," published by Samuel Lewis in 1814. Below is the same geographic area depicted with current remote sensing technology in a colorful image of the American landscape. Map measures 54"x42". The map is number 113605 and can be ordered via an authorized USGS Business Partner, a listing of which is available on:

<http://rockyweb.cr.usgs.gov/acis-bin/querypartner.cgi>,

or from the USGS at ask@usgs.gov, or 1-888-ASK-USGS.

The map can be used to examine how cartography has changed in the past 200 years and how much the Lewis and Clark survey contributed to our understanding of Western North America.

The "Map of An Emerging Nation" includes the first map from an American, published in 1784 by a Connecticut goldsmith, silversmith, engraver, and jeweler (and convicted counterfeiter) named Abel Buell, "A New and correct Map of the United States of North America Layd down from the latest Observations and best Authorities agreeable to the Peace of 1783." The reverse shows growth of the United States from 1775 to 1987. Other maps listed include a presidential elections map, an ecoregions map of North and South Dakota, and a digital

landforms map of the USA.

Other USGS sites for teaching about Lewis and Clark include the main portal: <http://www.cerc.usgs.gov/lewisandclark/>

and the Missouri River Infolink:
<http://infolink.cr.usgs.gov>

You and your students can analyze real-time streamflow information for different points along the Missouri and Columbia Rivers on:
<http://waterdata.usgs.gov/nwis/rt>

Students can investigate relationships, routes, and patterns using geographic information systems (GIS) through ESRI's site:
<http://www.esri.com/lewisandclark/>

The National Geographic Society:
<http://www.nationalgeographic.com/xpeditions/activities/01/lewis.html>

has also created excellent resources for hands-on geographic investigations.

I also encourage you and your students to view the new IMAX Lewis and Clark movie that is currently showing around the country. My favorite book about Lewis and Clark is Stephen Ambrose's book "Undaunted Courage." Last year, I read "River Horse" by William Least Heat Moon, who crossed the USA by boat during the 1990s, retracing much of Lewis and Clark's route. Many other excellent books are available. Network with other geography educators and share your ideas!

[U.S. Department of the Interior](#)

[U.S. Geological Survey](#)

[Rocky Mountain Mapping Center](#)

Maintainer: webmaster@rockyweb.cr.usgs.gov

URL: http://rockyweb.cr.usgs.gov/public/outreach/isntthatspatial_lewisandclark.html

Last modified: 5 December 2003