

Teacher's Guide

A project of the Steel Valley Trail Council and the Youth Earn & Learn Program

HISTORY OF THE PROJECT

In early 2007, the Community Trail Art



Initiative (CTAI) was launched by artist Ann Rosenthal through the Steel Valley Trail Council.

The CTAI is an outgrowth of the 2006 Summer Youth Earn & Learn Program during which students of the McKeesport Area Technology Center learned about the social and natural history of their riverfront and trail. The high school students produced

16 trail art banners that connected McKeesport's City Hall to the riverfront and trail.



To date, the 2007 Initiative has produced

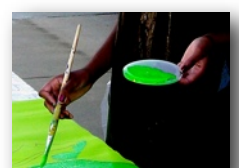
over 30 banners designed by art and



design students and painted by community members through several area workshops led by local artists.

Workshops have been offered in McKeesport, Pittsburgh, and during the opening weekend of the Three Rivers Arts Festival. Literally hundreds of children, youth, and adults have been directly involved in painting the banners, which can be seen along the trail in

McKeesport and Southside Works.



The project truly represents a community effort with youth taking the lead!

What is the Community Trail Art Initiative?

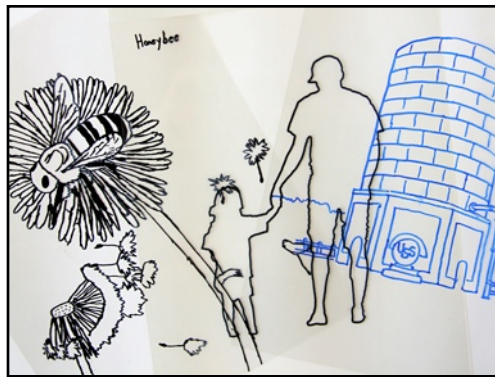
The Community Trail Art Initiative (CTAI) combines place-based eco-literacy and art to engage trailside communities along the 150-mile Great Allegheny Passage (GAP). Its aim is to increase grass-



Research: local history and ecology

roots participation and stewardship of the trail along the 19-mile Steel Valley Trail section of the GAP, between Clairton and Pittsburgh. We are particularly interested in encouraging young people to develop a personal involvement in their trail.

This will help them see the ecological, social, and economic benefits of the trail to their community. Thus, we aim to foster their leadership, and cultivate their "ownership" of the Steel Valley section of



Design: drawings and compositions

the GAP. As teachers and youth leaders, you can help make this happen. With your guidance, students in social studies, science, and math classes will research the local history, geography, and ecology of Western Pennsylvania. Based on their research, art and design students will create images for trail banners. Then, during a series of workshops, community members of all ages will paint the

banners for display along the trail. Student research will also translate into interpretive signage and other amenities for the Steel Valley Trail. Students will quickly see the positive, concrete impact their work can have on their community—an experience that may lead to life-long community involvement.



Painting: community workshops

The trail is slated to be completed in 2008. It will be a signature project of Pittsburgh's 250th anniversary celebration. Many of the Initiative's outcomes are intended to dovetail with the anniversary and with completion of gaps in the GAP.

HOW TO USE THIS GUIDE

Activities in this guide are arranged as they relate to one of five banner categories, identified by their background colors:

- Blue: River views, including geography and ecology;
- Orange: Historical events and landmarks along the trail;
- Green: Flora along the trail;
- Gold: Fauna along the trail;
- Purple: Trail users, including cyclists, walkers, and birders.

Each category offers many opportunities for individual, partner, and group work for grades 6-12.

You may wish to assign activities as they relate to current classroom or group topics, or allow students to self-select activities that draw their interest. Numbers after the activities designate the Pennsylvania academic standards to which the activity relates.

Each activity culminates in creation of a concrete entity, such as a chart, diagram, oral report or brochure. Students may use the suggested method of reporting or choose their own end product. Each end product can then, with the help of a CTAI artist, translate into way-finding banners or interpretive trail signage to be displayed along the Steel Valley Trail near your community.



River Views Activities

What is a watershed? Research the **Monongahela River Watershed** or the **Nine Mile Run Watershed**. What are its boundaries? How does water enter the watershed? What happens as water flows through the watershed? What factors affect the amount and quality of the water? Many streams have been culverted (buried or diverted into pipes). Find out if there are any culverted streams in your community. Report your findings in a book, chart, or web page. Include a map showing landforms and waterways within the watershed. [Ecology: 4.1.7, 4.1.10]

Research the processes involved in the formation of the **Monongahela Valley** beginning with the last ice age. Represent the changes over geological time in a series of maps, using salt, papier-mâché, or a computer-drawing program. Design interpretive signage based on your series of maps. [Science: 3.5.7, 3.5.10]

How has the environmental quality of the **Monongahela River** changed in the past century? How have the uses of the river changed? What was the river like during most of the 1900s? prior to that? Now? What species lived in and around the river before and after the Industrial Revolution? Which ones live near the river and trail today? What led to changes? Make a judgment. What do you think about how the river has been used throughout history? Gather historic photos of the river, barges, people working along the river, etc. Work in a group and decide together how to publish or present your findings. Include images of the river and trail. [Ecology: 4.3.7, 4.3.10; 4.7.7, 4.7.10, Geography 7.4.9, 7.4.12]



History Activities

Long ago, the **Haudenosaunee** lived in the Mon Valley. What was their government like and how did it influence the governing documents of the U.S? Compare and contrast the Great Law of Peace and speeches by leaders of the Iroquois League with key documents such as the Declaration of Independence and the Constitution. Develop images that can be used on banners or interpretive signage to celebrate the Mon Valley's early inhabitants. [History 8.2.6, 8.1.12; Government 5.1.9]

Research a **historic Mon Valley building or bridge**, such as the Hot Metal Bridge, South Side Market House, Chatham Village, The Frick Art and Historical Center, or Neville House. Who built it? What is its history? Did other buildings or bridges precede it? If so, what were they like? Gather images. Document your research as a photo essay, magazine article, or website. Use your images to inspire a banner design for the Steel Valley Trail. [History: 8.2.9, 8.2.12]

Research the **Carrie Furnaces**. Create an annotated time line or photo essay about a blast furnace. Then use one or more of your images to create a banner or trail marker. [History 8.1.9, 8.1.12, 8.2.9, 8.2.12]

What is **your community** proud of: an art festival? a regatta? a famous person? What would you like to promote to visitors? What is unique about where you live? Take a field trip to a natural or historical site and take photos. Or research your topic on the Internet and in books. Gather historical images. Share multiple points of view and distinguish between facts and opinions in presenting your findings. [History 8.1.6, 8.1.9, 8.1.12]



Flora Activities

Investigate a plant native to a habitat close to the Steel Valley Trail. Use magazines, books, or the Internet to collect and label drawings or photos that can be used for trail art designs. Compose a paragraph explaining **how to use style and colors** to communicate the value of preserving natural flora along the Steel Valley Trail. [Art: 9.1.8, 9.1.12, 9.3.8, 9.3.12]

Select a portion of the Steel Valley Trail close to your school. Be sure it includes flora. Choose a single vantage point from which to view it. Then, illustrate the same portion of the trail four times, once for **each season of the year**. Use oil pastels, watercolors, crayons, charcoal, pencils, or another medium. [Geography: 7.2.9, 7.2.12]

What are **invasive plants**, and where did they come from? What effect do they have on an ecosystem? Which organizations in your community are removing invasive species, and what are they doing to restore native habitats? Research which species are of most concern, and what has been done in your community or at Frick, Schenley, or Riverview Park to restore native flora. Design banner images that highlight native species, including wildflowers, grasses, and trees which you might find along the trail. [Ecology 4.6.12, 4.7.10, 4.7.12, 4.8.7, 4.8.10, 4.8.12]

How were steelworkers involved in the **restoration** of Dead Man's Hollow? What had to be done to create a wild space for plants, animals, and people? Create a banner image that celebrates this historic site and how the steelworkers and community restored it. [Ecology: 4.8.10, 4.8.12]



Fauna Activities

Research an ecosystem, such as Deadman's Hollow Wildlife Preserve or Hayes Woods. Describe the ecosystem. Does the park have more than one? Gather and label images of flora and fauna. Write captions. In what ways do plants and animals depend upon their physical environment? What is the relationship of predator to prey? Diagram the **food web** of key animals in the ecosystem. How might humans impact the environment? How might increased human activities affect the animals living there? Report findings in a book, bulletin board, or web page. [Ecology: 4.6.7, 4.6.10, 4.7.7, 4.7.10]

What is a **riparian area**? What riparian areas are nearest to your community? What species make their homes there? What is the importance of a riparian buffer zone? How have human activities affected the area? What have people done to ameliorate or reverse ill effects? Present your findings in a written or oral report. Include visuals, such as a diagram illustrating how an ecosystem changes from river to riparian area to town. [Ecology 4.1.7, 4.1.10, 4.1.12]

Research a **threatened or endangered species** in Western Pennsylvania today. Collect and label images. How many individuals lived in Western Pennsylvania before Europeans settled in the area? Then, choose a date during the 1900s, such as 1909 or 1950. How many individuals were estimated to have lived there then? How many live in the state today? Has the species declined or grown? How has decline or growth of the species affected the ecosystem? Present your data in a graph and share your findings in an oral report. [Math: 2.4.8, 2.4.11; Ecology: 4.7.7, 4.7.11]



Trail Users Activities

When it is complete, the Steel Valley Trail will be 19 miles long. Do some **calculations**. If you bicycled 9 miles per hour, how long would it take you to get from Pittsburgh to McKeesport? Now imagine that you want to cycle all the way to the nation's capitol at the same rate of speed. (Hint: You'll need to cycle the entire GAP, then continue on the C&O Canal National Historic Park Towpath.) How many hours will that take? How many hours will you cycle each day? Include time for snacks, meals, and camping for the night. How many days will it take you to complete the whole bike ride? Create your itinerary. Then decide how your project can translate into a banner or interpretive signage. [Math: 2.2.11; 2.3.8]

What **other trails** can you access from the Steel Valley Trail—the Montour or the Three Rivers Heritage Trail? How about a water trail used by the boating public? Choose a trail and draw a map connecting it to the Steel Valley Trail. Find out what people will see along that trail. Identify points of interest on the map. Include a scale and legend (a map key). Then use a feature of the trail as the main image of a banner to point the way to that connecting trail. [Geography: 7.1.9]

What is the **Steel Valley Trail Council**? How did it get started? What are its accomplishments so far? What benefits does it provide to people and the environment? What is involved in designing and building a trail: Who decides where the trail will go, who designs and builds the trail, and what if the land is privately owned? Who maintains the trail once it is built? How can young people help the organization achieve its future goals? Present your findings in an oral report or persuasive speech. [Geography: 7.4.6, 7.4.9, 7.4.12; Health: 10.4.6, 10.4.9, 10.4.12]

“The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and aesthetic values of the environment. Pennsylvania’s public natural resources are the common property of all people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.”

Section 27 of Article I of the Pennsylvania Constitution

Art for the Trail—Become Involved!



The Community Trail Art Initiative provides opportunities for youth and community members to create place-based, eco-literate public art. Trail art banners link communities to trailheads, and direct users along the trail. Signage and other public art features enhance the trail experience, providing historical and ecological interpretation and visual delight. Student-created banners are on display along sections of the Steel Valley and Youghiogheny River Trails, and more are in production. Interpretive trail markers are needed for historical landmarks, such as the Carrie Furnaces, and natural processes, such as the water cycle.

You can schedule a local artist to come to your classroom to serve as an advisor and guide to help your students translate these Teacher’s Guide activities into banners or interpretive signage that will not only enhance the trail experience for walkers, joggers, cyclists, and other visitors, but will also increase students’ self-esteem as their art becomes a part of their cityscape. To arrange for a CTAI artist, contact Ann Rosenthal at 412-688-0417 or art4trails@earthlink.net.

Resources



- Watershed Atlas**
<http://www.watershedatlas.org>
- Nine Mile Run**
<http://www.ninemilerun.org>
- Three Rivers Second Nature**
<http://3r2n.cfa.cmu.edu>
- Earthguide**
<http://earthguide.ucsd.edu>
- Bridging the Urban Landscape**
<http://www.clpgh.org/exhibit>
- Pittsburgh History Center**
<http://www.pghhistory.org>
- Rivers of Steel**
<http://www.riversofsteel.com>
- Steel Valley Trail Council**
<http://www.steelvalleytrail.org>
- Friends of the Riverfront**
<http://www.friendsoftheriverfront.org>
- The Youghiogheny River Trail**
<http://www.youghrivertrail.org>
- The Great Allegheny Passage**
<http://www.atatrail.org>
- Rails-to-Trails Conservancy**
<http://www.railstotrails.org>

Project Credits



The CTAI is a project of the Steel Valley Trail Council (SVTC). The initiative is directed by Ann Rosenthal, Pittsburgh community artist and Director of the Youth Earn & Learn Program. She is also an SVTC board member in charge of directing Initiative programs.

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Teacher’s Guide Credits

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