

# SHIPWRECK

# Using Literature and Student Imagination to Teach Geography

#### **Donna Kay Mau**

are a former mariner who took to sea again in hopes of increasing your fortune. Now a powerful storm has left you the sole survivor of the voyage and cast you up on a deserted island. You are no longer the eager but inexperienced youth who first ran away from home in search of adventure. Your new situation calls on all your knowledge and powers of invention to help you survive in an unknown environment.

Sound like the makings of a good yarn? In fact, Daniel Defoe's tale of *The Life and Strange Surprising Adventures of Robinson Crusoe of York Mariner as Related by Himself* entranced generations of readers. This included the young who—then lacking anything known as a "children's book"—took it up along with *Gulliver's Travels* and *A Pilgrim's Progress* as a story meant for them.

First published in 1719, *Robinson Crusoe* is an account of the real shipwreck

of one Alexander Selkirk, embellished by the author's imagination and provision of many more details. It is historical fiction or—some might argue—science fiction. It joined the ranks of many earlier tales of shipwreck and provided the model for countless more to follow.

The adventures of Robinson Crusoe can provide a lesson in geography that integrates literature and prompts creativity by asking students to use their own imaginations to respond to the harrowing situation of one shipwrecked sailor. I use it to reinforce a unit on the five themes of geography, with particular attention to the themes of location, place, and human-environmental interaction.<sup>1</sup>

The lesson is a three-part activity that students perform in groups and individually. In part one, students use cues of absolute and relative location to fill in the names of real places on three of Crusoe's voyages in an imaginary ship log. In part two, students read excerpts from Crusoe's journal and use them to create a map of the island and to evaluate the resources and technology available to him. In part three, students write papers based on their knowledge of Crusoe's situation.



#### The Lesson

Purpose

Students will use map skills, knowledge of the resources available, and their own powers of invention to follow the adventures of Robinson Crusoe on three ocean voyages and during his encounter with an unknown island.

#### Objectives

- ► to use map skills to discover places on Crusoe's voyages based on absolute and relative location
- ► to use mapmaking skills to chart Crusoe's island
- to identify characteristics of place on Crusoe's island
- ► to analyze what Crusoe needed to survive on the island given the resources provided by the environment
- ► to evaluate how Crusoe's survival was affected by his attitude, experience, and the tools available to him
- ► to invent other possible responses to Crusoe's situation

#### Set-up

Students will work in cooperative groups of three members each. Each group will have a captain, steward, and cartographer (these roles should be alternated for each day of the simulation). The captain gives directions and is in overall charge of the group's effort. The cartographer supervises the use of maps and the effort to locate places and chart the island. The steward records places on the ship's log and notes useful information about the island.

In part one, the task of each group is to use the ship's log to plot their voyage and to

discover the places indicated by the absolute or relative locations given. (Alternatively, the teacher could prepare the log so that students begin with places and discover their absolute locations.) Each group will present its findings to the class for comparison.

In part two, the task of each group is to use the journal excerpts to:

- prepare a map of the island using the information given. The map must include the cardinal directions and a map scale, but the choice of visual presentation is up to the group
- ▶ fill out the Survival List on Crusoe's needs and the tools and resources that were available to him. Students could rank the resources and technology in terms of importance. Each group will again share its findings with the whole class.

In part three, students will write individual papers about survival on the island. These papers could take the form of: (1) a newspaper report on how Crusoe survived based on the information in his journal, (2) a new entry in the journal that sums up what Crusoe thinks was most important to his survival, or (3) an original response to the situation in which the student invents his or her own plan for survival on the island. These papers should provide the basis for a final class discussion.

#### Materials

- atlas
- outline map of the Western Hemisphere

- with lines of latitude and longitude
- ➤ worksheet: Ship Log created from Robinson Crusoe
- worksheet: Excerpts from the Journal of Robinson Crusoe
- worksheet: Survival List
- materials for preparing a map of the island

#### Evaluation

This project can be evaluated at each step by the teacher and students. Students can compare and contrast their Ship Logs, maps of the island, and worksheets on island survival. The teacher should evaluate these group efforts as well as the final papers written by students.

#### Acknowledgment

The illustrations in this article are from an edition of *Robinson Crusoe* published in Boston by DeWolfe & Fiske Company (no date).

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Answer Key for Shipwrecked Quiz (back cover)

- The Odyssey; Homer; first storm caused by Zeus' thunderbolt after Odysseus' men ate sacred cattle, second storm caused by Poseidon who sent a wall of rain to scuttle the raft
- Sinbad the Sailor; The Arabian Nights
   Entertainment or The Thousand and One Nights; a roc
- 3. The Tempest, William Shakespeare; Caliban
- Swiss Family Robinson; Johann David Wyss; "Falconhurst" because it was a treehouse
- The Mysterious Island; Jules Verne; Captain Nemo from Twenty Thousand Leagues Under the Sea

#### SURVIVAL LIST

Your job is to use the excerpts from Robinson Crusoe's journal to:

- ▶ list what human needs had to be fulfilled for Crusoe to survive on the island.
- ▶ list the resources provided by the island's environment that helped Crusoe to survive. These may be ranked in order of importance.
- ▶ list the tools from the ship or handmade that helped Crusoe to survive. These may be ranked in order of importance. (Note: the retrieval of pen, ink, and paper from the ship can be assumed from the existence of this narrative.)

NEEDS	RESOURCES	TOOLS

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## Ship Log

Your job is to plot the following three voyages of Robinson Crusoe by making use of absolute and relative location. Absolute location refers to where a place is located on the grid created by lines of latitude and longitude. Relative location refers to the location of a place in relation to other places. As you plot the voyages, use an atlas to discover the place names left blank but referred to in Robinson Crusoe. Note: the latitude and longitude given are in terms of whole degrees and not exact. Also, some of the places referred to as "countries" did not exist as such in Crusoe's time.

VOYAGE I (CA 1652)		
Robinson Crusoe, messmate		
The ship left the port of	(51 $^{\circ}\mathrm{N}$ , 0 $^{\circ}$ ) on the	River in the country of
It sailed SE to the country of	(10°N, 14°W)	located on the continent of
Loaded with trading goods, the ship r	nade the return voyage to its poin	nt of departure, where the goods were sold for
a great profit.	• • •	-
Voyage 2 (ca 1653-1655)		A STATE OF THE STA
Robinson Crusoe, trader		
Sailing again toward the continent for	merly visited, the ship was seize	d Andrew Market
by pirates and Robinson Crusoe carrie	_	- Tills
(34°N, 8°W) in the		The state of the s
Crusoe and a companion made their e	•	
headed SE along the continent's shore		food
and fresh water despite fear of hostile		Committee of the commit
mouth of the River	•	
, where he thought to find Europe		
		h America. Sailing SW on a voyage of 22 or
		39°W) in the country of
Crusoe stayed there and began life as		
	- F	
Voyage 3 (Embarked September 1	, 1659)	
Robinson Crusoe, planter and trader		
		of settlement, Crusoe was aboard a ship bound
		cean for the west coast of Africa. But a hur-
	•	n. The captain calculated their new position
		River (0°, 50°W) and the
,	•	The ship, now leaky and in bad need of
-	ē -	land of(13°N, 59°W) in
the Sea. But anot	ner storm caused it to strike a ree	ef and go down. Robinson Crusoe was the only
survivor of the shipwreck, and spent a	dmost thirty years on a tiny unm	arked island.

Log Answer Sheet: Voyage 1: London, Thames, England, Guinea, Africa. Voyage 2: Salé, Morocco, Gambia, Senegal, Cape Verde, Salvador, Brazil. Voyage 3: Atlantic, Amazon, Orinoco, Guyana, Barbados, Caribbean

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#### EXCERPTS FROM THE JOURNAL OF ROBINSON CRUSOE

(From Robinson Crusoe by Daniel Defoe. Students can locate these passages in any unabridged version of the novel.)

September 30, 1659.—I, poor miserable Robinson Crusoe, being shipwrecked, during a dreadful storm, in the offing, came on shore on this dismal, unfortunate island, which I called "The Island of Despair"; all the rest of the ship's company being drowned, and myself almost dead.

All the rest of the day I spent in afflicting myself at the dismal circumstances I was brought to: viz, I had neither food, house, clothes, weapon, nor place to fly to; and, in despair of any relief, saw nothing but death before me...

October 1.—In the morning I saw, to my great surprise, the ship had floated with the high tide, and was driven on shore again, much nearer the island...

From the 1st of October to the 24th.—All these days entirely spent in several voyages to get all I could out of the ship, which I brought on shore, every tide of flood, upon rafts.

Nov. 1.—I set up my tent under a rock, and lay there for the first night; making it as large as I could, with stakes driven into swing my hammock upon..

Nov. 5.—This day I went abroad with my gun and my dog, and killed a wild cat...Every creature I killed, I took off the skins and preserved them.

Nov. 17.—This day I began to dig behind my tent into the rock, to make room for my further conveniency. Note.—Three things I wanted exceedingly for this work: viz, a pick-axe, a shovel, and a wheel-barrow, or basket. As for the pick-axe, I made use of the iron crows, which were proper enough, though heavy...

Nov. 18.—The next day, in searching the woods, I found a tree of that wood, or like it, which in the Brazils they call the iron-tree, for its exceeding hardness...I worked it effectually by little and little into the form of a shovel or spade...

Jan. 13.—In the next place, I was at a great loss for candles...the only remedy I had was, that when I had

killed a goat I saved the tallow, and with a little dish made of clay, which I baked in the sun, to which I added a wick of some oakum, I made me a lamp...

In the middle of all my labours it happened that...I found a little bag...which had been filled with corn for the feeding of poultry...I saw nothing in the bag but husks and dust; and being willing to have the bag for some other use...I shook the husks of corn out of it on one side of my fortification...about a month later, or thereabouts, I saw some few stalks of something green shooting upon the ground...after a longer time, I saw about ten or twelve ears come out...I carefully saved the ears of this corn, you may be sure...

April 22.—I had three large axes, and abundance of hatchets (for we carried the hatchets for traffic with the Indians); but with much chopping and cutting knotty hard wood, they were all full of notches, and dull; and though I had a grindstone, I could not turn it and grind my tools too. This cost me as much thought as a statesman would have bestowed upon a grand point of politics, or a judge upon the life and death of a man. At length, I contrived a wheel with a string, to turn it with my foot, that I might have both my hands at liberty... This machine cost me a full week's work to bring it to perfection.



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July 4.—It was the 15th of July that I began to take a more particular survey of the island itself. I went up the creek first, where, as I hinted, I brought my rafts onshore. I found, after I came about two miles up, that the tide did not flow any higher; and that it was no more than a little brook of running water, and very fresh and good...On the banks of this brook, I found many pleasant savannahs or meadows, plain, smooth, and covered with grass; and on the rising parts of them, next to the higher grounds, where the water, as it might be supposed, never overflowed, I found a great deal of tobacco, green, and growing to a great and very strong stalk; there were divers other plants, which I had no notion of or understanding about, and might, perhaps, have virtues of their own, which I could not find out. I searched for the cassava root, which the Indians, in all that climate, make their bread of, but I could find none. I saw large plants of aloes, but did not understand them. I saw several sugar canes, but wild, and for want of cultivation, imperfect.



The next day, the 16th, I went up the same way again; and after going something further than I had gone the day before, I found the brook and the savannas began to cease, and the country become more woody than before. In this part I found different fruits, and particularly I found melons upon the ground, in great abundance, and grapes upon the trees: the vines had spread indeed over the trees, and the clusters of grapes were just now in their prime, very ripe and rich. This was a surprising discovery, and I was exceedingly glad of

them; but I was warned by experience to eat sparingly of them, remembering that, when I was ashore in Barbary, the eating of grapes killed several of our Englishmen, who were slaves there, by throwing them into fluxes and fevers. But I found an excellent use for these grapes; and that was, to cure or dry them in the sun, and keep them as dried grapes or raisins are kept...

...the next morning proceeded upon my discovery, travelling nearly four miles, as I might judge by the length of the valley, keeping still due north, with a ridge of hills on the south and north side of me. At the end of this march, I came to an opening, where the country seemed to descend to the west; and a little spring of fresh water, which issued out of the side of the hill by me, ran the other way, that is, due east; and the country appeared so fresh, so green, so flourishing, everything being in constant verdure or flourish of spring, that it looked like a planted garden.

I descended a little on the side of that delicious vale, surveying it with a secret kind of pleasure, though mixed with my own other afflicting thoughts, to think this was all my own; that I was king and lord of all this country indefeasibly, and had the right of possession; and, if I could convey it, I might have it in inheritance as completely as any lord of a manor in England.

I saw here abundance of cocoa trees, orange and lemon, and citron-trees; but all wild, and few bearing any fruit, at least not then. However, the green limes that I gathered were not only pleasant to eat, but very wholesome; and I mixed their juice afterwards with water, which made it very wholesome, and very cool and refreshing.

Sept. 30.—I was now come to the unhappy anniversary of my landing. I cast up the notches on my post, and found I had been on shore three hundred and sixty-five days. I kept this day as a solemn fast, setting it apart for religious exercise, prostrating myself on the ground with the most serious humiliation, confessing my sins to God, acknowledging his righteous judgment upon me, and praying to him to have mercy on me through Jesus Christ; and having not tasted the least refreshment for twelve hours, even till the going down of the sun, I then ate a biscuit-cake and a bunch of grapes, and went to bed, finishing the day as I began it.

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# Students Explore their Conceptions of the Heroic

#### Joseph O'Brien and Steven H. White

hat is a hero? Who are your heroes? We asked these questions of students in kindergarten through high school. Elementary students focused on action most often the act of saving someone—in describing a hero. Middle school students more often defined a hero as someone to "look up to"—either because this person did "something special" or possessed some characteristic they admired. High school students offered more complex responses, tending to define a hero in terms of more than one attribute. But when it came to naming heroes, more students in every age range identified people who were personally known to them—parents, other family members, or friends—than anyone else.

We believe that encouraging students to explore the idea of a hero enables them to better understand their own thoughts and beliefs about the world around them. Asking middle school students to study heroes can be an especially rewarding experience for several reasons.

First, heroes and their accompanying myths or legends are part of the material from which young people's dreams are made. Playing out hero themes is one way in which children come to understand their society, their role in it, and their potential to affect it positively.

Second, the study of heroes lends itself to the integration of social studies and other disciplines, especially the language arts. A teacher might build a study of heroes on the reading of biographies, with students choosing historical or contemporary figures whom they identify as heroes to research. This study also combines well with the visual arts, as students consider how the representations of heroes in different times and places reflect the values of a society.

Third, the study of heroes can be student-centered, with the direction it takes depending at least in part on students' conceptions of what makes a hero and who is heroic. The teacher can build upon these understandings and use them as a bridge to the curriculum throughout the year.

Fourth, the study of heroes can be ongoing and inquiry-based, with students applying their initial conceptions of a hero to different historical circumstances. This not only enables them to develop more complex thinking skills, but to trace the evolution of their own thinking at different stages in their development.

#### A Study Unit on Heroes

Based on these premises, we developed a unit on heroes for the middle school level that contains the following features:

*Thematic Base*: The core concept of the unit involves the definition of a hero.

While our unit centers on the identification of personal heroes, teachers are encouraged to select the theme best suited to their students and curriculum. For example, students might be asked to identify heroes in American history.

Integration with Literature: Literature can add much depth and richness to the study of heroes. Students might read biographies of historical or contemporary figures, such as Clinton Cox's The Forgotten Heroes: The Story of the Buffalo Soldiers or Patricia Giff's Mother Teresa: Sister to the Poor. Or they might examine fictional heroes, such as the mythical figure of Theseus in Mary Renault's The King Must Die or one or more of the characters in Harper Lee's To Kill a Mockingbird.

Student-centered: In this unit, the ideas about what makes a hero come from the students. Because an unwritten goal of the unit is to enable each student to identify with one or more people as heroes, the students' thinking must drive the unit, with the teacher accompanying the class as a guide.

Ongoing and Inquiry-based. While a teacher may opt to use our suggestions as a self-contained unit, we believe the more effective approach is to thread the unit throughout a semester or the entire year. This would enable students to apply their conceptions of a hero broadly, and to compare their thinking not only with that of their

classmates, but with their own former views of what constitutes the heroic.

Our unit follows six steps, which are described as follows with accompanying activities:

**Step 1:** Establish a working definition of a hero. Individual students express their own ideas about what constitutes a hero and name who their heroes are on a class survey. This definition is comparable to a hypothesis which students continually "test." Student responses to each question should be used to guide a discussion of heroes.

Activity: Class Survey

- 1. What is a hero?
- 2. What would you have to do to become a hero?
- 3. Who is one of your heroes?
- 4. Why is that person or character a hero to you?

Use the students' responses to guide a discussion of each question.

**Step 2:** Investigate the working definition of a hero. In this step, students might:

- 1. Read a biography and decide whether its subject is a hero
- 2. Read a work of fiction and decide whether or not it contains a hero
- 3. Research what others say about heroes Students use their working definitions as a guide in exploring the possibilities of what makes a hero. The key here is to provide students with rich yet concrete examples of potentially heroic people and/or acts that cause them to question their initial definition. Some websites that offer biographical sketches of heroes appear at the end of this unit.

Activity: Hero Scavenger Hunt Directions: You have just discussed each other's initial thoughts about a hero. Now, explore what makes a person a hero through reading a story or a biography. Decide whether a character/actual person you are reading about possesses any characteristics of a hero. List these characteristics with examples of how they are demonstrated in the reading.

Step 3: Refine the working definition of a hero. This step is divided into two parts. In Part 1, students use the lists they prepared to brainstorm about the group's understanding of a hero. While the class need not develop its own definition, the large group discussion enables individual students to recognize and learn from the thinking of other students. In Part 2, students refine their own definitions of a hero by analyzing the heroic characteristics named by the class. As an outgrowth of these activities, students might create a resume or ad for a hero.

Activity: Brainstorming About Heroes **Part 1.** Questions for Brainstorming *Characteristics of a Hero* 

- ▶ What are the characteristics of a hero?
- Who are some historical or contemporary figures that embody these characteristics?
- What fictional characters can you think of who embody these characteristics?

#### Defining a Hero

- ► What distinguishes a hero from an everyday person?
- Can a person possess hero characteristics and not perform a heroic deed?
- If so, is this person a hero? Why or why not?

Exploring the Definition of a Hero

- ► Is it easier to "recognize" people in the past or people today as heroes?
- ► Once a person attains hero status, is it possible to stop being a hero?
- ► Are heroes important to you? Why or why not?

Part 2. Do You Agree?

Listed below are some characteristics and actions of a hero identified during the class brainstorming session. (Note: for the purposes of demonstrating this activity, we have provided a sample list.) Read the list and indicate whether you think the characteristic or action named is (1) Essential, (2) Secondary, or (3) Not Necessary for a person to be considered a hero.

- Essential—possessing this characteristic or performing this action makes this person a hero
- (2) Secondary—while this is an important characteristic or action, other qualities or deeds are necessary to become a hero
- (3) Not Important—this characteristic or action is unlikely to distinguish a person as a hero

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**Step 4:** Present a working definition of a hero. Students working in small groups develop a collage to illustrate their understanding of a hero, then review the collages of other groups and refine their own definition.

Activity: A Hero Is...

Part 1. Developing a Collage

\_\_ Overcome obstacles

- As a group, write a definition of a hero and tape it to the back of a poster board.
- Individually, look through magazines for words and pictures that match your group's definition of a hero. Cut them out and place them in the middle of the table.
- As a group, review the cutout material. Select those pieces that best meet your definition.
- 4: Arrange them on the poster board for presentation to the class.

#### **Part 2.** Reviewing other Collages

- As a group, review two other collages.
   Discuss what ideas you think each collage is trying to convey.
- Based on the review of each collage, write what you think is that group's definition of a hero. Compare your observations with how each group

- defined a hero on the back of its poster board.
- 3. Return to your collage and review the definitions of a hero composed by the other two groups. Compare them with the definition you placed on the back of the poster board. Discuss whether you want to make any changes in your group's collage or definition. Make changes as appropriate.

Step 5: Apply the definition of a hero. Each student should now write down his or her own current definition of a hero, and select a person who personifies this conception. Students will now create project boards that include the hero's portrait, a brief biography, and a portrayal of one or more heroic characteristics/actions in a form of the student's choosing (e.g., pictures, quotes, an original poem or song). In a class discussion, students could talk about

what they can or would like to do to be like their heroes.

Activity: Hero Portrait Gallery Each hero portrait should include:

Name

Picture/Drawing

**Brief Biography** 

Portrayal of Heroic Characteristics/Actions (Note: For those interested in continuing with this unit, students could add to the Gallery throughout the semester or year. If students keep a portfolio, they might remove their last person and store her/him in the portfolio when they add a new person to the gallery. As a final activity, each student might choose a favorite hero for inclusion in a Hero Hall of Fame.)

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## **Websites**

#### **Carnegie Hero Fund Commission**

trfn.clpgh.org/carnegiehero/

The Carnegie Hero Fund was established in the early 1900s to recognize acts of outstanding civilian heroism throughout the United States and Canada. This website contains summaries of the acts for which the Carnegie Commission awarded each recipient the honor. It also has information on the awardees since June of 1996. Additional links include a bibliography of recommended readings and a history of the award. This site would be useful when discussing characteristics of heroes.

#### TIME 100: The Most Important People of the 20th Century

cgi.pathfinder.com/time/time100/index.html

This site is maintained by *TIME Magazine*. *TIME* is currently profiling 100 remarkable people who have had an influence on the past 100 years. Special issues of the magazine featuring Leaders & Revolutionaries, Artists & Entertainers, Builders & Titans, Scientists & Thinkers, Heroes & Inspirations, and Person of the Century began appearing on newsstands in March 1998 and will continue until December 1999.

This website also contains the Time 100 Poll, which invites visitors to enter their choice for each of the categories mentioned above, and to see the data compiled from all entries to the Poll. Entries in the category of Heroes & Inspirations include Charles Lindbergh, Jesse Owens, Babe Ruth, Martin Luther King, Jr., Mother Teresa, Yuri Gagarin, and Neil Armstrong. This would be an appropriate site to broaden students' conceptualization of heroes by discussing why some people may and others may not consider the people listed as heroes.

#### **Female Heroes**

home.earthlink.net/~womenwhist/heroine.html

A section of the Women in World History Curriculum directed by Lyn Reese focuses on women considered to be central figures in their time, because of their abilities, achievements, or other qualities that helped define the period in which they lived. This website contains information on Female Heroes of the Regions of the World and Female Heroes from the Time of the Crusades. It is useful in examining how time and culture, and particularly the issue of gender, affect the identification of heroes.

#### My Hero

myhero.com/home.asp

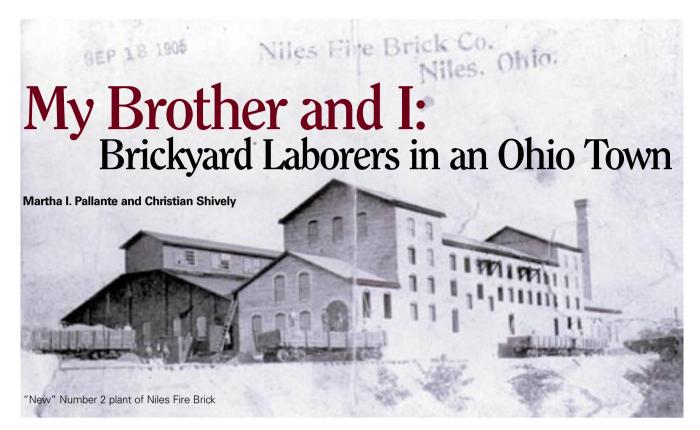
This is an interactive website that broadens the perspective that heroes can be relatives or friends as well as historical figures and current newsmakers. It offers featured stories about heroes—such as Rosa Parks, Nelson Mandela, and Albert Einstein—as well as stories submitted by visitors. Additional links include information on people placed in such categories as artists, explorers, lifesavers, peacemakers, teachers, and many others.

#### Welcome to Giraffe Country

http://www.giraffe.org/

The Giraffe Project is an effort to find, commend, and publicize information about people who act for the common good. The website features links to stories about local heroes who have provided help or inspiration to others within their community. Additional links are available for K-12 curriculum resources and activities to engage students in identifying and thinking about heroes in their communities.

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In 1872, Welsh immigrant John Rhys Thomas established the Niles Fire Brick Company in Niles, Ohio. The business manufactured high quality firebrick for the burgeoning steel and iron industries. This firebrick, also known as refractory brick, was used to line furnaces employed in the smelting of iron and steel.

The original plant was a wooden structure on Langley street in Niles. Because of the high temperatures involved in the manufacturing process, fire represented a major hazard. The Number One Plant was rebuilt at least three times between its establishment and 1903.

In 1905, company managers built a second plant in response to growing demand. This doubled the size of the work force and the number of bricks produced. Both plants were modernized during the 1940s, with electrification of plant operations and a switch from coal to natural gas to fire the kilns. Production grew from an original output of 500,000 bricks in 1872

to 2,500,000 in 1953. But, within 20 years, both plants had been closed and torn down as a result of changes in the steel industry.

#### The Niles Firebrick Project

Serendipity...what a wonderful word to describe what is now known locally as the Niles Firebrick Project. It began in May of 1993, when I wandered into the Niles Historical Society to look at some records it had recently acquired from the owners of the Niles Fire Brick property. I stopped for two reasons. One was personal interest; the first job my grandfather held in the United States was at the Niles Fire Brick Company. The other was my curiosity as a historian, and that spur-of-the-moment stop has dramatically altered the course of my professional development and scholarly research.

The ultimate outcome was the Niles Firebrick Project, an outreach program from Youngstown State University to local schools made possible through an Ohio Humanities Council grant in December 1996. The project has provided university

educators and graduate students, classroom teachers and students in kindergarten through grade 12, with hands-on experience in exploring local history. So far, the Niles Firebrick Project has traveled to nine schools in six Ohio school districts, with the majority of classrooms visited being at the middle school level.

The Niles Firebrick Project centers on the use of primary documents in the Niles Fire Brick Collection, which is now housed at the Ohio Historical Society's Museum of Industry and Labor in Youngstown. Supplementing these documents are oral histories of former employees and their descendants—many accompanied by photos, memorabilia, and other artifacts—collected with the aid of the Center for Historic Preservation at Youngstown State University. All together, these materials have provided the basis for an intensive museum experience—using display panels, transcribed documents, newspaper advertisements, and a slide show—that we take into classrooms.

Our purpose in undertaking the



Niles Firebrick Project was twofold. First, we wanted to focus on an aspect of our community's history that often goes unmentioned: the role of working class immigrants in the cultural and economic development of the region. Second, we sought a way of sharing techniques for using primary sources in the classroom with local teachers. Our effort proved timely in light of the recently-developed Ohio Proficiency tests, which emphasize both the use of primary documents and the teaching of the critical thinking skills needed to decipher them.

This project represents a true collaborative effort among its participants. For the university people, the experience has proved invaluable. We combined theories of teaching with the practical application of historical knowledge to produce a genuine hands-on experience in local history. In the classroom, we team taught the material, monitored cooperative learning groups, and led classroom discussions—experi-

ences that provided us with broader knowledge of local history as well as direct feedback on our approach to the material.

The teachers who invited us into their classrooms also felt they grew academically from the experience. Like us, they learned more about the past of their own communities. They also learned new techniques for working with primary sources and new ways to make use of university resources. Many teachers asked us to return the following year or requested copies of the documents in order to continue or extend the project. Gaye Breegle of Edson Junior High School in Niles has used the project's displays as the model



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vear-long effort that involves her students in doing their own research projects for National History

Day.

Students at all levels showed enthusiasm for the hands-on nature of the project. Some brought personal knowledge to it, through either knowing or being told about a relative who once worked in the Firebrick factory. For example, one student recognized a great-grandfather's name on a company payroll, and then discovered his picture on one of the display boards. This project not only made history more personal but—as was its design—helped students to connect local events with larger historical trends in immigration, ethnicity, and industrialization in the United States.

For instance, students discovered that while the number of men employed by the Niles Fire Brick Company steadily increased, no women ever worked for the company as laborers. They also made the connection between the enactment of child labor laws and the disappearance of "boys" from the payroll in 1915.

Ads from the November 15, 1905 edition of *The* Youngstown Vindicator.

#### **Working with Primary Sources**

In taking the project into schools, we typically worked with the same class for two or three days. On the first day, we introduced students to the Firebrick materials through a slide

presentation extending from the plant's founding in 1872 to its final liquidation in 1972. The slide show was designed to relate aspects of Firebrick's history to broader trends in the United States. For

example, the coming of workers from Wales, Italy, and countries of Eastern Europe (as well as some from Olive Hill, Kentucky) fits into the pattern of late 19th century immigration. The growth and decline of the steel industry is also reflected in the corresponding demand—or lack thereof—for firebricks.

On the second day, students worked in cooperative groups to interpret company payrolls. We prefaced this activity with a review of the slide show and a brief summary of the history of the Mahoney Valley region between 1895 and 1915. This history included the recruitment of immigrants to work at the brick factory, and the effect of the change from the Bessemer process to open-hearth furnaces in the steel industry on the demand for refractory bricks.

Students at the middle school level worked in groups to examine company payrolls for three different years: 1895, 1905, and 1915. The payrolls consisted of the names of workers, the number of days each worked in a 15-day period, the daily rate of pay, and total wages earned for the

NILES FIRE BRICK PAYROLL FOR FIRST HALF OF NOVEMBER 1895						
NAME	Days	Rate	Total	Debt	Due	Remarks
Euley, Juan	13.25	1.15	15.24			
Buley, Nick	2.75	1.15	3.16			
Karney, Thos	14.25	.70	9.97			
Larey, Willie	13.25	.70	9.27			
Lawrey, Thos	12.25	.70	8.57			
Labrial, Carnel	14.5	1.25	18.12			
Nichol, Jos	15	1.15	17.25			
Pallanti, Lawr	14.75	1.15	16.96			
Pallanti, Jos	6	.70	4.20			by Lawrence
Seaton, John	13	1.70	22.10			
Sheehan, James	14.25	1.25	17.81			
Sheehan, Pat	13	2.00	26.00			
Smith, John	14.25	.70	9.97			
Williams, Jos	13.25	1.50	19.87			
Watkins, John	12	1.25	15.00			

Figure 1



Worker housing on Langley Street.

pay period (see the example in Figure 1). Students were asked to write down ten items they found significant or unusual about the payrolls. These apparently simple instructions in fact prompted students to use critical thinking skills to compare and contrast the payrolls, and to make connections between these primary documents and their knowledge of local history during this period.

On the third day, students used the 1905 payroll in conjunction with other primary sources to speculate about the quality of life provided by workers' earnings. They considered the payroll in terms of living costs as reflected in newspaper ads from the November 15, 1905, edition of *The Youngstown Vindicator*. For example,

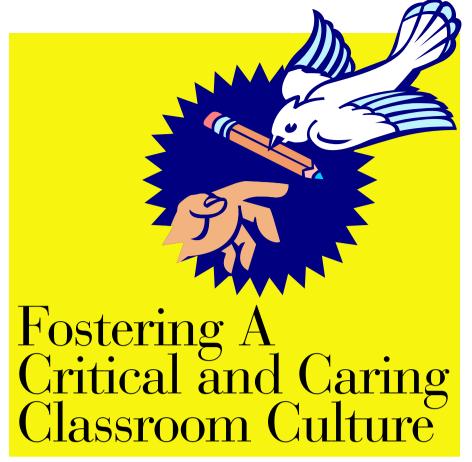
one ad priced the cost of furnishing three rooms in a house—parlor, bedroom and kitchen—at \$75.50. Ads for house rentals, articles of clothing, grocery items, and bicycles also helped give students a sense of what the dollar would buy for Firebrick workers and their families during this period.

Students were also asked to address the question: "What are some of the striking differences you find between workers in 1905 and today in terms of working conditions and benefits?" That is, they were asked to consider what does not appear in the payroll records—such as health insurance, retirement benefits, or leaves earned—that would now be deemed essential in judging the quality of life.

We found middle school students to be avid detectives. They enjoyed working together and using the clues found in primary documents to unravel the mysteries of times past in their community. Clearly, the ideas underlying the Niles Firebrick Project can be put to work in other communities by teachers who want to help their students learn more about local history and its place in the larger framework of historical trends in the United States.

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■●■ Middle Level Learning May/June 1999 M13



### Pamela B. Joseph and Mark A. Windschitl

∕hen fifth-graders in Barbara Vogel's class in Aurora, Colorado, learned that slavery was not a bygone occurrence in American history, but that people in the present day were enslaved in war-torn Sudan, the students were horrified and in tears. But their teacher did not try to comfort them nor rationalize such horrors. Instead, she sought to use their feelings of concern and outrage to encourage the children to take social action. She helped her students to start a letter-writing campaign to bring this dire situation to public attention. When letters did not change the fate of Sudanese slaves, the children raised money to buy freedom for a few slaves. As newspapers publicized the children's efforts, donations came in from around the world, so that the class eventually had over \$50,000 in funds—to purchase the freedom of slaves. The class even developed a website to encourage others to stop slavery in Sudan.<sup>1</sup>

Clearly, Barbara Vogel views her students as human beings with strong feelings of empathy and as social agents who are capable of making change. She believes that her job "is to balance the heart and mind of her students." Her classroom is a place for caring and for taking a critical stance in a world that needs repair.

Another middle-school social studies teacher helped her students to learn about social injustice in a unit that grew from their interest in lawyer Jennifer Harbury's odyssey to find her husband, a Guatemalan freedom fighter who had "disappeared." Students engaged in research and background writing, artwork, the collection of artifacts, and presentations to their peers, their families, and other community members. This sixth-grade unit on Central America eventually included a letter-writing campaign to the chair of the Senate Foreign Relations Committee. The class also sent copies of their letters to Jennifer Harbury, who visited the classroom, shared her story, and described how she was touched by the students' letters on her behalf.<sup>3</sup>

The search for justice is a driving force behind civic action. By fostering a critical and caring classroom culture, middle level educators can raise students' awareness of civil justice and morality, and prepare them for future roles as active citizens. In such a classroom culture, the norms of classroom life encompass compassion, critique, and social action. Teachers consistently strive to empower students to make changes in their lives, communities, and the world.

For many educators, having this kind of a classroom means changing daily school life for themselves and their students. We believe that a commitment to this kind of classroom calls for more than teaching a special curriculum unit or attempting an occasional social action project. Rather, we believe that there is a need to infuse the ideas of civic justice and morality into classroom activities throughout the school year.

In a critical and caring classroom culture, teachers

- ► Identify their students' moral concerns and ideas about justice
- Broaden students' horizons by teaching them about human experiences and issues that lie beyond their immediate experience
- ► Offer a classroom environment that continually stimulates civic awareness
- Select issues for student action that are well-defined and allow students to develop their sense of empowerment

The educator committed to a caring classroom culture considers learners to be unique individuals with personal histories that are rich with the influences of family life, peer relationships, and popular culture. Students bring into the classroom

their expectations, life pressures, experiences of privilege or discrimination, and stories of survival. These life experiences are regarded as the primary means by which students make sense of the world.<sup>4</sup> On the basis of these experiences, students have acquired values and a sense of how things ought to be.

By listening to students, educators can identify the issues that run through their conversations and concern them, and hence the themes that are most suitable for class examination and discussion. Teachers can ask students to select issues that interest them by asking the question, "What should I be paying attention to in my world?" In a critical and caring classroom, students are confident and relaxed enough to voice their concerns and hear those of others, and teachers ensure that students' ideas are not ignored or dismissed.

Students are guided to understand themes that are central to civil morality, such as dominance and liberation, justice, and silence about injustice. It is possible to discuss such issues on too abstract a level, and one of the teacher's challenges is to represent them in more concrete forms, such as stories, photographs, skits, collages, or songs. Students learn about insiders' viewpoints in the search for justice, as they listen to the stories of people of color, females, and other marginalized members of society whose voices have been too little heard.

Teachers can also stimulate critical thinking by confronting fixed views held by students. One high-school teacher, Bill Bigelow, made a provocative challenge to the interpretation that Columbus "discovered" America when he presented the point of view of the indigenous peoples of this country. He came into class one

day and absconded with a student's purse—announcing to the class that he had "discovered this purse!" His students' disconcerted responses became the basis for their thinking about the early history of this country.<sup>6</sup>

The critical and caring classroom has an environment full of stimuli to thought and discussion. Photographs, drawings of people interacting, cultural artifacts, advertisements, tools, toys, labels, and clothing can all be effective stimuli. Students should also have easy access to primary information sources such as newspaper articles, personal memoirs, original artifacts, biographies, and artistic works that allow them to make their own interpretation of current or historical events.

A key objective is to take action to improve social conditions. The problems suggested by teachers for class action should not be overwhelming or polarizing for students, but must offer possibilities for group affirmation and small actions toward change. Action, or follow-through, is essential to enable students to feel a sense of civic empowerment. Students should learn to see themselves as social and political beings with the right to question the systems of influence in schools, workplaces, and communities. They should be encouraged to find resources outside the school setting and to venture into the community to gather documents, conduct interviews, and make observations.

The final evaluation of students' efforts can take several forms: substantive comments by the teacher, written self-critiques by students during a reflection process, and observations by the teacher, by peers, or by community members who have been affected by student attempts at transformative action. Evaluation needs to be seen as

a guidance process as well as an indicator of accomplishment. The purpose of evaluation is to provide feedback about content knowledge, communicative skills, and, above all, critical insights. Whether or not critical insights are being realized by learners can be discerned through discussions, role-plays, presentations to the class, oral arguments, position papers, and letters to support social action.

The critical and caring classroom can become the site of hope and possibility, as its experiences inspire children and their teachers to believe that caring through social action can make a difference in themselves and in the world.

#### **Notes**

- See David Field, "Freedom Writers," Teacher Magazine on the Web (February 1999); Nat Hentoff, "Fifth Grade Freedom Fighters," The Washington Post (August 1, 1998); Mindy Sink, "Schoolchildren Set Out to Buy Freedom for Slaves," The New York Times (December 2, 1998); Richard Woodbury, "The Children's Crusade," Time (December 21, 1998).
- 2. Field.
- Pamela B. Joseph, Stephanie L. Bravmann, Mark A. Windschitl, Edward R. Mikel, and Nancy S. Green, *Cultures of Curriculum* (Mahwah, NJ: Lawrence Erlbaum, in press).
- Nina Wallerstein, "Problem Posing Education: Freire's Method for Transformation," in Ira Shor, ed., Freire for the Classroom: A Sourcebook for Critical and Caring Teaching (Portsmouth, NH: Boynton, Cook, Heinemann, 1987).
- Henry Giroux, Border Crossings: Cultural Works and the Politics of Education (New York: Routledge, 1993), 104.
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# SHIPWRECKED

THROUGH THE PAGES



1. The hero of this epic poem is shipwrecked not once, but twice, on his way home from a war. On the first island where he washes ashore, he is held captive by Calypso. Set free, he puts forth on a raft to be cast up on another island, where he tells

- ▶ Name the poem?
- ▶ Name the author?
- ► Tell who or what caused the storms that resulted in the two shipwrecks?

the story of his journeys to Alcinous. Can you:

2. In this fairy tale, the hero and his shipmates go ashore on an island paradise rooted in sand on the back of a giant fish. When they light a fire, the fish rises up, and all are thrown into the sea. Now the hero lands on a "real" desert island. Can you:

- ▶ Name the hero?
- Name the book of tales his story comes from?
- ► Tell what bird unwittingly helps the sailor escape from the island?



The following paragraphs describe wrecks at sea, although not all involve ships.

Use the written and visual clues to find the answers to these questions.

The last one is the stumper!

(Answer key on page M3)



3. The shipwreck that begins this play results from a storm created by the magician Prospero. Cast ashore on the island he rules is Ferdinand, Prince of Naples, who promptly falls in love with the magician's daughter, Miranda. Can you:

- ► Name the play?
- ► Name the author?
- ► Tell who first introduced Prospero to "all the qualities o' the isle, The fresh springs, brine-pits, barren place and fertile"?



4. This story opens in the year 1812, when a family finds itself abandoned as their ship's crew takes to the lifeboats during a storm at sea. The members of the family must use all their powers of invention to survive on an uninhabited island. Can you:

- Name the book?
- Name the author?
- Tell what the family named its home on the island and why?

5. Five Union men escape from a Confederate prison in a balloon, which descends near a deserted island after many days of storm. Although they employ their wits to great advantage, it is an unknown benefactor who ensures their survival on the island. Can you:

- ▶ Name the book?
- Name the author?
- ► Tell who saves them and what other science fiction story by this author he appears in?



