
Lesson 5.7

TAKE ACTION, SAVE THE PAST

Subjects: science, social studies, language arts.

Skills: application, analysis, synthesis, evaluation.

Strategies: brainstorming, decision making, planning, communication, discussion, research skills, writing, problem solving, values clarification, debate, role play.

Duration: approximately 2 to 4 weeks, working 2 to 4 hours each week.

Class Size: any; groups of 3 to 5, preferably 4.



Spear point from North Carolina, ca. 9000 BC.

Objective

In their study of archaeological resource conservation, students will use a problem-solving model to identify a problem and solve it creatively.

Materials

For each team, a copy of “Decision-Making Sample” and the “Review of the Problem” masters; a copy of the “Decision Making” activity sheet. For each student, a copy of “Rules for Brainstorming.”

Background

The growing concern about destruction of archaeological resources (sites and artifacts) lends itself to a creative problem-solving model. Problem solving is a skill students will need for future success. Students use their creative and critical thinking skills to find useful solutions to current and future problems. When possible, students should be supported to carry out their solutions. In recent years, students across the country have been influential and instrumental in finding and implementing solutions to problems by using problem-solving models. Teachers may wish to experiment with the following model. Listed under “Sources,” below, are two books for those who want more detailed information on using a problem-solving model.

Problem solving is most frequently done in groups of four students. It can also be done as a whole class under the guidance of the teacher. The more this process is used, the more competent teachers and students become.

Procedure

1. *Creating Awareness:* Make students aware that a problem exists. This can be facilitated by teaching students about archaeology and reading “A Review of the Problem.”

2. *Researching the Problem:* Research is essential to problem solving. Students who have experienced many lessons from this teaching guide will have sufficient background for solving archaeological problems. These lessons together with reading the “Review of the Problem” may be adequate preparation for completing the process. Additional research may be done if the students think they do not have enough information.

3. *Brainstorming Problems:* Students will brainstorm a list of specific problems related to the

overall problem of archaeological resource destruction. This will help to clarify the problem. Encourage students to list as many problems as possible (10 to 25). For example:

- digging up sites destroys valuable research data;
- archaeologists cannot learn as much if artifacts are taken away or stolen from a site;
- Native Americans think graves of their ancestors that are dug up have been desecrated;
- tourists cannot enjoy and learn from sites if they have been destroyed.

4. *Identifying the Underlying Problem:* The students now select the one problem from their list that they think is the most important. “It should be one which, if solved, might solve many of the other problems on the list as well. It may appear individually on the list or it may be a combination of a number of problems on the list” (Crabbe 1988, p. 40). The problem is most easily solved if it is stated as a question beginning with the phrase “How might we?” or “In what ways might we?” and contains one main verb. For example:

- How might we preserve archaeological sites for enjoyment by the public during the next 100 years?
- In what ways might we involve community members in the preservation of archaeological resources?

5. *Brainstorming Solutions:* “Once the underlying problem has been identified and written, the teams should begin their quest for solutions. This is the time for truly creative brainstorming. Students should stretch their minds as they look for actual ways to resolve the issue they have described” (Crabbe 1988, p. 44). Students should follow the “Rules for Brainstorming” in Appendix 3. Examples of solutions include:

- Create brochures about how and why to protect sites, and put brochures in a park visitor center.
- Write a letter to the editor of a newspaper discussing the importance of protection.
- Talk about the problem of destruction on a radio talk show.

6. *Choosing and Evaluating the Best Solution:* Students should review their list of solutions and write their 10 best solutions on the “Decision Making” activity sheet. From this list they should choose their best solution (see “Decision Making Sample” activity sheet). This is done by establishing a set of criteria by which to judge each solution. The criteria should be stated as questions, be problem specific, and establish lasting effects. Here are some examples:

- Which solution will have the longest-lasting preservation effect on archaeological sites in our state?
- Which solution will be the quickest to implement? Which solution will be the easiest to implement?
- Which solution will cost the least to the state taxpayer? Which solution will influence the most people?
- Which solution will involve the most community members in the preservation of archaeological sites?

7. *Describing the Best Solution:* In paragraph form the students describe how they will carry out their solution. They should answer the questions: Who? What? Why? Where? When? How?

8. *Carrying Out the Solution:* When possible provide students with an opportunity to carry out their solution. Example: If their best solution is to create an educational display for a visitor center in a national park (or other location), allow time for the construction of the display and arrange for permission to show it.

Sources

- Bouchard, T. J. 1977. "Whatever Happened to Brainstorming?" In *Guide to Creative Action*, edited by S. J. Parnes, R. B. Noiler, and A. M. Biondi. New York: Charles Scribner's Sons. [The "Rules for Brainstorming" are adapted from this source.]
- Crabbe, Anne B. 1988. *The Coach's Guide to the Future Problem Solving Program*. Laurinburg, N.C.: The Future Problem Solving Program.
- Lewis, Barbara A. 1990. *The Kid's Guide to Social Action*. St. Paul: Free Spirit Publishing.
- Smith, Shelley J., Jeanne M. Moe, Kelly A. Letts, and Danielle M. Paterson. 1993. *Intrigue of the Past: A Teacher's Activity Guide for Fourth through Seventh Grades*. Washington, D.C.: Bureau of Land Management, U.S. Department of the Interior. [This lesson is adapted from "Take Action—Save the Past" on pp. 131–135, courtesy of the Bureau of Land Management.]
- Ward, H. Trawick, and R. P. Stephen Davis, Jr. 1999. *Time Before History: The Archaeology of North Carolina*. Chapel Hill: University of North Carolina Press. [The image in this lesson's main heading is taken from Figure 2.1.]

Review of the Problem

Out there, in our country's public lands, Americans are being plundered, robbed of a history that the land has held for thousands of years. This history has been passed down to us by the people who were here before us. They have left artifacts, drawings, and remains of their way of life. Archaeologists study the remains, drawings, and other artifacts left by the early Americans to discover clues to past cultures.

Some of these areas are far off the beaten path and some have been set aside as deserving of special protection. In the past, only the hearty outdoors enthusiast made the difficult journey to these sites. Today, more roads and highways cross the land, making it easier for sites to be visited by many people—including vandals, professional scavengers, casual collectors, and tourists.

Many ancient sites have been damaged in some way. For example, looters have dug large holes and taken artifacts from the Hardaway site, a camp site important to early Native Americans. Unless we act now to save such pieces of our North Carolina past, there may not be anything left to save. Large quantities of pottery and stone tools, human skeletal remains, rock art, historic cabins, and trails, as well as other valuable clues to our past have been damaged.

The large numbers of people visiting sites are endangering their existence. Visitors climbing in and out of ruins damage archaeological evidence. Campers building campfires near sites can harm rock art. People with metal detectors who dig bullets and belt buckles from Civil War battlefields in North Carolina destroy archaeological evidence. Each shovelful of dirt that is taken out of these sites may cause a loss of knowledge about past people. Each time a skeleton is unearthed and its bones scattered, we lose another link in our American heritage. Rock art is changed beyond repair each time uninformed or uncaring people chalk over a pictograph so it can be photographed, add their own carvings to a petroglyph for amusement or chisel a part of the art away from the wall. Each time artifacts are destroyed or removed from a site, the past culture can no longer be accurately dated and studied. The worst thing about vandalism and destruction of historic and prehistoric sites is the finality of the situation; the loss of history is complete and can never be recovered.

Federal and state agencies are working to prevent this destruction, with the help of concerned citizens. As guardians of our public lands, these agencies (such as the U.S. Forest Service, National Park Service, Department of Defense, Fish and Wildlife Service, Bureau of Land Management, and state governments) safeguard these special places.

You too can help. You can learn about artifacts and their value in the search for knowledge of the past. You can contact archaeological groups or historical societies in your area to find out how you can learn more. You can teach others about the importance of archaeological sites. You can form citizen groups who watch over sites. You can help prevent further destruction of these sites and become involved in legal and meaningful archaeology projects.

There are many other solutions to the problem of archaeological resource destruction. Your creative ideas are needed now!

Decision Making Sample

Follow the lettered instructions (A–D) to complete the “Decision Making” activity sheet. Some examples are given in the sample at the bottom of this page.

- A. Summarize your best solutions.
- B. Write your criteria in each diagonal.
- C. Rate each solution according to each criterion on a scale of 1 to 5 (with 5 the highest, and 1 the lowest). Use each number only once in each column.
- D. Add the numbers across each solution line. The highest number indicates your best solution. In the case of a tie, combine the two ideas into a super solution.

| Solutions | Criteria | | | | | Total |
|--|----------|---|--|--|--|-------|
| | 5 | 1 | | | | |
| | 4 | 5 | | | | |
| | 1 | 3 | | | | |
| | 2 | 4 | | | | |
| | 3 | 2 | | | | |
| 1. Create imitations of actual sites that tourists may visit and dig in. | 5 | 1 | | | | 14 |
| 2. Design a TV advertisement teaching people about site preservation. | 4 | 5 | | | | |
| 3. Write letters to the editor of the local newspaper. | 1 | 3 | | | | |
| 4. | 2 | 4 | | | | |
| 5. | 3 | 2 | | | | |

Decision Making

| Solutions | Criteria | | | | | Total |
|-----------|----------|--|--|--|--|-------|
| | | | | | | |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |

Rules for Brainstorming

1. Criticism is ruled out.

- Judgment of positive and negative ideas must be withheld.
- No one should criticize anyone else's ideas.

2. Freewheeling is welcome—the wilder, the better.

- It is easier to tame down than to think up ideas.
- Don't be afraid to say anything that comes into your mind; the farther out the idea, the better.
- This complete freedom stimulates more and better ideas.

3. Quantity is wanted.

- The greater the number of ideas, the more likelihood of winners.
- Come up with as many ideas as you can.

4. Try piggybacking ideas; suggest combinations and improvements.

- In addition to contributing ideas of your own, suggest how ideas of others can be turned into better ones, or how two ideas can be joined into still a better one.

[Adapted from Bouchard (1977).]