Skill: Language Arts

Objectives
Students will:
• Examine their own values and beliefs related to water issues.
• Evaluate possible actions they might take that have an impact on water in the environment.
• Examine, express, clarify, and take responsibility for their own reasoning.

Background
The water resources that we have in Oklahoma are precious. The well-being of our state is closely tied to adequate supplies of water. Farmers and ranchers depend on precipitation to grow their crops and to raise livestock. Our cities and towns need dependable sources of water to meet their increasing water needs.

Meeting our state's water quality and quantity needs represents a challenging task. There are many reasons for this. Foremost is the different water values that people hold. To what extent a person values water has a great deal to do with:

• Upbringing - A person’s past has a lot to do with the way he or she values water. Did your parents have ample supplies of water or did they have little? Did they ever live in an area where a drought will no doubt have a different value of water than someone who has not.
• Occupation - Some professions are more dependent on water than others. For example, the success of Oklahoma’s number one industry, agriculture, is closely tied to receiving adequate amounts of moisture at the right times.
• Location - Certain areas are more prone to water problems than others. For example, if you live in the low lying area along a river and experience a flood and your house is flooded, you will have a greater appreciation for floods.
• Presence or Absence of Modern Day Conveniences - Technological advances have a great deal to do with the improvement of our quality of life. An example of how we have improved our quality of life is the change from hauling water by bucket to running water and indoor plumbing.

Your students will have other ideas that should be written on the blackboard for discussion.

Vocabulary
• adequate
• precipitation
• dependable
• quality
• quantity
• agriculture
• moisture
• convenience
• technological
• stewards
• obligation
• septic system

Materials:
• Water Value Cards
  Photocopy the “Water Value Pages” that follow this activity and cut apart.

P.A.S.S.
4th Grade
• Read 1.1, 3.1b
• Write 1.2
• Oral 1.2, 2.1, 3.1,2

5th Grade
• Read 1.1a, 3.1b
• Write 1.2, 2.1
• Oral 1.2, 2.1, 3.1,2

6th Grade
• Read 1.1a, 3.1b
• Write 2.7
• Oral 1.2, 2.3
As stewards of our natural resources we have an obligation to manage the resources to the best of our abilities. This means weighing the good and the bad points of any action. At a personal level you are faced with hundreds of choices that reflect your water values, for example, you can build a septic system at your lake front cabin or you can leave the present system that is polluting the lake. What do you do? What types of things will you consider when making your decision?

Procedure

Students will read, discuss, make judgments, and write about hypothetical dilemmas concerning water issues and natural resources in Oklahoma. They will talk about water resources as being important to our communities, to rural water users, and to other water interests, and how each of us will be asked to make more and more personal choices on water use and water conservation.

- Photocopy and cut apart the dilemma cards on the following pages. The students can also create their own dilemmas on blank cards. Allow one card for each student.
- Divide the students into small groups. Have the students put their cards in a pile, face down, in the center of the group.
- Each student takes a card and reads it silently. Give the students several minutes to study the situation and decide what they would do and why. After the time is up, have each student read his situation and options aloud to the rest of the group. The student then gives the option he or she has chosen and why.
- The rest of the players decide to what degree each agrees with the other player’s answer. Rating is done on a scale of 0-10. Zero is total disagreement and 10 total agreement with the decision of the player. A rating of 5 means “no opinion” or “needs more information.”
- Each player is given a chance to announce how he or she rates the other player’s decision and gives the reasons why. The person being rated should have the opportunity to ask questions and offer clarification. Ratings should not represent a judgment of the person but a way for students to experience having ideas examined by peers. The ultimate purpose is to provide the students with an opportunity to examine, express, clarify, and take responsibility for their own reasoning.
- Continue the process until all players have had a turn.

Follow-Through

One member of each group could report on the most controversial dilemma the group discussed and the class as a whole could informally evaluate the option that was selected and provide alternatives that might be better.

Conservation restrictions (such as rationing) could be discussed. Merits of various plans could be evaluated.

Discussion and Evaluation

Determine if objectives have been met by listening to the discussion.

Have students examine their values and beliefs.

Have they made judgments on the options according to merit or the personalities involved?
Your jeans need washing but there are no other dirty clothes to wash with them.

What Do You Do?

1. Fill up the washer with water and wash them alone.
2. Wash them by hand in the sink.
3. Wait until there is more laundry to make a full load, or look around for other clothes to wash.
4. Wear them dirty.
5. Other.

You have one gallon of water to last you one week.

How Would You Use It?

1. Ration some for yourself each day for drinking only.
2. Share with your dog or cat.
3. Use some to water your dying plants.
4. Learn how to gather some more from the air condensing on the underside of a closed plastic covered container in the sun and use that for your plants and animals.
5. Other.

You and a friend are out hiking and you see someone dumping a 55 gallon drum of what may be a hazardous material into a wash.

What Do You Do?

1. Go over and ask what is going on.
2. Run home and call the police.
3. Wait until the dumper leaves, then go investigate by smelling and feeling the chemicals.
4. Take down the license plate number and then report it later to the fire department.
5. Other.

You are walking to your class and you see that one of the sprinklers on the school grounds has broken and is spraying a stream of water across the sidewalk and onto the nearby street.

What Do You Do?
Your city is running out of water and everyone will face severe conservation restrictions

Would You Choose To:

1. Ban the building of private pools.
2. All watering of lawns and golf courses must be limited to 15 minutes three times a week.
3. Ban all car washing.
4. All households are restricted to 30 gallons per person per day. (Average daily water consumption is 150 gallons per day per person.)
5. Other.

You own a cabin on a lake that is 100 miles from your permanent home. There are 400 other cabins on this lake. Sewage from your cabin is moving from your septic system's drain field, through the ground, into the lake. You have been notified by a local health authority that the lake's water quality is poor, and weed, algae and odor problems could result because of the septic system problems.

What Do You Do?

1. Sell the cabin.
2. Ignore the problem by doing nothing. (Attitude: this is someone else's problem.)
3. Have your sewage pumped and hauled to a safe place.
4. Form a lake association and try to resolve the problem as a group.
5. Other.

You are the mayor of a city which has an area known to flood. A developer wants to build five new houses in this flood area.

Do You:

1. Inform the developer no building will be allowed.
The well on your farm does not yield enough water to meet your domestic and livestock water needs.

What Do You Do?

1. Haul water in by tank, truck, or wagon.
2. Sign up for the new rural water system that is proposed for your area.
3. Drill a new well in an attempt to find a better source of water on your property.
4. Reduce your farm’s water consumption to an amount less than your well’s yield.
5. Other.

You are a purebred cattle breeder. There has been so little precipitation that the pastures and hayland have dried up. There are no extra feed suppliers. The cow herd is the result of many years of selective breeding and could not be replaced.

Do You:

1. Sell all the cows?
2. Sell all but the very best cows?
3. Buy hay from another area?
4. Locate good pasture and ship the cattle?
5. Buy grain?
6. Plant emergency forage?
7. Use a combination of the above?