



Problem Solving

A team building exercise highlights problem-solving issues.

SECTION 5 Finding Solutions

Subjects:

*physical education,
sociology*



Approximate lesson time:

1 hour



Materials:

*two ropes,
two paper bags*

STUDENT OBJECTIVES:

By the end of this lesson, students will be able to:

1. Describe the steps of effective problem solving.
2. Compare hypothetical situations to real wolf controversies.

TEACHER BACKGROUND:

Learning how to solve problems is a basic life skill. Many times in our society, we are taught that conflict is the way to get one's way (shoving to the front of the line, aggressive sporting events). This conflict model breaks down when we have to deal with other people over an extended period of time, as is shown in the conflicts in Northern Ireland and in Israel.

Problem solving is an integral part of wildlife management planning. An example of problem solving in wolf management is the impact wolves have on wildlife tourism. Many communities in wolf country promote the wolf as a symbol of the wild, which attracts people and money for businesses to thrive. Centers like the International Wolf Center in Ely, Minnesota, exist because people want to learn more about the wolf. However, other people living in wolf country

dislike the wolf because it has the potential to kill livestock and pets, and some fear that wolves are hurting deer populations for hunters. How do we solve this problem?

One way to address problems is to follow the S.T.O.P. problem-solving technique.

S – stands for **stop**. Often people rush off to solve a problem before they really understand it.

T – stands for **think**. Think about all of the issues involved in the problem.

O – stands for **observe**. Observe what is happening. Who is on which side of the issue? Are there ways to bring people together to solve this problem?

P – stands for **plan**. Create a plan for how to deal with this problem. Make sure everyone knows the plan before you start.

ACTIVITIES:

1. Divide the class into two teams. Using two ropes, mark off two "safe areas" two feet from the wall on either end of the room. Both teams should stand in the same safe area.

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National Science Education Standards

Unifying Concepts and Processes

*Evidence, models,
and explanation*

Science as Inquiry

*Abilities necessary
to do
scientific inquiry*

*Understanding about
scientific inquiry*

Life Science (5–8)

*Population and
ecosystems*

Life Science (9–12)

*Interdependence of
organisms*

Science in Personal and Social Perspectives (5–8)

*Populations,
resources,
and environments
Risks and benefits*

*For more
correlations,
please see
Appendix IV.*

2. Give each team one paper bag. Tell them that they are on the sinking Titanic, and they need to cross this room to get to the lifeboats, but they can't touch the water (floor) because it is icy cold and they will freeze (go back to the beginning). They need to get their team from one side of the gym (or cleared classroom) to the other side without touching the floor.
3. Students can use the bags in whatever way they choose (tearing them apart, putting a foot in the bag), but they can't use anything else to cross the room.
4. Allow the students time to plan and execute their solution. The teacher may remind the students to S.T.O.P. Encourage the students to be creative.
5. Evaluate the students' solutions. Discuss the following:
 - What procedure did they use to come up with their solution?
 - If teams didn't cooperate, ask them why they didn't.
 - Who spoke the most? Who spoke the least?
 - Whose ideas were respected? Why? Who got ignored? Why?
 - What did you do that helped or hindered the situation?
 - What behavior is required in order to come up with a solution agreeable to all?
 - How could our problem-solving skills be improved?
 - In what ways is this activity like or unlike the problem-solving used in wolf controversies?

*Usually, the main
problem with life's conundrums
is that we don't bring to
them enough imagination.*

—Thomas Moore, *Care of the Soul*

ASSESSMENT:

Tell students to complete the following sentences:

1. This activity surprised me because...
2. By doing this activity I realized...
3. If we used the same strategies to resolve wolf controversies that were used in this activity, it would be...

EXTENSIONS:

Ask the students if there are other ways they could complete the challenge in less time. Encourage them to develop creative answers (like tearing both team's bags up to make a bridge and walk across). Encourage the group to develop and try several solutions to this problem.

Which solution is the best?

What criteria could a person use to determine the best solution to a problem?

Additional Resources:

Paul Darst. Outdoor Adventure Activities for School and Recreation Programs. Minneapolis: Burgess Publishing, 1980.

Andrew Fluegelman. The New Games Book. San Francisco: Headlands Press, 1976.

Karl Rohnke. Cowstails and Cobras. Hamilton: Project Adventure, 1977.