Involvement Theater Inc.® Problem-Solving Project



© Involvement Theater Inc. 2004 10613 August Light Court Columbia, MD 21044

(410) 964-3155 or 1-866-203-8926 ext. 6797

Introduction:

Thank you for your interest in Involvement Theater, Inc. and this Problem-Solving Project Activity Guide. The exercises included in this Activity Guide are a small sample from The Problem-Solving Project Handbook (130 pages). The handbook is included, free, when The Problem-Solving Project comes to your school or organization.

The Seven Problem-Solving Steps:

A problem-solving process enables students to use their creativity in order to solve problems in a logical fashion. The following are the seven steps in the problem-solving process:

- 1. Identify the Problem
- 2. Accept Responsibility for Solving the Problem
- 3. Break the Problem into Parts
- 4. Generate Possible Solutions
- 5. Choose Solution/Make Plan
- 6. Implement Plan
- 7. Evaluate

Benefits of Problems Solving:

- 1. Encourages critical thinking.
- 2. Sharpens predicting skills.
- 3. Increases self-esteem.
- 4. Promotes healthy self concept.
- 5. Merges student's creative powers and ability to follow a process.

The exercises included here are grouped in the following grade level designations:

Primary Grades: Grades K - 2

Intermediate Grades: Grades 3 - 5 or 6

Middle School: Grades 6 - 8 High School & Adult Grades 9 +

Problem-Solving Exercises:

An important step in the problem-solving process is to identify the problem. Exercise 1, below, allows students to practice their listening skills as they define problems in a letter to a fictitious newspaper advise columnist.

EXERCISE 1: Dear M. Problem-Solver

All Grades

PURPOSE:

To identify a problem in simple terms.

MATERIALS:

Paper, pen, crayons

TIME: 45 minutes

Procedure:

- 1. Explain that this exercise is designed to practice identifying a problem.
- 2. Read an example M. Problem Solver letter from the appropriate grade level narrative, below, or select a story, magazine article or narrative description of a social studies issue.
- 3. Instruct students to listen to the letter to M. Problem Solver and to identify the problem or problems within the paragraph. The narrative may have more than one problem; students need to try to identify as

many problems as possible.

- 4. Instruct students to write a letter to "M. Problem Solver" (a fictitious problem-solving columnist at the local newspaper), describing a problem. Instruct students to sign a fictitious name to their letter, as other students will read or describe them later. Primary Grades and Intermediate Grades may draw a picture to depict a problem.
- 5. Collect the papers and re-distribute them (NOTE: Check letters for any inappropriate problem statements).
- 6. Instruct students to read or describe an M. Problem Solver letter, or picture, out loud. Remaining students identify the problem(s) in each description or picture.
- 7. Continue until all the papers are read or described. (Note for Primary Grades: You may choose to read or describe a smaller sample of representative problems).
- 8. As you proceed, challenge the students to summarize the problem in one sentence. Here is a list of questions that will encourage students to respond in one sentence.
- What do you think is the major problem?

- If you had to state one problem that underlies all the others in this letter, what would it be?
- Try to identify the overall problem. What did you come up with?

M. Problem-Solver Narratives:

Primary Grades

Dear M. Problem Solver,

I was with my mom and dad at the mall. I was holding my dad's hand until we came to a toy store. I wanted to go in and my dad said okay. My dad went to the games. I went to the stuffed animals. Dad said to wait for him at the stuffed animals. By the time I had finished looking, Dad still wasn't back. So, I started looking for him and got lost in the mall. There were so many people around I got scared.

Intermediate Grades

Dear M. Problem Solver,

Laura and Bob are good friends of mine. We do a lot of things together. They just cheated in a game we were playing. When they thought I wasn't looking, they took some game money from the bank that wasn't theirs. I'm very upset and don't know what to do. Middle School

Dear M. Problem Solver,

It seems that I'm never able to hand in homework on time. And, when I do hand it in, I always get a poor grade. There are a lot of other things I would rather do instead of homework. When I finally get a chance to do my homework, I'm either too tired or I feel rushed. Besides, I think the amount of homework they give us in school is unfair.

Another step in the problem-solving process is to generate possible solutions to the problem. In the exercises that follow, students brainstorm for possible solutions to a problem.



EXERCISE 2: One Picture is Worth a Thousand Words

PROCEDURE:

Primary & Intermediate Grades

PURPOSE:

To brainstorm solutions to a problem using a visual medium.

MATERIALS:

large paper, colored crayons or markers bulletin board or wall to post pictures

- 1. Create a problem statement for the entire group to solve.
- 2. Instruct each student to draw a picture on the upper half of the paper depicting the problem.
- 3. Instruct students to draw at least three more pictures on the bottom half of the paper depicting possible solutions to the problem.
- 4. Hang the pictures for the entire group to see. (NOTE: Use discretion, do not hang up inappropriate pictures).
- 5. Discuss the picture problem and the possible solutions. Emphasize how the class used the brainstorming method to gather many solution ideas.



EXERCISE 3: Shed Some Light

Intermediate Grades - Adult:

PURPOSE:

To brainstorm possible solutions to a given problem.

MATERIALS: N/A

TIME: 45 Minutes

PROCEDURE:

- 1. Instruct students to generate a list of problems. State each problem in one or two sentences.
- 2. Write each problem on the black board in a one sentence statement.
- 3. Define and describe brainstorming and instruct students to brainstorm solutions to each problem as an entire class.
- 4. Summarize and discuss solutions as well as the concept of brainstorming.

How to Brainstorm

- 1. Do not judge or criticize other people's comments!!!
- 2. Generate as many comments as possible.
- 3. Modify and adapt others' comments.
- 4. Anything Goes!! Say whatever comes to mind.
- 5. Write down all comments.

The next step in the problem-solving process is to select one solution and to create a general plan to carry it out. In the following exercises students use the voting and ranking methods to select a solution, they then create a general plan of action.

EXERCISE 4: Bravo! My Masterpiece

PROCEDURE:

Primary & Intermediate Grades

PURPOSE:

To use voting skills to select a solution.

To list a set of goals for carrying out the chosen solution.

MATERIALS: N/A

TIME:Primary Grades 15 Minutes

Intermediate Grades 30 Minutes

- 1. (Use pictures from Exercise 2, above) State the problem and review the picture-solutions posted in the room. If possible, group solution pictures into categories. Discuss the consequences of each solution.
- 2. Students, with eyes closed, vote which solution they feel is best.
- 3. With eyes open, discuss the chosen solution. Discuss the concept of voting as one way to select a solution.
- 4. As a class instruct students to generate a list of steps involved in carrying out the solution. This list serves as a series of general goals or steps for the plan. See "How to Set Goals" box below.
- 5. Write the goals on the back of the picture solution students chose.
- 6. Review the plan.

HOW TO SET GOALS

- 1. Ask: "What do I have to do to achieve this solution?
- 2. List general steps to implement the solution.
- 3. Each step listed becomes a goal.

Example

Problem: I lost a friend's new book.

Solution: I'll replace the book.

Goals: 1. I'll earn money to replace the book

- 2. I'll shop around for the book.
- 3. I'll give the book to my friend

EXERCISE 5: The Grand Finale

PROCEDURE:

Primary Grades - Adult

PURPOSE:

To review the problemsolving process.

MATERIALS: N/A

TIME:45 MINUTES

- 1. Select a problem from an exercise in this activity guide.
- 2. Review the steps in the problem-solving process.
- 3. Instruct students to portray the problem-solving process in comic book form. The main character must go through the problem-solving process. Suggestion: Create one or two panels for each step in the problem-solving process. Be sure students label each step of the problem-solving process.

OR

- 1. Divide class into small groups. Assign each group a problem.
- 2. Instruct each member of the group to depict one of the seven problem-solving steps in a single comic panel.
- 3. Each group posts their panels out of order.
- 4. As a class, students help arrange the panels into a logical problem-solving sequence.
- 5. Repeat the procedure until all groups have had the chance to present their process.