

# LEAP!

## LEarning About Problem Solving

### Welcome to LEAP for Grades 1-5

Welcome to LEAP – Learning About Problem Solving. This component is designed to introduce creative problem-solving skills as a part of the curriculum, in enrichment groups, or in other clubs or groups. LEAP starts students on the path to gain the life-skills needed to become effective citizens, using critical and creative thinking skills. The program allows students and teachers to learn the Creative Problem Solving process in a simplified format, taking into consideration the students' comprehension and skill levels.

### Why LEAP?

- Simplified model: LEAP teaches a systematic model for problem solving that is less complex than the competitive model used in grades 4-8. It parallels almost any other problem solving model you can find.
- Authentic thinking skills: Students learn to use both critical thinking and creative thinking to make informed choices and to address complicated situations. Students learn how to think, not what to think.
- Collaborative experience: Teachers model the problem solving process and guide students to work together in a collaborative, non-threatening manner towards a common goal.
- Flexible options: LEAP can be implemented as an extension to curriculum units, in exploratory classes, in enrichment groups, with English Language Learners, in out-of-school clubs or groups, and more.



### Who can participate in LEAP?

Grades 1-5: LEAP is intended for students in grades 1-5. It could be used with older students in certain situations, for example, English Language Learners of any age.

Adjust for age level: For younger students in grades 1-2, most of the work will be done through large group discussion, with the teacher recording the students' ideas. Older students could still participate through large group discussion, or could work in groups of 3-4 students with the guidance of the teacher, doing some of their own writing.

### Registration and Feedback for LEAP

Register online: You can register for LEAP at [wisfps.org](http://wisfps.org). Go to the Registration and Fees page and click on the Registration Form. One registration is enough to get you started. Each teacher using the materials should have a separate registration.

Submit for feedback: Each registration allows you to submit one student LEAP booklet twice during the year, in November and March. You may request other dates if you wish. Trained evaluators will provide feedback on the work. Submitting for evaluation is not required; you may continue to use the materials with as many students as you wish.

## How does LEAP work?

Based on a situation with a topic: The impetus for the problem solving work in LEAP is called a Challenge Scene. Each scene focuses on a topic. Students may or may not work on learning more about the topic.

Five step process: Students learn to apply a 5-step problem solving process to the situation in the Challenge Scene. (In Competitive Global Issues Problem Solving, step 4 is divided for a total of 6 steps.)

- Step 1 – Identify Challenges
- Step 2 – Select an Underlying Problem
- Step 3 – Produce Solution Ideas
- Step 4 – Generate and Apply Criteria
- Step 5 – Develop an Action Plan



## The Challenge Scenes

Short scenario: A Challenge Scene is a short scenario that establishes the time, place, people, and issues related to the topic explored. It is important for the students to read or listen to all the information presented carefully. Some of the problems or challenges are specifically stated, and some are implied. As in real-life, not everything is clear-cut. Students will develop the ability to make connections between what is actually stated and what might happen. This part of the process stimulates growth in listening skills, reading skills, and critical and creative thinking.

Many options: You will be able to choose from many Challenge Scenes. Select a scene to fit your curriculum, students' interests, or school/community issues – or write your own!

## Teaching the Problem Solving Process

Adjust to student skills: This document includes instructions for working through the problem solving process with your students. The work is recorded in the student LEAP Booklet. When introducing the process and the booklet pages to the students, you should model the use of each page of the LEAP Booklet and record student responses. Copies of each booklet page can be made and handed out as a reference for each step. For younger students, you may continue to record all of the work. Students who are able to write fairly well may complete parts of the booklet themselves as they become more experienced. Teach one step at a time – modeling, discussing, and adapting as student needs emerge.

Templates for the problem solving steps: The LEAP Booklet includes templates for writing each of the problem solving steps. These include brainstorming jotboards, “fill-in-the-blank” sentences, selecting ideas from a list, and answering specific questions.

More detailed instructions: More detailed instructions can be found in two manuals available at [fspimart.org](http://fspimart.org) – Action-Based Teacher Manual for Primary (grades 1-3) and Action-Based Teacher Manual for Junior/Middle (grades 4-5). These manuals give very specific lesson plans for each step of the process that are based on fairy tales. (Action-Based Problem Solving is a former name for LEAP – Learning About Problem Solving.)