

**WISCONSIN
Future Problem Solving Program**

**FPS Program
Basics**



**Information for Coaches
August 2018**

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Welcome to

Wisconsin Future Problem Solving

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Middleton, Wisconsin 53562*

608-824-9695

FAX 888-959-2383

wisfps2@charter.net

www.wisfps.org

Dear Educator,

Thank you for your interest in Wisconsin Future Problem Solving. Participation in FPS will be of great benefit to your students. Through FPS, students develop skills of teamwork, communication, research, critical and creative thinking, analysis, synthesis, and evaluation. They will learn to apply these wonderful skills to situations that are futuristic, but oriented to real life.

Today's students will spend most of their lives in the 21st century. As society changes more quickly now than ever before, we face the awesome burden of preparing today's students for the uncertainties of the new millennium. We cannot provide students with all the information they will need to survive in the future, but we can help them develop the thinking skills necessary to adapt to a changing world. The Future Problem Solving Program embraces that challenge.

Best wishes to you and your students as they become involved in Future Problem Solving. FPS is challenging, but the results are well worth the effort. Please call if I can be of any help.

Sincerely,

Lynn Buckmaster, Affiliate Director

For questions call Lynn at 608/824-9695

Wisconsin FPS Program Components

These are the components of the Future Problem Solving Program. Details of each are on subsequent pages.

Competitive Global Issues Problem Solving

Participants: Teams (or individuals) in grades 4-12
Division: Junior (4-6), Middle (7-9), Senior (10-12), Adult (post HS)
Product: Problem solving booklet written for each topic
Levels: 2 practice problems & qualifying problem at school
State Bowl competition
International Conference competition

Rookie Global Issues Problem Solving (Non-Competitive)

Participants: Students in grades 4-12
Divisions: Junior (4-6), Middle (7-9), Senior (10-12)
Product: Shorter problem solving booklet written for each topic
Levels: 3 problems completed at school

Bridge to Global Issues Problem Solving (Non-Competitive)

Participants: Students of first-year trained coaches in grades 4-12
Divisions: Junior (4-6), Middle (7-9), Senior (10-12)
Product: 1 *Trilogy* unit and 2 simplified booklets
Levels: 3 problems completed at school with flexible timeline & choice of topics

Competitive Community Problem Solving

Participants: Teams and individuals in grades 4-12
Divisions: Junior (4-6), Middle (7-9), Senior (10-12)
Product: 1 or 2-year problem solving project submitted
Levels: State Bowl presentation by winners
International Conference competition



Competitive Scenario Writing

Participants: Individual students in grades 4-12
Divisions: Junior (4-6), Middle (7-9), Senior (10-12)
Product: 1500 word futuristic short story submitted
Levels: State Bowl presentation by winners
International Conference competition and/or presentation

Competitive Scenario Performance

Participants: Individual students in grades 4-12
Divisions: Junior (4-6), Middle (7-9), Senior (10-12)
Product: 4-5 minute futuristic storytelling video submitted
Levels: State Bowl presentation by winners
International Conference competition and/or presentation

Action-Based Problem Solving (Non-Competitive)

Participants: Students in grades K-9
Divisions: Primary (K-3), Junior (3-6), Middle (6-9)
Product: Simplified problem solving booklet written for each topic
Levels: 2 problems completed at school



Global Issues Problem Solving

What is Global Issues Problem Solving?

Global Issues Problem Solving (GIPS) is a competitive component of Future Problem Solving Program International (FPSPI). It is a team or individual activity in which participants research a series of global topics and learn a six-step creative problem solving process. In competition, participants apply their knowledge and the problem solving process to address in writing an imagined situation set in the future called a Future Scene. Topics for the Future Scenes include global issues in the areas of business & economics, science & technology, and social & political areas. Each year five topics are addressed: two practice problems, a qualifying problem, an affiliate competition (State Bowl) problem, and an international competition problem.



Why Global Issues Problem Solving?

Future Problem Solving Program International (FPSPI) provides the tools and strategies students need to face the challenges of today and the future. What better way to prepare students than by guiding them to learn in depth about topics of global importance, to systematically address related complex situations, and to evaluate multiple solutions in order to best address the situation through an Action Plan? Those involved in Global Issues Problem Solving practice powerful problem solving skills using critical and creative thinking. Participants improve their communication skills through collaboration and learning to write concisely and with a specific focus in mind. The non-fiction/informational text reading skills, writing skills, and teamwork collaboration skills address many academic standards identified as critical skills by Common Core, STEM, 21st Century Skills, and NAGC (Nat'l Association for Gifted Children). The 4Cs – collaboration, communication, critical thinking, and creative thinking are infused into FPS and strengthened with membership in Partnership for 21st Century Learning (P21) www.p21.org.

Who can participate in Global Issues Problem Solving?

Recent Topics in Business and Economics

Air Transportation
Counterfeit Economy
Debt in Developing Countries
Fund-raising and Charity Giving
Global Workplace
Pharmaceuticals
Trade Barriers
Philanthrocapitalism

Students and adults may participate in competitive Global Issues Problem Solving in four divisions: Junior (grades 4-6), Middle (grades 7-9), Senior (grades 10-12), and Adult (post high school). Wisconsin also offers options for non-competitive participation as young as kindergarten, including Action-Based Problem Solving, our Rookie division, and curricular options. Contact us at wisfps2@charter.net for more information.

What is the composition for GIPS groups?

Global Issues Problem Solving is for individuals and teams of four. In some cases a team may be fewer than four. Coaches may work with multiple teams and individuals. The composition of the team does not have to be the same for each practice problem. However, in most cases the team composition must remain the same from the qualifying problem through the international level. Teams may consist of students from any grade in the division. Students may compete in a division higher than their grade level, but not in a division lower than their grade level.

Recent Topics in Social and Political Areas
Green Living
Disappearing Languages
Impact of Social Media
Recovering from Natural Disaster
Propaganda
Social Isolation
Identity Theft
Criminal Justice System

How can I get started with my students?

Training in the problem solving process is important for coaches of Global Issues Problem Solving teams and individuals. We hold workshops in the problem solving process. If you are not able to attend a workshop, you can find many resources for Global Issues Problem Solving at fspimart.org. Action-Based Problem Solving materials teach a simplified process for younger or beginning students. See the “GIPS Essential Publications” pages for information focused on Global Issues Problem Solving. The GIPS Key Tips for Coaches provides further information about each step of the problem solving process. Contact wisfps2@charter.net for more information.

Recent Topics in Science and Technology
Desertification
Biosecurity
Genetic Testing
Ocean Soup
Water Quality
Energy of the Future
Biosecurity
Cloud Storage

How do I register students for Global Issues Problem Solving?

Visit our website for registration and submission materials at www.wisfps.org. We may be able to put you in touch with experienced GIPS coaches. Simply contact us at wisfps2@charter.net.

How are GIPS booklets evaluated?

GIPS booklets are scored by trained evaluators who carefully read and assess students’ problem solving efforts. Emphasis is placed on providing teams with feedback that will help them improve. Competitive booklets consist of 12 written pages covering the six steps of the problem solving process. First place teams and individuals in each division at the Affiliate Bowl move on to the International Conference competition. We highly recommend that coaches consider becoming evaluators! Coaches who do so continually tell us that evaluating clarifies the process and helps them become better coaches.



The 6-Step Problem Solving Process



All of the problem solving work in FPS is based on the Creative Problem Solving (CPS) process, sometimes also referred to as a complex problem solving process. This is a powerful process that can be applied to many complex situations in educational, business, community, and personal settings.

1. Identify Challenges (16)

- Generate issues, concerns, and problems, applying background knowledge to the Future Scene
- Consider major issues and categories of problems in order to think of more challenges
- Select the sixteen best challenges
- Write the sixteen challenges clearly and concisely, showing cause and effect and tying directly to the Future Scene

2. Select an Underlying Problem

- Consider the major issues in the sixteen challenges
- Select an issue, one that will have a major impact on the Future Scene, for the focus of the underlying problem
- Be forward-looking and proactive, not regressive and reactive, in developing the underlying problem
- Write the underlying problem in correct format
- Indicate a desired action to be taken, a purpose for the desired action, and parameters tying the problem to the Future Scene

3. Produce Solution Ideas (16)

- Generate multiple solutions to the underlying problem
- Think futuristically and consider the use of technological advances
- Select the sixteen best solution ideas

- Check each solution for its relevance to the underlying problem
- Write the sixteen solutions clearly
- Elaborate by telling who will implement the solution, what action will be taken, and how or why the action will be taken

4. Select Criteria (5)

- Generate possible criteria that could be used to evaluate the solutions
- Consider the underlying problem and the Future Scene in developing criteria
- Select five important criteria
- Write criteria in question format, with a superlative and in the desired direction



5. Apply Criteria

- Select the eight most promising solutions to include in the grid
- Rank the solutions based on each of the criteria separately
- Identify the best solution as the one with the highest number of total points

6. Develop an Action Plan

- Plan how the best solution can be implemented
- Describe the actions and steps of the plan
- Make clear how the plan will solve the underlying problem and impact the Future Scene

Evaluation Criteria for Global Issues Problem Solving

Step 1 / Challenges

The marks:	Y	<i>Yes!</i> This is a possible challenge.
	P	<i>Perhaps</i> this is a challenge. Explain more completely.
	W	<i>Why</i> is this a challenge? The evaluator cannot see the connection.
	S	This is a <i>solution</i> idea instead of a challenge.
	D	This challenge is a duplicate – too similar to another one.

Fluency measures the quantity of *Yes* challenge ideas.

Flexibility measures the number of different categories covered by the *Yes* challenges.

Clarity measures the quality of the writing and the cause-effect reasoning in the challenges.

Originality is awarded for innovative ideas not generated by most other teams.



Step 2 / Underlying Problem

Condition Phrase, Stem+Key Verb Phrase, Purpose, and Parameters evaluate the quality of the required elements in the UP.

Focus looks at the scope of the UP and whether it is too broad or too narrow.

Adequacy judges the importance of the UP and the impact on the Future Scene.

Step 3 / Solution Ideas

The marks:	R	This is a <i>Relevant</i> solution that addresses the Key Verb Phrase of the UP and supports the Purpose.
	P	<i>Perhaps</i> this is a solution. Explain more completely.
	W	<i>Why</i> is this a solution? Does not seem to address the KVP and Purpose.
	D	This solution idea is a duplicate – too similar to another one.

Fluency measures the quantity of *relevant* solution ideas.

Elaboration/Clarity rates the degree to which solutions are appropriately elaborated and measures clarity and conciseness of writing.

Flexibility rates the number of different categories covered by the *relevant* solutions.

Originality is awarded for innovative ideas not generated by most other teams.

Step 4 and 5 / Criteria and Grid

Correctly Written judges the correct structure of a single standard, superlative, and desired outcome.

Relevance judges whether the criteria are generic to any UP or specific to this UP.

Correctly Used judges to what extent the grid is completed accurately.

Step 6 / Action Plan

Relevance measures the relationship of the plan to the Underlying Problem KVP and Purpose.

Effectiveness evaluates how well the plan successfully solves the UP.

Addressing Criteria measures the degree to which a team has explained how the Action Plan meets criteria.

Impact determines to what extent the plan will have a positive impact on the Future Scene.

Humaneness measures the productive, positive potential of the plan.

Development of Plan measures how well a comprehensive, workable plan has been presented.

Overall

Research Applied rates the application of research shown throughout the booklet.

Creative Strength/Futuristic Thinking measures evidence of creativity and futuristic concepts used throughout the booklet.

Overall Expression of Ideas measures the clearness and conciseness of expression throughout the booklet.

Competitive Global Issues: Overview of the Year

For each portion of the year, students research and study a topic area, then complete a problem solving booklet based on a Future Scene that is written about the topic of study. A team of evaluators reads the booklets and provides extensive written feedback focused on improvement of writing and thinking skills.

Practice Problem 1

Topic for study:	Topic is new each year
Steps completed:	1-3: Challenges, Underlying Problem, Solutions
Booklet postmark date:	Late October
Team size:	3-5 students
Working conditions:	Flexible, based on educational needs of students

Practice Problem 2

Topic for study:	Topic is new each year
Steps completed:	All 6
Booklet postmark date:	Late December
Team size:	3-5 students
Working conditions:	Flexible, based on educational needs of students



Qualifying Problem (3)

Topic for study:	Topic is new each year
Steps completed:	All 6
Booklet postmark date:	Mid February
Team size:	4 or fewer students
Working conditions:	To qualify for state, "bowl" conditions must be met -- 2 consecutive hours, unassisted, with a maximum of 4 students; teams may also elect to be evaluated non-competitively if they are not ready for bowl conditions

State Bowl

Participants:	Top teams & Coach's Best on qualifying problem are invited
Topic for study:	Topic is new each year
Steps completed:	All 6
Team size:	4 or fewer students
Location/Dates:	Mid to late April, Thursday through Friday, Wis hotel
Working conditions:	Same as Qualifying Problem, but on-site

International Conference

Participants:	First place teams from State Bowl are invited
Topic for study:	Topic is new each year
Steps completed:	All 6
Team size:	4 or fewer students
Location/Dates:	Early June, Thursday through Sunday, US university
Working conditions:	On-site, same as State Bowl

Rookie GIPS Teams: Overview of the Year

Rookie teams follow the same topics and basic schedule as Global Issues competitive teams, but write a shorter booklet with only 10 challenges and 10 solutions. The recommended team size is 3-6 students, but there are no hard-and-fast “rules.” Coaches may assist students as they feel appropriate, and time limits are flexible. If teams are working towards competitive participation, then reducing coach assistance through the year and trying a 2-hour time limit on the 3rd problem more closely simulates competitive conditions.

Rookie Booklet Schedule (Non-Competitive)

September-October

- ◆ Learn Steps 1-3 of problem solving process (Process Pointers for Students booklet helpful in teaching the writing skills needed.)
- ◆ Research background information on **Topic 1**
- ◆ Use Future Scene from competitive program
- ◆ Complete Short Booklet problem solving, steps 1-3

Late October

- ◆ Postmark deadline for booklet. Evaluations will be returned within 2-3 weeks.

November-December

- ◆ Learn Steps 4-6 of problem solving process
- ◆ Research background information on **Topic 2**
- ◆ Use Future Scene from competitive program
- ◆ Complete Short Booklet problem solving, steps 1-6

Late December

- ◆ Postmark deadline for booklet. Evaluations will be returned within 2-3 weeks.

January-February

- ◆ Review Steps 1-6 and refine writing skills
- ◆ Research background information on **Topic 3**
- ◆ Future Scene will be mailed in late January
- ◆ Complete Short Booklet problem solving, steps 1-6

Mid February

- ◆ Postmark deadline for booklet. Evaluations will be returned within 2-3 weeks.



BRIDGE to Global Issues Problem Solving

Getting started in Global Issues Problem Solving can be a bit daunting. The Bridge program provides a gradual introduction to GIPS for your work with students. Once you have “crossed the Bridge,” you will be better prepared to jump into the regular Rookie or Competitive program the next year.



BRIDGE is for...

- Coaches who have completed a TRAINING WORKSHOP
- Who are in the FIRST YEAR of working with students
- Who would like to work at their OWN PACE
- For ONE YEAR only

REGISTRATION FEE OF \$70 INCLUDES...	REGISTRATION NOTES
<ul style="list-style-type: none"> • A copy of the appropriate level of the Coaching Trilogy <ul style="list-style-type: none"> ○ Stepping Stones grades 4-6 ○ Puzzle Pieces grades 6-9 ○ Building Blocks grades 9-12 • Materials for two practice problems • Evaluation for one booklet for each of two practice problems • Mentoring assistance as needed from an assigned mentor 	<ul style="list-style-type: none"> • If we have a record that you have already purchased a copy of one of the Trilogy publications, then you may register for \$30. • You may use the BRIDGE program with as many students as you want. With one registration you will select one booklet to submit for each evaluation to use as an example with the students. • If you want to send more than one booklet for evaluation each of the two times, each additional registration is \$30. Registration for additional booklets must be done at the beginning, when you register for the Bridge program.



THE BRIDGE PROGRAM

- PART 1 – Introduce the problem solving process with ten 20-minute lessons
- PART 2 – Apply the process to a short Future Scene and submit work for evaluation
- PART 3 – Work on research and apply the process to a full-length Future Scene and submit work for evaluation



BRIDGE

Details

PART 1 – Ten 20-minute lessons

- Work through the ten lessons in the Trilogy publication to introduce your students to the problem solving process. Each lesson should take approximately 20 minutes. It is recommended that you complete one or two lessons at a time with your students.
- Feel free to contact your mentor at any time for questions or assistance.
- Notify the Wisconsin FPS office when you have completed the lessons.

PART 2 – Choose from 3 short Future Scenes and submit work for evaluation

- You will be sent three short Future Scenes and a Guided Booklet for recording student work. These scenes will not require research.
- Select ONE of the scenes to use with your students, working in teams of 3-5.
- Using your Trilogy work as a guide, work with the students to complete the problem solving booklet.
- Submit the booklet for evaluation. You will receive the completed evaluation within 7-10 days.

PART 3 – Research and work with a full-length Future Scene

- Select from three past Global Issues topics. You will be sent a full-length Future Scene, a chapter that includes research summaries on the topic, a few process activities related to the topic, and a Rookie Booklet for recording student work.
- Using suggestions from the Trilogy Facilitator's guide, work with students on topic vocabulary and learning as much as possible about the topic.
- Practice the steps of the process.
- Guide students through the problem solving process applied to the Future Scene, allowing them to work independently as much as possible.
- Submit the booklet for evaluation. You will receive the completed evaluation with 7-10 days.

Congratulations, Coach!

You have reached the end of the Bridge!
You are ready for Rookie or Competitive
Global Issues Problem Solving!



GIPS Essential Publications

Most coaches can't get along without these important resources from www.fpspimart.org.

FPSPI Association Fee 2018-19



Join this official group to support FPSPI and receive information for **all** FPS Components from the International Office:

- Official guidelines and documents
- Unique supplemental materials including tips and examples

\$30 fee for electronic download of supplemental materials and participation throughout the year through various offerings!

Readings, Research, and Resources (RR&R)

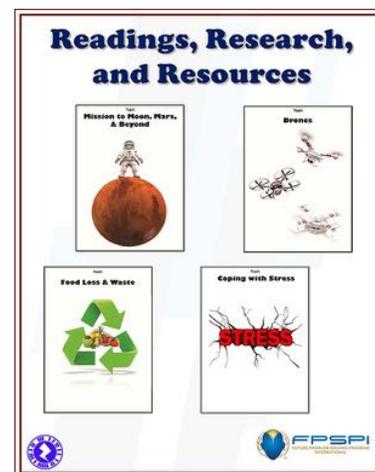
Provides essential background information for coaches and students

For each of the first four topics of the year, the guide includes the following publications:

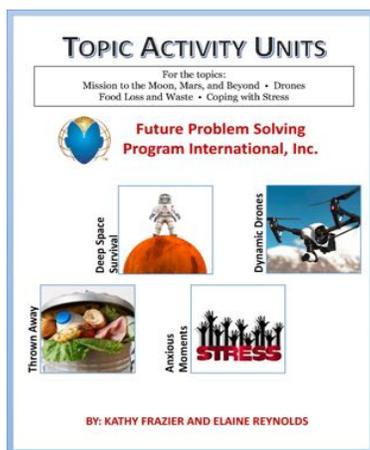
- Themes and Concepts
- Terms and Definitions
- Overview
- Questions for Discussion
- Internet Resources
- Article Summaries

(Note: No chapter is provided for the International Competition topic.)

\$50 electronic/\$55 binder ready



Topic Activity Units (TAU)



Provides a wide variety of instructional activities for preparation on the first four topics of the year

Can be used as a unit of study or activities may be used as desired for particular steps within the process

Build the following skills through various activities:

- Researching and analyzing the topics
- Analyzing & writing the process steps

\$60 electronic/\$65 binder ready

Combos

Combo #2 – RR&R and Q&A: \$80 electronic, \$85 binder ready

Combo #3 – RR&R and TAU: \$90 electronic, \$105 binder ready

Combo #4 – RR&R, TAU, and Q&A: \$125 electronic, \$140 binder ready

More GIPS Essential Offerings

Available at www.fpspimart.org

Coach's Handbook

A comprehensive overview of Global Issues Problem Solving
A great resource for beginning coaches:

- Six-step creative problem solving process
- Examples for each step
- Tips on teaching
- Exercises for improving team performance

\$33 electronic/\$35 binder ready



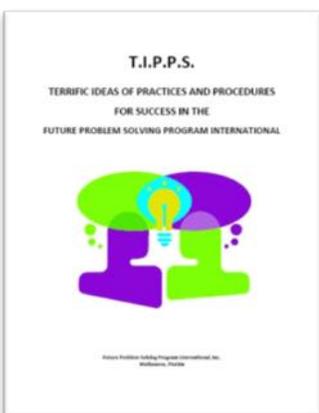
TIPPS – Terrific Ideas of Practices & Procedures

A collection of ideas, strategies, and techniques contributed by successful coaches

Addresses pertinent areas:

- Establishing and maintaining a program
- Strengthening teams
- Strengthening research skills
- Strengthening the problem solving process
- Strengthening creative, critical, and futuristic thinking
- Integrating problem solving into the curriculum, and MORE

\$38 spiral bound book



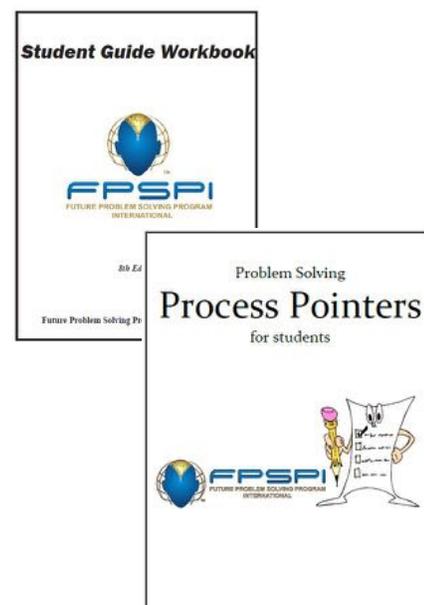
Problem Solving Process Pointers & Student Guide Workbook

Written for students, these “workbooks” provide plenty of practice

- *Student Guide Workbook* introduces basic generating and focusing tools and guides beginning students through the six-step creative problem solving process. Explanations and examples are included.
- *Problem Solving Process Pointers for Students* includes hints for reading a Future Scene, the “anatomy” of each problem solving step, hints for thinking and writing, “build your own” guides, and writing practice.

\$10 Process Pointers/\$7 Student Guide Workbook

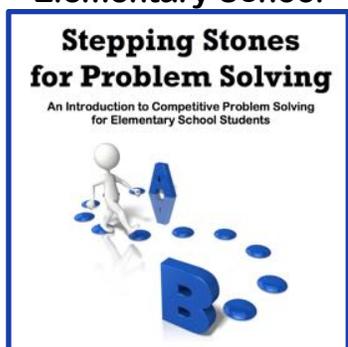
**NOTE: You may purchase Process Pointers from Wisconsin FPS for \$5.00.
Go to the sales page on our website at wisfps.org**



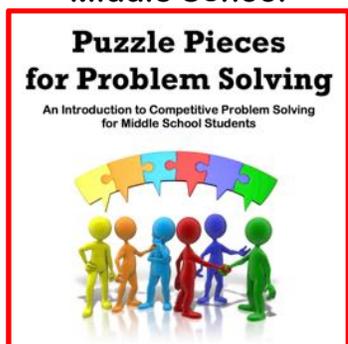
Coaching Trilogy for Global Issues Problem Solving

Developed by Wisconsin FPS Affiliate Directors, this trilogy of coaching materials provides a systematic introduction to competitive problem solving for elementary, middle, and high school students. Each publication includes student materials to introduce the process, supplementary materials with examples for each step of the process, and a facilitator's guide with coaching suggestions for the year – Practice Problem 1, Practice Problem 2, Qualifying Problem, and State Bowl.

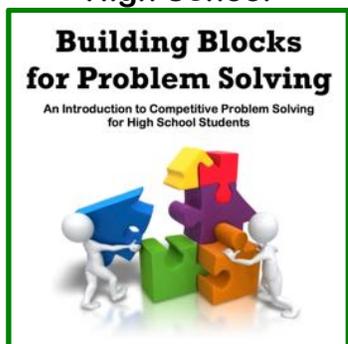
Stepping Stones for Problem Solving Elementary School



Puzzle Pieces for Problem Solving Middle School



Building Blocks for Problem Solving High School



Contents

Student Materials: Ten one-page 20-minute lessons to introduce the problem solving process

- 1) Future Scene
- 2) Brainstorm Challenge Ideas
- 3) Write Challenge Ideas
- 4) Brainstorm Action Goals
- 5) Complete the Underlying Problem
- 6) Brainstorm Solution Ideas
- 7) Write Solution Ideas
- 8) Brainstorm Criteria Ideas
- 9) Rank Solution Ideas with Criteria
- 10) Brainstorm Ideas for an Action Plan

Problem Solving Possibilities: Supplementary materials for each of the ten lessons. Includes examples and ideas for facilitator/teacher to review prior to working with students, and to use as reinforcement with students *after* they have completed each lesson.

Facilitator's Guide: Coaching instructions and suggestions for the entire competitive year

- Instructions for the ten lessons
- Preparation suggestions for each problem
 - Developing background knowledge
 - Practicing the process
 - Timelines for writing the booklets
- Hosting a Day Away for Problem 1 (SS, PP)
- Futurizing ideas (PP, BB)
- Connecting research (BB)
- Support materials
 - Category list
 - Writing prompts
 - Label Templates

Purchase on the SALES page at www.wisfps.org!
\$40 per publication or \$100 for three, electronic format
Each adult using the materials must have a purchased copy

Future Problem Solving Program International Community Problem Solving Competition

What is Community Problem Solving?

Community Problem Solving (CmPS) is a team or individual activity in which students identify real problems in a community – a school, local, state, national, or even global community, and implement real solutions. Students use the skills of the problem solving process as they work on their project. However, since real life is not always as organized as an academic exercise, the process may not proceed neatly from step to step, and projects may not be completed by the time they must first be submitted. CmPS can be pursued as an extracurricular activity or as part of the regular school curriculum, and projects can be one or more years in length.



Why Community Problem Solving?

Future Problem Solving Program International (FPSPI) provides the tools and strategies students need to face the challenges of today and the future. What better way to prepare students than by teaching them to think systematically about problematic situations, gather information to understand the situation, and evaluate multiple solutions in order to best

address the situation? Students involved in Community Problem Solving learn powerful lessons about creating change, dealing with local authorities and organizations, and making a positive impact. The implementation of real solutions gives students a strong sense of accomplishment and helps them see the practical applications of the processes and skills that they have been learning. CmPS participation may fulfill service-learning requirements, although CmPS projects are typically more extensive. FPSPI components are aligned with national curriculum standards, Common Core standards, and the National Association for Gifted Children (NAGC) standards.

Who can participate in Community Problem Solving?

Students may participate in Community Problem Solving in three divisions: Junior (grades 4-6), Middle (grades 7-9), and Senior (grades 10-12). Having a background in the Global Issues or Action-Based components of FPSPI is a great start for students in CmPS, but it is not required. If students have not been involved with these components, they do need to learn the problem solving process as part of their community problem solving experience.

**2017 Beyonder Award
“Don’t Sugar Coat It”
Johnson Central High School,
Kentucky**

“This project was designed to spread awareness to the entire community about the dangers of diabetes. Our community suffers with limited knowledge of diabetes, healthier eating habits, and simple exercise habits. Hosting diabetes walks, informing members of our community about diabetes, and helping people make healthier lifestyle choices is just a few things we have done to help our community. Our primary goal is to raise functionality for people who suffer from the dangers of diabetes.”



How do students participate in CmPS?

Individuals or teams of any size may participate in Community Problem Solving. For a team, you may want at least 3 or 4 students, and for large projects groups of up to 15 are possible. You may have more than 15 students involved; however, please note that a maximum of 15 students may participate in the CmPS competition at the International Conference if the team qualifies. Since CmPS projects are long-term activities, lasting up to a year or more, students need to be committed to following through with the activity. Complex projects may take quite a bit of organization, with tasks divided among the participants.

How can I get started with my students?

Training in the problem solving process is important for coaches of Community Problem Solving teams and individuals. We are willing to meet with you and your students to help get you started. You can find resources for Global Issues Problem Solving or Action-Based Problem Solving at fspimart.org. Both of these components are focused on teaching the problem solving process. See the “CmPS Essential Publications” page for information focused on Community Problem Solving and the “Tips for Coaches” pages for ideas on working with your students in CmPS.

How do I register students for Community Problem Solving in Wisconsin?

CmPS Coach and Project information, entry forms and due dates are available at wisfps.org. Wisconsin also has a supplement to the project requirements. Contact wisfps2@charter.net for this information. Let the office know if you would like to be put in touch with an experienced CmPS coach.

How are CmPS projects evaluated?

CmPS projects are scored by trained evaluators who consider all elements of the project. In Wisconsin, these elements include a six-page written report and supporting documentation of an addendum and a scrapbook. There are additional requirements for projects that qualify for international level competition. First place projects of high quality move on to the international competition. If deemed exceptional, second place projects at the affiliate level may be submitted for consideration for an international invitation.

Where can I find a sample project to view?

An example of a written report, addendum, and the team’s PSA media presentation can be found at fspsi.org (What We Do menu, Competitive Components, Community Problem Solving).

2017 Middle Individual Grand Champion Project SharkMate The Illawarra Grammar School, Australia

“As fear of sharks pervades the public psyche, the senseless culling and slaughter of sharks has a perverse level of acceptance in society today. With one hundred million sharks killed every year globally, their future existence would seem to be precarious at best, and the delicately balanced ecosystem of our oceans is ultimately at risk.

SharkMate can alleviate fear of attack by providing a likelihood factor of shark presence to users of our waterways. This app will allay fear and assist in preventing the needless destruction and slaughter of wildlife in the world’s oceans and ultimately help protect our ecosystems.”

CmPS Evaluation Information

Project Categories	<p>At the international level, projects are placed within a category for evaluation. Teams may indicate their choice of category; in some cases they may be asked to indicate their first, second, and third choice of category. There must be at least 5 teams in a category to form an evaluation group. If there are fewer than 5, those projects will be assigned to another category. Individual projects will be placed in categories if there are more than 8 entries in a division.</p> <ul style="list-style-type: none"> • Civic/Cultural Concerns • Education Issues • Environmental Concerns • Health Concerns • Human Services Issues
Use of Categories in Evaluation	<p>In Wisconsin, CmPS entries are evaluated in one group per division, not in categories.</p>
Affiliate Evaluation	<p>At the Affiliate level in Wisconsin, scoring is based on the written report, the addendum, and the scrapbook. Most projects are invited to give an oral presentation at the Wisconsin FPS State Bowl in April. This presentation and a table-top display at State Bowl are required for advancement.</p>
International Evaluation	<p>There are two parts to the evaluation process at the International level.</p> <p><u>Preliminary scoring</u> is done prior to the International Conference.</p> <ul style="list-style-type: none"> • Written Report: Project Overview • Written Report: Implementation of Plan • Addendum <p><u>On-site scoring</u> is done at the conference.</p> <ul style="list-style-type: none"> • Written Report: Project Outcomes • Scrapbook/Portfolio • Media Presentation • Display • Interview <div style="text-align: right;">  </div>
Grand Champion Awards	<p>At the International Conference and in some larger affiliates that evaluate multiple categories of CmPS projects, a grand champion for the division will be determined from the first place winners in each category. Once the grand champion is determined, the places for other winners in that category are moved up in placement.</p>
Beyonder Award	<p>At the International Conference, one Beyonder Award across all divisions may be given. Dr. E. Paul Torrance coined the word “Beyonder” to describe projects that “outdistance the others so far that they are not even on the same scale.” Team or Individual CmPSers who have demonstrated an exceptional depth, passion, and commitment in the project that goes above and beyond what would normally be expected of student(s) in the grade level division are considered for the Beyonder Award.</p>

Community Problem Solving Essential Offerings

Available at www.fpspimart.org

FPSPI Association 2018-2019 (Available September 1, 2018)



Join this official group to support FPSPI and receive information for **all** FPS Components from the International Office:

- Official guidelines and documents
- Unique supplemental materials including tips and examples

\$30 fee for electronic download of supplemental materials

CmPS: A “Real World” Experience

- A reference for learning more about all areas of CmPS and how to achieve successful results
- Tips and ideas for CmPS projects



\$35 electronic/\$40 binder



CmPS 2017 International Champions

Beyonder, Grand Champion, and First Place projects at the 2017 International Conference. Includes the following items applicable for all divisions:

- Project Reports
- Project Addendums
- Evaluations
- Presentations

\$40 electronic/\$50 binder

2018 International CmPS Conference Grand Champions are available separately by division for **\$10 each (electronic only)**, as is the 2018 Beyonder Award.

Creative and Critical Thinking Tools for CmPS

This publication clarifies the steps of the problem solving process as they apply to CmPS. For each of the problem solving steps, a variety of creative thinking tools (G for “generating”) and critical thinking tools (F for “focusing”) are provided. Each of the thinking tools includes a description and directions for use, a completed example related to Community Problem Solving, and a blank template for use with your students.

\$48 electronic/\$53 book

Creative & Critical Thinking Tools for Community Problem Solving

Infusing Problem Solving Skills into CmPS



Future Problem Solving Program International, Inc.

NOTE: Purchase from Wisconsin on the Sales page at wisfps.org for \$40

Wisconsin Future Problem Solving Scenario Writing Competition



What is Scenario Writing?

Scenario writing is an individual competition in which students develop short stories of 1500 words or less and related to one of five topics for the year. The story is set at least 20 years in the future and is an imagined but logical outcome of actions or events taking place in the world today. It is a prediction of the future and is written as though the future were the present. A winning scenario example is found on FPSPI's website at www.fpspi.org at the Scenario Writing component tab.

Why Scenario Writing?

To prepare students for the challenges of the 21st century, Future Problem Solving Program International teaches students to think critically, creatively, and futuristically in a variety of ways. One of the ways for students to think futuristically is to create images of what the future may be like. The Scenario Writing component of FPSPI strives to help students enlarge, enrich, and make more accurate those images of the future, while honing their creative writing skills. Scenario writing personalizes the ever-growing perspective a student has on the future. In addition, participation provides opportunities for students to meet and exceed educational standards as they refine their writing skills.

Who can participate in Scenario Writing?

Students may participate in Scenario Writing in three divisions: Junior (grades 4-6), Middle (grades 7-9), and Senior (grades 10-12). For students who participate in Global Issues Problem Solving (GIPS) or Scenario Performance components of FPSPI, Scenario Writing can serve as an excellent complement to their work on any of the topics. Scenario Writing is also an excellent offering for students who do not participate in other components. The creative writing involved may appeal to students who are not drawn to the team orientation of the other components. Scenario Writing can be used as a stand-alone activity by an FPS coach, an English teacher, a parent, or any instructor with students who are interested in creative writing.

18-19 Scenario Topics

- Criminal Justice System (last year's IC topic)
- Mission to Moon, Mars & Beyond
- Drones
- Food Loss & Waste
- Coping with Stress

Do students need to know the creative problem solving process for scenarios?

The creative problem solving process is used in the Global Issues and Community Problem Solving components. Although knowing the process can help students to think about the future, it is not a prerequisite for scenario writing. However, because scenarios must relate to one of the topics, students should do some background reading about the topic they select for their story.

**Excerpt from *Out of the Mouths of Babes*
Junior Division 1st Place 2017 International Champion**

I am on duty, monitoring the information relayed by the millions of sophisticated sensors deployed in disaster-hit areas. Neon statistics, colour-coded based on severity, quiver in front of me on a holographic screen. Sitting in my Aeromobile, I'm ready to swing into action at a moment's notice.

Earthquake, magnitude 8.9, together with tsunami. 50 people missing, presumed dead...

The text is bright orange. Not severe enough for my team. Another team will respond.
A line of red comes into view.

Hurricane, category 7. 75 people confirmed dead, 200 people missing, young children among them...

The red is my cue to embark on a rescue mission
"Take me there," I instruct the Aeromobile.

I begin by mentally turning on my specialised search-and-rescue (SR) chip. The SR chip, which is implanted in my brain in addition to my other information chips, will automatically connect with sensors on the ground and give me detailed and precise information about the situation. It will also link up with the identity chips of people on the site, enabling other SROs and I to locate them and assess their condition quickly, as well as the SR chips of other SROs.

I swing into action prompted by the information leads from my SR chip. Other SROs are moving around, locating survivors to be fitted into body cases. Only survivors who have more than a seventy percent chance of survival (as calculated by the SR chip) are rescued. This may seem inhumane, but with the multitude of disasters occurring, a perverse sort of triage is practiced – medical intervention only for those who will probably survive...

How can I get started with my students?

The best way to become acquainted with scenarios is for you and your students to read many of them. See the Scenario Writing Essential Publications page for more information.

How much help should I give?

The student's writing must be original. As coach, you may read the student's work, ask questions that occur to you as a reader, and make general suggestions for improvement. Authors may receive adult help to correct spelling, grammar, and punctuation errors. Peer revision is a beneficial process.

How are scenarios evaluated?

Scenarios are read and scored by experienced evaluators who consider the following elements: creative thinking, futuristic thinking, idea development, style/voice, character development, mechanics/structure, and topic related research. A rubric-based authentic evaluation is provided, giving students tools for continuous growth. See the "Scenario Evaluation" page for more information.

How does one register for Scenario Writing?

Entry forms can be found at wisfps.org. Click on "Program Components, Scenario Writing." Follow the requirements for submitting entries as outlined in this document.

When are scenario entries due?

In Wisconsin, Scenario Writing entries are due in late January. Evaluation takes place in February, and results are announced in late February.

What are the levels of competition?

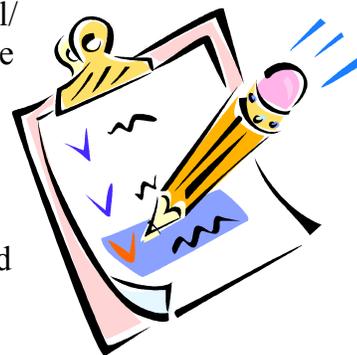
Wisconsin selects three winning scenarios in each division. The writers of these winning stories will be invited to attend the opening activities on Thursday evening at State Bowl, where they will read the scenarios at a division session. Qualified scenario

writers may also participate in the Scenario Writing Team competition on Friday. The winning scenarios will be published in an anthology. First and second place scenarios are entered into the International level competition. All Wisconsin first-place winners and all International winners are eligible to compete in the Scenario Writing Team Competition at the International Conference in June.

Scenario Writing Evaluation Criteria

Creative Thinking

Strong portrayal of innovative/ingenious/novel ideas with unusual/imaginative details that provide a unique/powerful experience for the reader (Scored 1-10)



Futuristic Thinking

Demonstrates an understanding of patterns/trends and how they might evolve; will use/develop specialized terms/language related to the topic and storyline; will show a strong portrayal of futuristic trends/predictions that enhance the story (Scored 1-10)

Idea Development

Includes complex ideas supported by rich/engaging/pertinent details; will show strong evidence of analysis, reflection, and insight exploring different aspects of the topic; will show obvious sophistication in organizational strategies; will hold the readers attention with significant details (Scored 1-15)

Style/Voice

The use of literary techniques makes the text lively/engaging; a clear, distinctive personal touch prevails; stylistic nuances and elements are uniquely mastered; well crafted, varied sentence structure is used; skillful use of vocabulary allows the reader to become emotionally involved (Scored 1-15)

Character Development

Authentic character(s) with dynamic nature enhancing the overall impact and effectiveness of the writing; characters will evoke an emotional response; the writer will provide insight, perspective, and empathy with the character(s) and a sense of involvement with them (Scored 1-5)

Mechanics/Structure

Shows clear control of grammar and punctuation; creative use of conventions may be used to enhance meaning; license with some conventions may be taken intentionally to make a point; dialogue, dialect, slang, etc. may be “played with” to creatively portray character(s); the story will be carefully edited (Scored 1-5)

Topic Related Research

Knowledge of the topic is evident and is artfully blended with the story line; an understanding of the topic’s futuristic trends is evident (Scored 1-5)



Scenario Writing Essential Offerings

Check out these essential resources from the FPSPI Catalog.
(Available at www.fpspimart.org)

FPSPI Association



Join this official group to support FPSPI and receive information for all FPS Components from the International Office:

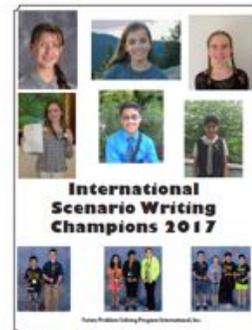
- Official guidelines and documents
- Unique supplemental materials including tips and examples

\$30 fee for electronic download of supplemental materials (Available September 1, 2017)

Int'l Scenario Writing Champions 2018

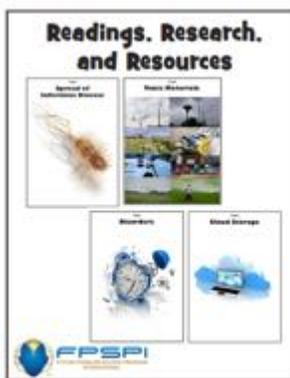
Includes award winning stories published each year:

- The top five scenarios from each division in the FPSPI International Scenario Writing Competition
- The Junior, Middle, and Senior Scenario Writing Team champions from IC 2016
- Evaluator scores and comments



\$30 electronic/\$35 book

Readings, Research, and Resources (RRR)



Provides essential background information on the topics for scenario writers:

- Terms and Definitions
- Topic Overview
- Questions for Discussion
- Internet Resources
- Article Summaries

(Note: No chapter is available for the International Competition topic.)

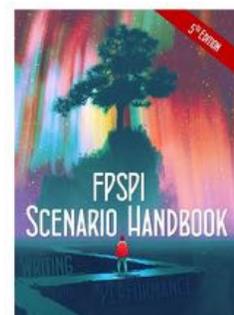
\$50 electronic/\$55 binder ready/\$18 individual topic

Scenario Writing & Performance Handbook

Designed to help teachers effectively guide students in writing & performing scenarios, this manual includes the following:

- Explanations of scenario writing techniques
- Classroom activities
- Award-winning student work

\$40 electronic/\$45 binder ready



Wisconsin Future Problem Solving Scenario Performance Competition



What is Scenario Performance? Scenario Performance is the newest Future Problem Solving component, with the inaugural competition at the 2015 International Conference. In Scenario Performance, students choose from annual topics as they project into the future and create a futuristic story related to the topic. This story is not written out in full; rather, it is *told* and should be more “natural” and “spontaneous” in nature. Up to 10 cue cards may be used in the presentation.

This oral activity for individuals encourages students to enlarge ideas, enrich personal style, and predict accurate images of the future. Students are challenged to create a story that lasts up to 5 minutes, is set 20-30 years in the future, and arises from any one of the topics set in the FPS year. The use of any “acting”, singing, props, or aids beyond the use of the voice and 10 cue cards is not permitted.

Why Scenario Performance? Scenario Performance (ScP) was designed by FPSP Australia to develop and sustain the oral tradition of storytelling. Essentially, ScP is for students who enjoy storytelling. This option is ideally suited to students who show thinking abilities in different ways - particularly for those whose cultural heritage and/or learning styles prefer oral communication. It is also ideal for developing thinking skills. A rubric-based authentic evaluation is provided for competitors, giving students tools for continuous growth.

Who can participate in Scenario Performance? Students may participate in three divisions: Junior (grades 4-6), Middle (grades 7-9), and Senior (grades 10-12). For students who participate in the Global Issues Problem Solving and/or Scenario Writing components of FPSPI, Scenario Performance can serve as an excellent complement to their work on any of the topics used in Global Issues Problem Solving or Scenario Writing.

Scenario Performance is also an excellent offering for students who do not participate in other components of FPSPI. Creative storytelling may appeal to students who are not drawn to the writing and/or the team orientation of the other components. Scenario Performance can be used as a stand-alone activity by an FPS coach, a drama/debate teacher, a parent, or any instructor with students who are interested in creative storytelling.

Do students need to know the creative problem solving process for Scenario Performance? The creative problem solving process is used in the Global Issues and Community Problem Solving components. Although knowing the process can help students to think about the future, it is not a prerequisite for Scenario Performance. However, students should do some reading about the topic they select for their story.

How can I get started with my students? The best way to become acquainted with Scenario Performance is to view and listen to sample performances and storytelling presentations. A winning Scenario Performance video example is found at www.fpspi.org on the Scenario Performance component tab.

How much help should I give? The student's story must be original. As coach, you may listen to the student practice, ask questions that occur to you as a listener, and make general suggestions for improvement in storytelling techniques. Cue cards, if used, must be created by the student.

How is the Scenario Performance evaluated? Scenario Performances submitted via video or performed live are scored by evaluators who consider these elements: storytelling techniques, audience awareness, style/voice, the intended purpose of the story, development of the story, character development, creative thinking, connection to topic, and futuristic thinking. Authentic evaluation and feedback is provided via a rubric-based score sheet.

How do I enter student work for Scenario Performance? Entry forms can be found at wisfps.org. Click on Registration and Fees. Follow the requirements for submitting entries as outlined in this document.

What is the timeline for Wisconsin performances? Scenario Performance video entries are due in early February. Evaluation takes place in February, and results are announced in late February or early March. There will be three winners in each division.

What happens at State Bowl? The winning storytellers will be invited to attend the opening activities on Thursday evening at State Bowl to receive their awards and perform their stories.

What happens at the International Conference? First place Scenario Performers are eligible to participate in a live competition at the International Conference. NOTE: For the International Conference competition, Scenario Performers will create a new scenario based on the IC topic.

Scenario Performance Topics 16-17

- Mission to Moon, Mars & Beyond
- Drones
- Food Loss & Waste
- Coping with Stress
- (Topic for live competition at the International Conference to be announced March 1st)



Scenario Performance Evaluation Criteria

Storytelling Techniques

Effective pacing; unity/coherence of performance; appropriate transitional elements in performance; clarity of spoken voice (Scored 1-5)

Audience Awareness

Recognition of intended audience; attention to needs of the intended listener; communication with audience; involvement with listener; elicits emotional response; motivation of listener to consider consequences (Scored 1-5)

Use of Voice

Appropriate use and variation of voice; personal storytelling identity emerges through use of voice; suitable range of tones (Scored 1-10)

Development of Story

Logical, justified development of plot, conflict and closure; relevant elaboration; related connections and reflections; idea development strategies; organization (Scored 1-10)

Characterization

Central, identifiable, sustained character(s) (animate or inanimate) able to evoke emotional response from the listener (Scored 1-5)

Creative Thinking

Inventive, innovative, original, resourceful ideas (Scored 1-5)

Connection to Topic

Narrowing the topic to establish and maintain a clear focus; story told with a point set in the future as if it were really happening in the present (Scored 1-5)

Futuristic Thinking

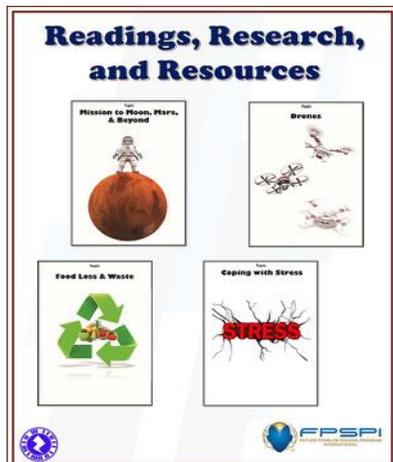
Portrayal of futuristic information and trends, including futuristic ideas as well as technological inventions (Scored 1-5)



Scenario Performance Essential Offerings

Check out these essential resources from the FPSPI Catalog.
(Available at www.fpspimart.org)

[Readings, Research, and Resources \(RR&R\)](#)



Provides essential background information on the topics for scenario writers:

- Terms and Definitions
- Topic Overview
- Questions for Discussion
- Internet Resources
- Article Summaries

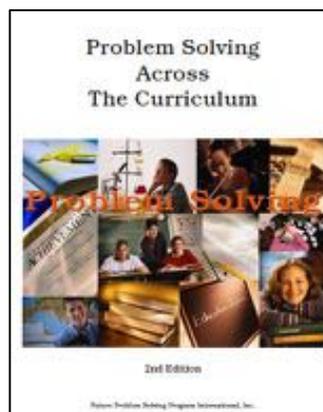
\$50 [electronic](#)/\$55 [binder ready](#)

(Note: No chapter is available for the International Competition topic.)

[Problem Solving Across the Curriculum](#)

Problem Solving Across the Curriculum may inspire Scenario Performers. This publication includes Future Scenes used in the past 35 years involving various topics.

\$38 [electronic](#)

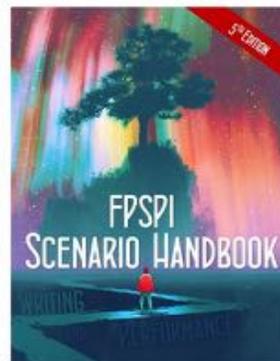


[Scenario Writing & Performance Handbook](#)

Designed to help teachers effectively guide students in writing & performing scenarios, this manual includes the following:

- Explanations of scenario writing techniques
- Classroom activities
- Award-winning student work

\$40 [electronic](#)/\$45 [binder ready](#)



Non-Competitive Problem Solving

There are a number of ways to teach problem solving skills to your students non-competitively. Each works a bit differently. If you are looking for a non-competitive activity, consider the options described on these two pages to determine which one best fits your needs.

Rookie Global Issues Teams, 4-12

- A non-competitive option for those just starting out in FPS.
- Wisconsin teams participate in three divisions: junior (4-6), middle (7-9), and senior (10-12).
- Teams use the same three practice problems and Future Scenes as competitive teams, with the same postmark dates for submission.
- Teams write a shorter booklet that includes all six steps (three on the first problem), but only 10 challenges and 10 solutions. Teams of 3-5 are recommended. There are no limitations on time or getting assistance from the coach. Booklets are evaluated non-competitively.
- Note: Rookie teams may upgrade to competitive status for the third practice problem, called the Qualifying Problem. They will then write a full competitive booklet with 16 challenges and 16 solutions. Teams must follow competitive QP Conditions (four students or fewer, two hours of consecutive time, no notes or adult assistance) to be considered for a State Bowl invitation.

Bridge to Global Issues Problem Solving, 4-12

- This option is for first year coaches who have completed a training workshop, are in their first year of working with students, and would like to work at their own pace. It provides a gradual introduction to GIPS.
- Coaches introduce the problem solving process with ten 20-minute lessons provided in one of our *Trilogy* publications (see page 15).
- Next coaches apply the process to a short Future Scene with a guided booklet and submit work for evaluation.
- Finally, coaches choose a topic and are provided with research. Students apply the process to a full-length Future Scene and submit work for evaluation.

Global Issues Qualifying Problem Non-Competitive Option, 4-12

- This option is for Wisconsin teams who have registered as competitive and have tried full-length booklets, but are not ready for competitive conditions (four students or fewer, two hours of consecutive time, no notes or adult assistance) on the Qualifying Problem (QP).
- Coaches who determine their students are not ready for QP competitive conditions may give students extra time or assistance as they are working.
- On the cover sheet for problem three, the coach will check that the students completed the booklet without following QP Conditions, and the booklet will be evaluated non-competitively (no ranking, not eligible for State Bowl).

Action-Based Problem Solving (AbPS), K-6

- AbPS is designed for integration into the classroom curriculum. It incorporates a simplified process for students who are just getting started in FPS. We recommend AbPS for these two divisions: primary (K-3) and junior (3-6).
- From a number of available topics, teachers select one topic for problem solving each semester. This allows teachers to best match curriculum or community issues. (Sample topics: trash, hunger, learning to read, tornadoes, school safety, water pollution)
- Students work on a simplified version of the problem solving process in classes or in teams within a class
- Each registration entitles one booklet to be sent for evaluation each semester, but materials may be used with as many students as you wish.
- It is highly recommended that teachers purchase an Action-Based manual from the International Office, which provides instructional materials for initial learning of the simplified problem solving process.



Non-Competitive Problem Solving continued

The Problem Solving Experience Curriculum, 5-8

- *The Problem Solving Experience: Classroom Curriculum Designed to Promote Problem Solving in the 21st Century* is a complete curriculum targeted at grades 5-8. Portions of the curriculum may be used with younger or older students.
- The curriculum can be implemented as a full semester course, or spread across 1-4 school years.
- The curriculum consists of a preparation unit and eight “experiences.” Complete lesson plans and resource materials are provided for direct instruction of problem solving skills.
 - Preparation for Problem Solving
 - Problem Solving Experience 1: Eensy Weensy Spider
 - Problem Solving Experience 2: The Elephant’s Nose
 - Problem Solving Experience 3: Robin Hood
 - Problem Solving Experience 4: The Lorax
 - Problem Solving Experience 5: Harrison Bergeron
 - Problem Solving Experience 6: Smart Clothes
 - Problem Solving Experience 7: Digital Music Rights
 - Problem Solving Experience 8: Prejudice



Problem Solving Across the Curriculum, 4-12

- This is a publication that provides copies of hundreds of Future Scenes that have been used in the Global Issues Problem Solving component over a number of years.
- Teachers may select Future Scenes to fit their curriculum, and may modify the scenes to meet their students’ educational needs.
- Training in teaching problem solving process skills is needed in order to make full use of these Future Scenes.

Action-Based Problem Solving manuals
The Problem Solving Experience curriculum
Problem Solving Across the Curriculum
Available at fspimart.org



Future Problem Solving Program International Action-based Problem Solving Overview

What is Action-based Problem Solving (AbPS)?

- AbPS is Future Problem Solving Program's problem-solving component designed specifically for use in the regular classroom.
- AbPS introduces the classroom teacher and students to creative problem solving, higher-level thinking, and action skills in a hands-on, non-threatening manner.
- The concepts behind each problem-solving step are taught in short, challenging lessons, making the concepts easy to understand and apply.
- AbPS actively engages all students in learning, constructing meaning, and applying both knowledge and process to real-life situations.
- AbPS is performance based and has real-world applications for authentic learning. It is designed to guide students into the problem solving process and provides support for future success with Global Issues Problem Solving and/or Community Problem Solving.
- The Action Fair provides students and teachers with an opportunity to identify a local need or problem area, create a comprehensive plan of action using the AbPS model, and introduce the local community to the upcoming project through the presentation of a five minute skit based on the action plan. Teams of any size can engage in an Action Fair coordinated by the FPS Affiliate Program or individual school(s).
- AbPS provides a model that is effective in the classroom for all students and can be implemented as:
 - a strategy for use in the inclusion model,
 - a curriculum in exploratory classes,
 - an extension of any curriculum unit, and
 - a model to introduce higher level thinking skills to students.



Why Action-based Problem Solving?

Future Problem Solving Program International provides the tools and strategies students need to face the challenges of today and the future. Action-based Problem Solving provides opportunities for students to develop and exercise the skills necessary to meet and exceed standards through research and investigation of topics relevant to their world. Action-based Problem Solving provides a convenient package designed to stimulate the creative and critical thinking skills younger students need in order to synthesize the massive amount of data brought to them by Information Age technology.

FPSPI teaches students how to make informed choices and solve complicated problems. AbPS facilitates discovery by presenting the students with perplexing issues and providing the means to become active inquirers. AbPS provides students with the procedural, brainstorming, decision-making, and communication strategies needed for learning. The hands-on model turns the classroom into an authentic learning community, bridging the gap between school and the real world. Students learn to work cooperatively toward a common goal, discovering how to manage time as well as the project. They begin to see a purpose for their education and develop a personal commitment to learning.

Those involved in Action-based Problem Solving practice powerful problem solving skills using critical and creative thinking. Participants improve their communication skills through collaboration and learning to write with a specific focus in mind. The non-fiction/informational text reading skills, writing skills, and teamwork collaboration skills address many academic standards identified by Common Core, STEM, 21st Century Skills, and NAGC (Nat'l Association for Gifted Children) as critical skills.

Who can participate in Action-based Problem Solving?

Students may participate in Action-based Problem Solving in three divisions: Primary (grades K-3), Junior (grades 3-6), and Middle (grades 6-9).

What is the composition for AbPS?

- Four to six students comprise a team and may vary from problem to problem.
- Teams typically work on one topic for the year in Primary Division and one topic per semester in Junior/Middle Division.
- It is recommended a team complete all steps in the second semester topic in order to prepare for the Action Fair.

How does Action-based work?

- Team members (four to six students) may vary from problem to problem.
- The Action Fair provides students and teachers with an opportunity to identify a local need or problem area, create a comprehensive plan of action using the AbPS model, and introduce the local community to the upcoming project through the presentation of a five-minute skit based on the action plan. Teams of any size can engage in an Action Fair coordinated by the FPS Affiliate Program or individual school(s).

How do I register students for Action-based Problem Solving?

Registration materials can be found on our website at www.wisfps.org.

How are AbPS booklets evaluated?

AbPS booklets are scored by trained evaluators who carefully read and assess the written booklets. Some Affiliate Programs require that all coaches receive evaluation training and participate as evaluators. If yours does not, serving as an evaluator is highly recommended and always improves coaching skills!



Action-Based Problem Solving: Overview of the Year

August-October: Purchase the AbPS Teacher's Manual for your division (primary, junior, middle) from international catalog at fspimart.org.

- ◆ Attendance at a fall training session is recommended for beginning coaches. If you cannot attend one, you may be able to get started by reading the Teacher's Manual and contacting the Wisconsin FPS office (608-824-9695) with any questions.

September-October: Use the Lesson Plans from Section 2 in the Teacher's Manual to teach the problem solving process to your students. The Lesson Plans can be completed in a 1-2 week unit.

- ◆ After introducing each step, guide students through the entire process using one of the fairy tales in the manual.

November: Select one of the "Challenge Scenes" from your division to work on with your students.

- ◆ Primary/elementary teams may work as a whole class with the teacher recording the ideas, or work in groups of 3-6 if the students are ready, or some combination of these.
- ◆ Junior and Middle teams should work in groups of 3-6 students, guided by the teacher but completing the work themselves.
- ◆ Select one booklet to submit for evaluation for each registration that you purchased. (Check the entry sheet for postmark date, usually mid-November.)



Optional for December-January: You may want to practice the problem solving process with your students using one of the other fairy tales from the manual.

February-March: Select a second "Challenge Scene" for your students to work on. If you wish to conduct a Community Action Fair, you may want to choose a Challenge Scene that could relate to that event.

- ◆ Submit a booklet for evaluation for each registration. (Check the entry sheet for postmark date, usually mid-March.)

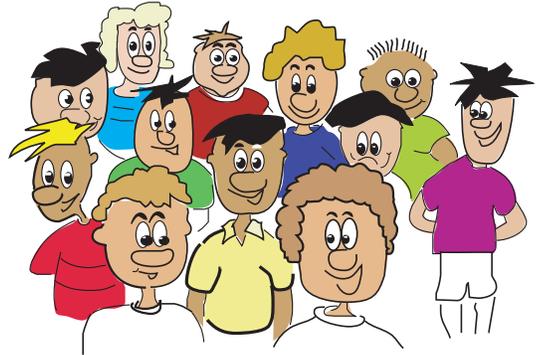
Optional for April-May: Organize a Community Action Fair. At this event, multiple student teams gather for a half-day or day to brainstorm solutions, criteria, and action plans in response to a school or community issue. Teams present skits to share their ideas.

- ◆ Follow-up to the event would include actually carrying out some of the ideas developed.

Implementing Future Problem Solving Extracurricular? In-class? Pull-out?

There are many ways to implement FPS. Here are some examples from a survey of teams at Wisconsin's 1999 State Bowl. Contact the office for further information on any of these ideas.

- Junior students meet once a week with the principal, who is their coach.
- A team of junior students meets with a parent-coach at her house after school once a week.
- Junior students meet after school once a week for 90 minutes. On booklet writing days they start during class time in the mid-afternoon.
- Students apply for an FPS Social Studies class in grades 6, 7, and 8. The social studies curriculum is compacted and a significant amount of time is spent on Future Problem Solving research.
- Students in a gifted magnet program participate in the non-competitive program in fourth grade and then in the competitive program in fifth and sixth grades.
- All 7th grade gifted students are taught FPS in a once a week "pull-together" program. Those interested in continuing on a competitive team work with a coach before and after school and on weekends.
- Students are introduced to FPS in a middle school English class. The class spends 10 days preparing for each problem, with homework expected.
- Sixth graders study FPS as part of an integrated curriculum. For each topic, two weeks are spent in science or reading class studying the topic research. Then two weeks are spent in language arts class practicing the process and writing skills.
- Students apply for a sixth grade FPS class which they take instead of 6th grade reading. In seventh grade FPS is the language arts class.
- A high school extracurricular group meets with the coach on Saturday mornings.
- High school students meet with the coach for several 20 minute periods during each week. Students miss parts of classes and are expected to make up the work.
- High school students take FPS as an every-other-day elective course.
- In one district, students in all three divisions meet once a week with the coach. Many students participate for several years.



Recommendation for Extracurricular/Pullout Models

It's a challenge to implement FPS if you only have a weekly time slot! If this is your situation, we recommend a half day workshop to introduce students to the 6-step process, and combining some regular class time with the extracurricular or pullout time for a 150-180 minute time block on booklet writing days, so that the writing can be completed in one sitting. Booklet writing on problems 1 and 2 can be split up over several days, but should not be split over several weeks!

Sample Future Scene

World Population (2000-01 Problem 2, Middles and Seniors)

The Internet News Service has returned the following article summaries you requested.

Headline: World's population reaches six billion

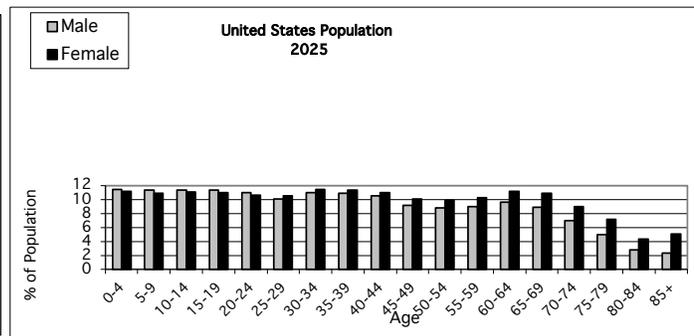
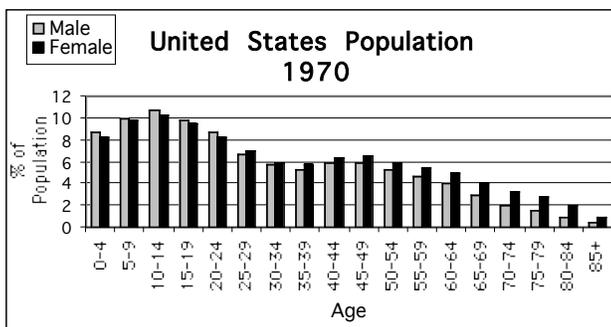
Source: *New York Times* – Archives. Date: 10-12-1999

Today, at approximately 1:40 p.m., the world's population reached six billion people. This new benchmark comes just 12 years after the last billion people were added to the world's population. It took most of the age of humanity to achieve a worldwide population of one billion people in 1804.

Headline: For the first time in history, old outnumber young

Source: *New York Times* – E-News. Date: 03-30-25

Twenty-five percent of the world's population is over the age of 65. Two million people living around the world are 100 years of age or older compared with 135,000 centenarians in 2000. For the first time in human history, the population growth has slowed to 1.3 percent per year. Yet, despite this drop in the birth rate, population growth continues. One of the primary factors contributing to the increase in population is the continuing drop in death rates. Older people are not dying as frequently as new people are being born. Life expectancy around the world is 75 years. Today, in 2025, the world's population is at eight billion people.



In 2000, the oldest baby boomer was 54, while the youngest was 36. Now in 2025, the oldest boomer is over 80 and the youngest is over 60. The bar graph shows the dramatic growth in the older population, while the younger population grows at a much lower rate.

Editorial Headline: Intergenerational conflict – old versus young or young versus old? Source: *New York Times* – E-News. Date 08-24-25

The seismic shift in population raises concerns about issues ranging from the solvency of pension programs to competition for resources between those who are older and those who are younger. The demand for products and services important to older citizens has increased dramatically. Because of huge variances in life experiences and values in a fast changing world, intergenerational conflict is expected to grow.

Headline: FPSP think tank called in on population crisis. Source: *Congressional Record*

Date: 10-01-25

In an effort to address the needs of the aging population, Congress requests the assistance of a well-respected group of Future Problem Solvers.

The FPS team is charged with the responsibility of examining the effects of an aging population on U.S. society. Due to this unprecedented population phenomenon, every institution in society needs to rethink its mission and how that mission is accomplished in light of a changing population. The FPS team will examine the challenges society faces because of this population shift. Select an important problem area, and generate solution ideas to present to the Congressional committee.

World Population Booklet Excerpts – Middle Division

Challenges

- * As health care and medicine get better and better, life expectancy goes up. The retirement age may then go up also. As a result, older people may have to work even if their bodies are wearing down both mentally and physically.
- * In 2025 the elderly outnumber the young. As a result, more money in social security funds may be needed. The younger generation may have to pay so much into social security that they don't have enough for their own financial needs.
- * Because of the growing number of elderly people, companies may target more and more of their products and advertising to this age bracket. The younger generation may resent this and feel they aren't getting the attention they should.
- * Since older people are not dying as frequently as in the past, this will result in a population increase. There may be a very high demand for land and housing for all of these people, reducing the amount of natural environments and habitats.
- * As people get older their physical health tends to deteriorate. With so many older people, the demand for expensive medical care for serious, long term illnesses may overwhelm the health care system, and there could be many conflicts over who gets access to the latest in health care.
- * Many older people do not drive as frequently or stop driving altogether. It may be difficult for all these older people to find transportation to buy groceries, go to the doctor, etc, and they may end up feeling very isolated from society.

Underlying Problem



Since the number of older people in the US outnumber the young, how might we provide ways for the elderly to be useful members of society so that they do not feel isolated from the everyday world in 2025 and beyond?

Solutions

- * A national system of volunteers called "Elderly Educators" will be formed. The EE's will be trained to work with students. They will be given automated personal hover cars to get to the schools, and will be paid like substitutes.
- * Businesses will set up apprenticeship programs where the elderly will teach a younger person parts of their job. The elderly will work part time, so they will still feel useful to society.
- * A company called "Create" will provide patents for products for the elderly that have been designed by the elderly. This will give them a better chance of getting their product ideas on the market, and since they are older they will understand the needs of the elderly.
- * Older people who are computer experts will set up on-line web-sites to meet the needs of the older people. They will travel around teaching the elderly how to access and use the sites.

Criteria

WSW allow the older people to feel most useful to society? WSW most reduce the isolation felt by many older people? WSW be the most accessible for the elderly? WSW benefit the largest number of older people?

Action Plan

A national architecture company will recruit talented elderly citizens with visualization skills and creativity to design living communities for the elderly. They will teach the Elder Design Team (EDT) how to survey people, and will provide transportation for them to interview many older people. The EDT will visit existing living areas and figure out what is good and bad about them. They will use their ideas to make proposals to the architects, who will work with the EDT. They will create a variety of designs for different situations. The living communities will be sponsored by businesses and will include restaurants, meeting rooms, technology centers, and recreation areas. Not only with the EDT citizens be useful, but they will be creating a product that is of benefit to other older people.

Who Attends State Bowl?

<h3 style="margin: 0;">Global Issues Teams</h3>	<p><u><i>Coach's Best:</i></u> For each coach who has 3 or more teams in a division that complete problems 2 and 3, the coach's highest scoring team will qualify for State Bowl.</p> <p><u><i>Highest Ranked:</i></u> All other teams are compared to each other to determine an overall ranking. The highest ranked teams qualify for State.</p>																
<h3 style="margin: 0;">Global Issues Individuals</h3>	<p><u><i>Qualified Year-Long:</i></u> Year-long individuals may qualify for State with high quality booklets. If they do not receive a qualification, they may still attend as a coach's individual (see below).</p> <p><u><i>Coach's Individuals:</i></u> A coach may bring one individual for each team that qualifies to attend State Bowl. This student will participate in the individual competition and be eligible to qualify for the International Conference.</p> <p><u><i>MAGIC Individuals:</i></u> In addition, coaches may bring additional individual students to compete on MAGIC (Multi Area Global Issues Competition) teams at State Bowl. The number of MAGIC students a coach can bring is dependent on how many teams he/she registered for the year as shown in the chart. These students will not be eligible to qualify for the International Conference. All individuals MUST be trained FPSers who have completed booklets as an individual or with a team for at least two of the topics for the year. All individuals should participate in the skit competition, either with a team, as a group of 3-4 individuals from a district, or by joining individuals from other districts. We will work this out as we approach the Bowl.</p> <table border="1" style="margin: 10px auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;"># Registered Teams (per division)</th> <th style="padding: 5px;"># State Bowl MAGIC Individuals</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">1-5</td><td style="padding: 5px;">4</td></tr> <tr><td style="padding: 5px;">6-10</td><td style="padding: 5px;">5</td></tr> <tr><td style="padding: 5px;">11-15</td><td style="padding: 5px;">6</td></tr> <tr><td style="padding: 5px;">16-20</td><td style="padding: 5px;">7</td></tr> <tr><td style="padding: 5px;">21-25</td><td style="padding: 5px;">8</td></tr> <tr><td style="padding: 5px;">26-30</td><td style="padding: 5px;">9</td></tr> <tr><td colspan="2" style="padding: 5px;">Etc,</td></tr> </tbody> </table>	# Registered Teams (per division)	# State Bowl MAGIC Individuals	1-5	4	6-10	5	11-15	6	16-20	7	21-25	8	26-30	9	Etc,	
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<h3 style="margin: 0;">Community Problem Solving</h3>	<p>First and second place CmPS teams and individuals are invited to present their projects during the Opening Ceremony. Teams and individuals who have scored high enough to qualify for the International Conference MUST present at State Bowl in order to be moved on. Other CmPS participants may also be invited to present at State.</p>																
<h3 style="margin: 0;">Scenario Writers</h3>	<p>First, second, and third place scenario writers will read their stories following the Opening Ceremony. Scenario writers who are also Global Issues FPSers but are not on a qualified team may also participate in the individual competition or scenario team writing competition. Other qualified scenario writers who did not place may also be invited for the scenario team writing competition.</p>																
<h3 style="margin: 0;">Scenario Performers</h3>	<p>Those receiving first, second and third place in each division will perform their stories at State Bowl.</p>																

State Bowl Details

Location	We are currently holding State Bowl at Green Lake Conference Center on Highway 23. It is possible that in some years we may be in a different location.
Time	State Bowl begins about 6:00 on a Thursday evening and runs through Saturday noon.
Typical Activities	<ul style="list-style-type: none"> • Opening ceremony – banner parade, CmPS presentations and awards, Scenario awards • Scenario readings – winners read their stories • Zippy Challenge – students are grouped with those from other districts for a fun activity • Competitions • Skit preparation – creatively presenting team action plans • Recreation time • Swap – students bring items to swap with others in a large “marketplace” • Skit presentations • Awards ceremony
Typical Costs (subject to change!)	<p>Registration fees</p> <ul style="list-style-type: none"> • GIPS teams - \$160 • GIPS individuals - \$40 • Scenario writers - \$20 • Scenario team writers - \$40 • CmPS teams - \$40 <p>Lodging per night per room (event is two nights)</p> <ul style="list-style-type: none"> • 1 person in room - \$100 • 2 people in room - \$110 • 3 people in room - \$120 • 4 people in room - \$150 <p>Meals</p> <ul style="list-style-type: none"> • Optional Thursday dinner - \$11 per person • Friday and Saturday breakfast included in room fees • Friday lunch/dinner - \$22 per person

Evaluating for the Future Problem Solving Program

What is the role of evaluation in the FPS program? Evaluation is an essential component of the FPS Program. Written feedback allows our students to grow in their abilities to apply the problem solving process. Evaluation provides students with information on their thinking, their writing, and their understanding of each step of the process. Evaluators work hard to encourage students while providing constructive suggestions for continuing improvement. The Wisconsin program prides itself on the care it takes in evaluating student work.

Who can evaluate? Our evaluators include adults (teachers and parents), college students, and high school students who are in grade 10 or above who have at least 2 years experience on a GIPS team. Many evaluators have experience in FPS as a coach or student participant; however, others first learn about FPS when they train to become evaluators. We welcome new evaluators to our ranks! Contact the state office to volunteer.

How does evaluation work? Evaluators gather on three Saturdays, beginning about 8:30. Each evaluator works on 4-7 problem solving booklets during the day, usually finishing somewhere between 2:00-4:00. Evaluation Saturdays are early November, early January, and late February. Evaluation at State Bowl is on a Friday in April.

What if you haven't evaluated before? Training for new evaluators takes place at the first and second evaluation days of the year. New evaluators need to attend both days. On those days, the trainers will teach the evaluation process and mentors will lead new people through one or more student booklets. New evaluators will work with an experienced evaluator who will mentor them through the process.

What does a commitment to evaluate entail? Evaluators should commit to 2-4 of the four evaluation dates. They must spend some time reading a research summary that is provided. Evaluation Guidelines are also provided with specific suggestions for what to look for in the student booklets. Evaluators should give their best effort in providing positive and constructive feedback to students.

What's in it for you?

- 1) *Remuneration!!* Evaluators earn money for their hours and for the number of the booklets they complete, as well as mileage for long drives.
- 2) *Added insight into the FPS process and the skills needed to be successful in competition.* Many coaches evaluate to learn more about the process, which improves their coaching.
- 3) *The enjoyment of working with a dedicated, fun-loving group of people.* Evaluating is serious work, but we enjoy the camaraderie that we have developed!
- 3) *Eternal gratitude from the evaluation coordinators!* We truly need the help of our evaluators to serve the students who work so hard at FPS.



**Find Wisconsin Future Problem Solving at
www.wisfps.org**

Check out our website for these features!

About Us

- Divisions and Topics
- History of Wisconsin FPS
- Our Board of Directors
- The Problem Solving Process
- Divisions & Topics

Our Program Components

- Global Issues Problem Solving
- Scenario Writing
- Community Problem Solving
- Scenario Performance
- Noncompetitive Options



Registration Fees

- Registration forms for Global Issues Problem Solving
- Entry information & forms for Scenario Writing, Community Problem Solving, and Scenario Performance

Evaluation

- Information for current evaluators
- Basic questions about evaluating
- Student booklet with Future Scene on the topic of Identity Theft
- Evaluation scoresheet

Coaches

- Program Basics
- Getting Started
- W.O.W. Factors
- Sales
- Training Workshops
- Calendar
- State Bowl

Parents, Students, Alumni

- Parents Corner
- Parents Newsletters
- Current FPS Students
- FPS Alumni
- Legacy Fund

**Future Problem Solving Program International
www.fpspi.org**