



2020-2021 FUTURE PROBLEM SOLVING

www.utahfps.org



Future Problem Solving is a fun and futuristic program that teaches **creativity, critical thinking, teamwork, and communication skills** to students in grades 4-12. Work with your students in creative writing or to solve global and community problems using our **powerful 6-step problem-solving process** in competitive and non-competitive divisions.



The Future Problem Solving 6-Step Process

1. Identify problems.
2. Choose a significant problem to solve.
3. Brainstorm solutions to the chosen problem.
4. Develop criteria to evaluate solution ideas.
5. Apply the criteria to identify the best solution.
6. Develop an action plan for making the best solution happen.

More information...

www.fpspi.org

www.utahfps.org

Like us on Facebook at

Utah Future Problem Solving

Prepare students for the future *today!*

FPS Registration

[CLICK HERE](#)

or go to

<https://forms.gle/vTDLgXEmQXgXjUoCA>

Registration due October 30, 2020

(late fee \$10 per entry)

FPS NEW COACH TRAINING IS AVAILABLE UPON REQUEST.

Register for the 2020-2021 Future Problem Solving Program



As exciting as ever!

FPS Competitive Divisions

Participate in the full program—with potential to compete at the State Bowl and Internationals!

Global Issues Problem Solving (Team) \$90.00 per team

In Global Issues Problem Solving (GIPS) students in grades 4-12 compete in teams of four to research and problem-solve topics of current relevance in the world. Teams complete two practice problems (optional), which are evaluated and returned with feedback. They then submit a third problem to try to qualify for the competitive State Bowl. Qualifying teams are invited to compete at State for the opportunity to represent Utah at the annual International FPS competition in June. See: <https://www.youtube.com/watch?v=0NB5CxAUNow&sns=em> (fast forward to 2:42)

Global Issues Problem Solving (Individual) \$35.00 per student

Individual Global Issues Problem Solving is designed to give self-motivated, confident students the opportunity to compete, using the same format as the Team Division but completing shorter booklets independently. This is an ideal option for coaches who have a few extra students who won't fit evenly onto teams. Individuals complete two practice problems (optional), which are evaluated and returned with feedback, and then submit a third problem to qualify for the competitive State Bowl. Qualifying individuals are invited to compete at State for the opportunity to represent Utah at the annual International FPS competition in June.

Community Problem Solving (Team or Individual) . . \$60.00 per team or \$50 per individual

In Community Problem Solving (CmPS), teams in grades 4-12 use the FPS process to identify and solve current problems in their own communities. This experience builds hands-on problem solving skills, strengthens analytical skills and leadership ability, and offers many different types of communication opportunities—all while actively involving students in giving back to the community in which they live. Teams spend the year working on the problem they chose, and compete for invitation to the State Bowl and the International competition. Because teams may include 15 or more students, this is an excellent experience for whole classrooms. Individuals are also welcome in Community Problems Solving and will be evaluated separately. See: https://www.youtube.com/watch?v=n1_QL169aY0&sns=em

Scenario Writing (Individual) \$40.00 per entry

Scenario Writing gives students in grades 4-12 who are interested in creative writing the opportunity to research any of the year's topics and compose a creative, dramatic, and futuristic scenario. Length of entry is a maximum of 1,500 words. Winning scenarios are chosen to compete at the International competition. See: <https://www.youtube.com/watch?v=WSQePNTiBhI&sns=em> (please make sure to use this year's topics – shown on pages 3-4)

Scenario Performance (Individual) \$40.00 per entry

Scenario Performance (ScP) is for students who enjoy telling stories. Students in grades 4-12 are challenged to create a story that is between 4-5 minute duration, set at least 20 years in the future, and arises from any one of the topics set for Scenario Writing in the FPS year. Submission will take the form of a video file of the student delivering an oral telling of their story, undertaken in one take without any edits. See: <https://www.youtube.com/watch?v=SDpv84hwdzU&sns=em>

International Competition

Teams, individuals, scenario writers, and community problem solvers who qualify for the State Bowl compete for the opportunity to represent Utah at the International Conference, which will be held **June 9-13, 2021** at University of Massachusetts at Amherst. At least one team/individual from each level of Global Issues, Community Problem Solving, Scenario Writing, Scenario Performance will move on to compete at the International Conference. This is an exciting opportunity that students will not want to miss, if selected. Utah students will be among 2,500 students from around the world participating in the competition. For more information about the FPS International Competition, visit www.fpspi.org.

FPS Non-Competitive Curricular Divisions

*Learn problem solving methods
without the pressure of competition*

Introducing Action-based Problem Solving (K-9) (Individual or Team) \$35.00 per class

This year-long, non-competitive component (AbPS) is designed for use in the regular classroom and introduces students to the skills of global issues problem solving in a hands-on, non-threatening manner. Students are encouraged to work on two topics, one per semester. Three divisions are offered: Primary (grades K-3), Junior (grades 3-6) and Middle (grades 6-9).

Community Problem Solving (4-12) (Individual or Team). \$35.00 per entry

Similar to the competitive CmPS, but in a non-competitive format.

Topics for Global Issues and Scenario Writing

Topic

Global Issues Submission Date

Practice Problem #1-YOUTH IN COMPETITIVE SPORTS

Thursday, October 15, 2020

Millions of children around the world participate in competitive youth sports every year. Involvement in organized sports teaches many essential life skills – teamwork, confidence, the value of hard work, and discipline. While some competitive sports promote activity and a healthy lifestyle, others build skills such as mental agility. The hyper-competitiveness of youth sports raises concerns that children are pushed too hard to win and succeed. The sports options for youth are also evolving, as competitive e-sports emerge. Competitive sports can heighten aggression, pressure to win, and put children – who are still growing and developing – at risk for injuries. In many places, increasing costs of club sport-memberships and insurance exclude those who need social interaction and fitness the most. The costs of maintaining and running facilities can also limit the accessibility for youth. How much should we push young people to participate in competitive sports? Do the benefits of structured competition outweigh the costs of over-competitive behavior and possible injury? How does participation in sports impact the well being of youth and their families?

Practice Problem #2-WEARABLE TECHNOLOGY**Thursday, December 10, 2020**

Traditionally, clothing and accessories have all been developed to fill basic needs. They provide warmth, protection from the elements or injury, and even serve to attract attention. Recently, the industry for wearable technology has transformed the way we think about clothing and accessories. Wearables have rapidly expanded to include heating elements, internet connections, watches, body monitors, and more. As more people grow accustomed to wearables in their daily lives, the possibilities for what the technologies can do are virtually limitless. They already monitor vital signs, send information to medical professionals, and even give individuals the ability to soar like a bird in personal flight suits. Smart sports uniforms can now reduce and identify injuries by regulating body temperature, supporting muscles and tendons, and gauging the force of impact. Attire with virtual reality functions is currently being developed to push this sector even further. How will wearable technology enhance or jeopardize real-life experiences and connections with others? Where in the world could wearable technologies allow humans to survive? What advantages or disadvantages are inherent in the inclusion of technology in our clothing and on our bodies?

State Qualifying Problem –HUMAN ENVIRONMENT IMPACT**Thursday, February 4, 2021****e**

Humans have always impacted the environment. Over time, the effects have increased as industrialization, urbanization, deforestation, processing of natural resources, the burning of fossil fuels and more technologies have developed. Examples of human's impact on the environment are everywhere.

Feeding the world's growing population has adverse environmental effects such as overgrazing, deforestation, and agriculture-induced soil erosion. Water pollution from pesticides and fertilizers impacts the quality of water available for specific populations. Clearing of land and overfishing result in loss of biodiversity and disturbances to ecosystems. Industrialization and urbanization cause the release of toxic solid, liquid, or gaseous waste materials and are the catalyst for serious environmental hazards. Water pollution as a result of poor disposal of sewage wastes, solid wastes, and other industrial wastes, may spread diseases and create an unfit environment for human activities. Industrialization has also increased consumption of natural resources for the production of goods, leading to a significant loss of nonrenewable resources and excessive waste. Activities like mining and dam construction cause habitat destruction. Trends like "fast fashion" contribute to why the fashion industry is the second-leading cause of pollution in the environment. What are our challenges moving forward to create a balance between basic human needs and our need to preserve or create an environment that is fit for continued quality human existence and growth?

State Bowl –PERSONALIZE MEDICINE**Problem due March 11, 2021
Presentations March 19, 2021**

What if your doctor could diagnose you before you experience symptoms? Using information from an individuals' genetic and molecular profile, researchers have begun to create patient-specific treatments with a level of precision never before seen. Personalized Medicine enables healthcare providers to use a patient's cells to combat precisely identified diseases at an unprecedented pace.

Researchers at universities, biotech companies, laboratories, and pharmaceutical companies are continually making discoveries. Doctors and other healthcare professionals continue to explore how these discoveries can help patients and increase our knowledge about diseases. The pharmaceutical industry is developing medications that tailored to an individual patient's genetic makeup. The costs of genetic tests are decreasing as their availability increases. Even with better affordability, how accessible will individualized advanced treatments be? Will insurance companies cover them? The increasing specificity of personal health information raises many concerns about the protection of personal data. How will Personalized Medicine account for the impact of external/environmental factors on an individual's health?

State Bowl – TBA
International Competition – University of Massachusetts – Amherst

March 19, 2021
June 9-13, 2021

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Other Dates:

Registration due for all competitions (late registration accepted until Feb. 1) **October 30, 2020**

Scenarios due (Scenario Writing)
Scenario Performance due

January 29, 2021
February 12, 2021

CmPS Proposal due
CmPS Intent due
CmPS due

November 2, 2020
December 14, 2020
March 11, 2021

What? A free team? How???

- **Evaluate** at least two of PP1, PP2, the Qualifying Problem, and State Bowl packets= this year. Please contact Collette Jusetesen (csjustesen@graniteschools.org) or Tammy Wright (twright@graniteschools.org) for more information, or
- **Recruit** a new coach with no previous FPS experience who registers at least one team for this school year.
- **Granite Schools:** GSD pays registration for up to **two entries per teacher.**

[CLICK HERE TO REGISTER](https://forms.gle/vTDLgXEmQXgXjUoCA)

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Get Involved in Utah Future Problem Solving!!!

Utah FPS needs people willing to help! If you are interested in helping out, please contact one of the members of the board listed below:

Utah FPS Board Members:

Collette Justesen: Board President/Affiliate Director

csjustesen@graniteschools.org

Tammy Wright: Affiliate Co-Director/Treasure/Evaluator

twright@graniteschools.org

Patti White: CmPS and Problem/Project Based Co-

pattiwhite@gmail.com

coordinator **Collette Hayes:** Scenario Coordinator

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Sheir Sohm: CMmPS and Problem/Project based

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Learning Coordinator

Elisa Jennings: CMmPS and Problem/Project based

ejennings@graniteschools.org

Learning Coordinator/Evaluator

Advisory Committee:

Jill Powlick jpowlick@gmail.com

Pam Kreips ppekrieps@gmail.com

For more information on FPS, please visit fpspi.org or watch this overview:

https://www.youtube.com/watch?v=OskH0B_rlg&sns=em