



PARENT

December 2022

PERSPECTIVES

This edition of our FPSPI parent newsletter contains information about the six-step Problem Solving Process. The information is submitted by Lynn Buckmaster, Affiliate Director of Wisconsin. Our *Cultural Corner* is provided by Sandy Horton, Affiliate Director of North Carolina. Please enjoy!

The 6-Step Process Used in Future Problem Solving

The process used in FPS is based on the Creative Problem Solving (CPS) process developed by Sidney Parnes and Alex Osborn. Each step is explained below and shows examples from a future scenario/scene about school.

Step 1: Identify Possible Challenges

- After reading a scenario set at least 25 years into the future, students brainstorm possible challenges (problems, issues) that might occur. They select and write their best 16 ideas.
- Students are encouraged to use a **cause, effect, consequence** format in writing their challenges.
- For example, *Sometimes schoolwork can be repetitive and not challenging enough for some students, causing them to become bored. As a result, they may act out or daydream in class.*



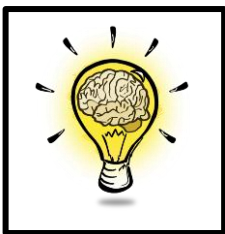
Step 2: Select an Underlying Problem (UP)

- Looking at the 16 challenges written, students identify one important issue (action goal) that stands out as needing to be addressed.
- The UP must include a **Condition Phrase**, a **Key Verb Phrase**, a **Purpose**, and three **Parameters** (topic, time, place).
- For example, *The three grade levels at Jackson Middle School tend to isolate themselves from each other and rarely mingle. Therefore, how might provide activities that involve students across grade levels, so that students can come to appreciate each other more throughout the 2022-2023 school year?*



Step 3: Produce Solution Ideas

- Students brainstorm solution ideas to their UP. They select and write their best 16 ideas.
- Students should tell **WHO** will implement the solution, **WHAT** the basic idea is, and **WHY/HOW** it works to help solve the UP.
- For example, *The Physical education instructors will coordinate events for a school-wide Olympics. Each team will have 6th, 7th and 8th graders on it, and they will compete together in various events. When kids who normally wouldn't associate with each other get the opportunity to work together and have fun as a team, they will come to appreciate each other more.*



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Step 4: Select Criteria

- Students identify 5 important criteria.
- Criteria are written as questions. They are singular, in the desired direction, and contain a superlative
- For example, which solution will . . .
 1. provide the greatest number of opportunities for students across grade levels to mingle?
 2. help students most appreciate each other?
 3. least interfere with the curriculum?
 4. students like the most?
 5. be easiest for staff members to organize?



Step 5: Apply Criteria

- Students use a grid to rank their best 8 solutions against each of the identified criteria.
- For each criterion, students rank order the 8 solutions as to how well they meet the criterion. Solutions are ranked 1-8 with 8 being the solution that best meets the criterion, 1 being the solution that least meets the criterion.

Solution	1	2	3	4	5	Total
Multi-grade team Olympics	3	7	2	6	8	26
Weekly appreciation awards	1	1	8	2	6	18
Multi-grade homeroom respect activities	7	8	4	1	2	22
Before school mixers	2	2	6	5	4	19
Buddy system (mixed grades)	6	6	5	3	1	21
Cross grade level academic classes	8	4	3	4	3	22
After school mixed grade clubs	5	5	7	7	7	31
Monthly parties for all 3 grade levels	4	3	1	8	5	21

Step 6: Develop an Action Plan

- Students develop a detailed plan for the solution that scored highest on the grid.
- For example, an action plan to describe the winning solution of after-school mixed grade clubs might be:

Interested teachers, staff, parents, high school students and other volunteers will conduct a variety of after school clubs for students in all three grades. No club will contain only one grade of students. Clubs will be held after school mainly in classrooms and other areas at Jackson Middle (library, gym, computer lab, etc.), but can also be at the local YMCA and neighborhood center. The clubs will feature a variety of activities that interest students, like board games, knitting, sewing, various sports, computer programming, painting, ceramics, chemistry, writing, reading, and even one for doing homework. A club can be about anything that interests a club leader. We will meet with the principal next week to get his approval. Then for the next two weeks we'll find people to run the clubs and have them write descriptions about their club's activities. We'll also contact the PTO to see if they can provide any funding for club supplies. In week 4 we'll create and post schedules, and make and post announcements to advertise the clubs for students. Week 5 will be a sign-up week for students. The clubs will start week 6. Clubs can always be formed at any time, and there is no limit on the number of clubs we might have. This solution does not interfere in any way with the curriculum because it occurs after school. It could even enhance the curriculum if teachers agree to give extra credit for attending certain clubs (like writing, reading, etc.). Students will like this solution because clubs are optional, and students can participate in clubs they like. Staff members don't have to organize anything unless they choose to run a club -- they only have to agree to having a club meet in their rooms afterschool, which is also a choice. These cross-grade level clubs will allow students, who wouldn't normally do anything together, get to know each other better. As they learn about each other and have fun together, they'll come to like and appreciate each other more, and will ultimately have greater respect for one another. If there aren't enough students from all three grade levels in clubs, we will survey students for what their interests are and create clubs around those interests to get more students.



How Can You Use the 6-Step Process at Home?

Step 1 – Identify Challenges

- Identify the challenges you see in a television program (e.g., documentary, movie, news broadcast and/or sitcom).
- Identify challenges faced by characters in books.
- Brainstorm, what are the challenges you face as a family?
- Read a newspaper or magazine article together. What challenges are described?

Step 2: Select an Underlying Problem

- Write an underlying problem for each of the above list of challenges you made.
- Look at an appliance (or other invention) – what underlying problem does it solve?
- Analyze a decision made by a character in a book or movie. What underlying problem did it help address?
- What are some underlying problems in the world today?

Step 3: Produce Solution Ideas

- Ways to reorganize a room in the house (or the house in general)
- Places to go on a family vacation
- Things to do on a rainy Saturday
- Solutions for any underlying problem!

Steps 4 & 5: Select & Apply Criteria

Think of criteria for the following, and use a grid to find the best alternative:

- Family vacation possibilities
- Ways to improve communication among family members
- Possibilities for the family's next car
- Which colleges to apply to? Which college to attend?



Step 6: Develop an Action Plan

- A family trip
- Organizing a family reunion
- Redecorating a room in the house

Make your voice heard!

- Our vote for upcoming topics will be *online* from January through March of 2023. Beginning January 15th, go to fspi.org. We will be voting on Topics for the 2024-25 competition year.
- You can check out a list of past topics under [Topic History](#).
- Any new ideas for topics? You can make [Topic Submissions](#) for future study.
- We love hearing from you!

We invite you to participate in our decision-making process!

Cultural Corner: North Carolina, a State of Mind



Sunrise over Brown Mountain

North Carolina is called the Old North State and the Tar Heel State. Where did the name come from? During colonial times, North Carolina was a key supplier to naval stores of tar, pitch, and turpentine produced by the longleaf pine trees prevalent throughout the state. It was used to coat wooden ships to prevent leaking and shipworm damage. The sticky black substance ended up on the feet of the workers, providing the nickname tar heels. In 1893, the student paper *The Tar Heel* was founded, and like tar to heels, the name stuck.

North Carolina has many top-ranking colleges and universities. In the 22-23 US News National University Rankings, [Duke University](#), the Blue Devils, ranked #10. Duke, founded in 1838, is divided into 10 schools and colleges serving both undergraduate and graduate students. [The University of North Carolina](#) at Chapel Hill, a public university founded in 1789, ranked # 29. By state law, at least 82% of each freshman class must be from North Carolina. The Tar Heels and the Blue Devils have a fierce rivalry, especially on the basketball court with their outstanding men's basketball programs. [Wake Forest University](#), the Demon Deacons, founded in 1834, tied with UNC for 29th place in the rankings. This university is well known for its graduate programs, the School of Law, School of Business, and School of Medicine. Another public institution, [North Carolina State University](#), founded in 1887, is #72 on the list. The Wolfpack is the largest four-year college in the state. NC State is known for its engineering school, education program, and the Jenkins Graduate School of Management.

From the Mountains to the Sea

The [Great Smoky Mountains National Park](#), America's most visited national park, spans the Great Smoky Mountains and the Blue Ridge Mountains, a division of the Appalachian Mountain range. The park straddles western North Carolina and eastern Tennessee and is renowned for the beauty of its ancient mountains and its plant and wildlife diversity.

Heading east towards Asheville and onwards to Boone, western North Carolina's High Country is in the middle of the Blue Ridge Mountains and includes the Linville Gorge. The Linville Gorge is home to [North Carolina Outward Bound School](#), a provider of experiential learning in the craggy wilderness focusing on intelligence, problem-solving,



Linville Gorge

active listening, communication, resilience, and compassion. [The North Carolina Future Problem Solving Office](#) is located in the heart of the [Linville Gorge](#). This gorge is the deepest and probably the most rugged gorge in the eastern United States. Nicknamed the Grand Canyon of the East, it is protected by the 12,000-acre Linville Gorge Wilderness Area in Pisgah National Forest. Hikers and climbers visit from all over the world.

Many diverse landmarks, and social and ecological systems are found in the NC mountains. [Grandfather Mountain](#) with its mile-high swinging bridge is recognized by UNESCO as part of the [Southern Appalachian Biosphere Reserve](#). The [Linn Cove Viaduct](#), a 1243-foot segmental concrete bridge, snakes around the cliffs of Grandfather Mountain to protect its fragile habitat.

Fun Fact: If you visit [Appalachian State University](#) in Boone, NC, know how to say their name. Some, especially from the north, pronounce Appalachian as ap-a-LAY-SHUN. In North Carolina and parts of western Virginia, it is always Ap-a-LATCH-UN.

The Piedmont area of North Carolina is a hub for technology and biotech companies. The area around Raleigh, Durham, and Chapel Hill is called the Research Triangle due to its proximity and collaboration with three major research

universities—Duke, North Carolina State, and the University of North Carolina. Home to some of the fastest growing companies and communities in the world, the Research Triangle is driven by innovation, research, and collaboration. Charlotte, NC is a powerful financial hub. As a city, it revels in its financial power and celebration of culture and arts. Many NC FPS teams and individuals hail from Charlotte and the surrounding area.

Heading east, at the opposite end of the state, lies the Outer Banks known as the [Graveyard of the Atlantic](#) because of the many shipwrecks that surround the area. Notable lighthouses dot the coast including Bodie Island Lighthouse and [Cape Hatteras Lighthouse](#). The Outer Banks is a chain of barrier islands and inlets including [Ocracoke Island](#).

This area is steeped in history. The early English settlement known as Roanoke is where Virginia Dare was born in 1587, the first English child born in America. When Virginia's grandfather, the governor of Roanoke returned from a trip to England in 1590, the colony and all inhabitants had disappeared. The only clue was the word "Croatoan" carved into a wooden post. The mystery of the Lost Colony of Roanoke continues today. In the 1700s, Pirates were known to frequent the area. Blackbeard and most of his men were ambushed and killed by a British naval expedition off Ocracoke Island in 1718.

In 1903 at Kitty Hawk in the Outer Banks, the [Wright Brothers](#) completed their first heavier-than-air flight in their Wright Flyer. North Carolina has taken great pride in the brothers' accomplishments, and "First in Flight" is often seen on NC license plates today.

[The Mountains to Sea Trail \(MST\)](#) stretches 1175 miles and traverses North Carolina. The trail's western endpoint is Clingman's Dome where it connects with the Appalachian Trail in the Great Smoky Mountains and continues to its eastern endpoint at Jockey's Ridge on the Outer Banks.

From the mountains to the sea, North Carolina is steeped in history, transformation, and innovation. The people of North Carolina show a resilience of spirit that reflects its diversity and hardiness.



Linn Cove Viaduct with Table Rock and Hawksbill in the distance

North Carolina is truly beautiful!

Famous People from North Carolina

Musicians born in, or hailing from North Carolina:

- Jazz and Blues: Etta Baker, Nina Simone, Thelonius Monk, John Coltrane
- Bluegrass: Doc Watson, Earl Scruggs, Jim Lauderdale
- Folk, Rock, & American Roots Music: James Taylor, Tori Amos, The Avett Brothers
- Country Music: Don Gibson, Charlie Daniels, Ronnie Milsap, Randy Travis, Eric Church, Luke Combs

Authors: Thomas Wolfe, William Sydney Porter (O. Henry), Charles Frazier, and Reynolds Price are native North Carolinians.

Sports: Michael Jordan, often called the best basketball player of all time, grew up in North Carolina. Richard Petty and Dale Earnhardt are regarded as the greatest drivers in NASCAR history.

To all our Future Problem Solving
Students, Parents, Coaches, Evaluators,
and Supporters around the globe!

