

CARES Expanded Learning Program Partnership with the National Inventors Hall of Fame

The National Inventors Hall of Fame (<https://www.invent.org>) modules will support and enrich the 21 CARES Expanded Learning Program TK-8 schools. CARES has been using these research based, hands-on, engaging, and problem based learning modules within the after school, intersession, and summer programs since 2017. The modules will be implemented one to two times a week at the 21 (CARES 18 elementary and 3 middle school sites) and include; 7, Pod Pals and Zoom (TK-1), Lost Treasure and Robotic Pet Vet (2/3), Innovation Force and Champions (4/5), Fly Gliders and Wear It Out (6/8). All modules are aligned to the Next Generation Science Standards (NGSS) and empower students to collaborate, create, gain confidence and practice divergent thinking with the acclaimed summer enrichment program that has reached children nationwide for more than 30 years. Based on credible research and directly informed by world-changing inventors, Camp Invention® provides a new, tested program each year. Their engaging, hands-on modules are designed to meet the needs of TK-8 students, helping develop the Innovation Mindset — a growth mindset that instills essential skills for any area of life. The total purchase total for all modules for 2,100 students across 21 sites is \$198,208.50 (modules, shipping and tax).

Comments from schools:

Middle School CARES Staff *“I’m not sure whose idea it was for the STEM kits but it’s brilliant. The fact that the boxes come with all the materials needed+lesson plans which makes it incredibly hassle free+straightforward for Civitello & I to implement for our STEM Program is a game changer.”*

Teacher *“The eclectic array of projects are exceptionally engaging. They get the students excited, curious, and motivated to participate without it feeling like *school work*. Not to mention assisting in behavior management because the students are genuinely stoked about what they’re doing.”*

Parent *I love that our program offers a STEM component of this caliber run by a regular day science teacher. Between the quality of the STEM Kits combined with having Ms. C. — adds an air of priceless appeal & quality to our overall Riverview program.*

Student *“I love these kits. They are fun and I’m learning so much about STEM!”*

The following funding sources will be used to purchase the National Inventors Hall of Fame: After School Education & Safety (ASES) grant, Expanded Learning Opportunity Program (ELOP), and Community Development Block Grant (CDBG). The breakdown of kits per school is as follows:

- Bel Air Elementary 130 kits
- Cambridge Elementary 136 kits
- Delta View Elementary 144 kits
- El Monte Elementary 114 kits
- Fair Oaks Elementary 114 kits
- Gregory Gardens Elementary 102 kits
- Hidden Valley Elementary 57 kits
- Holbrook Language Academy - (elementary students) 156 kits
- Meadow Homes Elementary 155 kits
- Monte Gardens Elementary 60 kits
- Rio Vista Elementary 95 kits
- Shore Acres Elementary 126 kits
- Silverwood Elementary 63 kits
- Sun Terrace Elementary 96 kits
- Westwood Elementary 59 kits
- Woodside Elementary 46 kits
- Wren Avenue Elementary 114 kits
- Ygnacio Valley Elementary 88 kits
- El Dorado Middle 67 kits
- Holbrook Language Academy (middle school students) 25 kits
- Oak Grove Middle 69 kits
- Riverview Middle 84 kits

Total = 2,100 kits (1,855 elementary kits and 245 middle school kits)

- **Pod Pals:** Children follow the adventures of the Pod Pals — aliens that have come to Earth and need help returning to Planet P. As the story unfolds, children explore a variety of science concepts, from gravity to nutrition to the color spectrum, and are challenged to complete tasks to help their new alien friends.
- **Zoom:** Children explore career paths that take them to the depths of the ocean, far into outer space and everywhere in between. Challenges include developing an invention for ocean exploration, mixing colors and creating slime, and designing and building tall, stable structures.
- **Lost Treasure:** Children are recruited by Professor Ivana Dig-It to help find the lost treasure of Archaic Island! They must develop an exciting adventure story that will persuade investors to fund their expedition, investigate data about volcanic eruptions, build gadgets to reach fruit in trees, create a treasure map and carefully navigate challenging terrain.

- **Robotic Pet Vet:** By developing their knowledge and skills in biology, physiology and circuitry to take apart and diagnose their robotic dogs, students are able to enhance their problem-solving skills. After helping their pets recover, children celebrate the homecoming of their customized robotic pet as they demonstrate design engineering concepts by constructing an interactive dog park attraction.
- **Innovation Force:** Children join the Innovation Force®, a team of NIHF Inductees who solve the world's challenges while battling supervillains! They need designers, makers and entrepreneurs to help outwit The Plagiarizer, their arch enemy who is stealing ideas. With inspiration from real-life inventions, children are empowered to design, build and market an invention that will save the world.
- **Champions:** Children discover unseen champions of the sports world and explore how innovators have changed the way people experience sports! Students build their own functioning tabletop games and investigate NIHF Inductees who have revolutionized sports. They draft inventors and inventions to add to their Innovation Dream Team and use their inspiration to add elements including concession stands, equipment and seating for the ultimate sports complex.
- **Fly Gliders:** Children engage in high-flying fun as they explore the science of flight with inspiration from NIHF Inductees Orville and Wilbur Wright. Students use their most valuable tools — their own eyes and hands — as they experiment with a handcopter, paper airplanes and a heliball, and explore the role of wing shape and nose weight in an airplane's trajectory.
- **Wear It Out:** In Wear It Out, Innovators combine creative ideas and maker materials to invent clothing and accessories that are both fashionable and functional. They employ divergent and convergent thinking and creative problem solving to engineer clothing of the future that responds to extreme weather scenarios.