

Camp Invention®

ACCLAIMED SUMMER STEM SUMMER STEM PROGRAM FOR GRADES K-6

A NATIONAL INVENTORS HALL OF FAME® EDUCATION PROGRAM

TABLE OF CONTENTS



CAMP INVENTION OVERVIEW



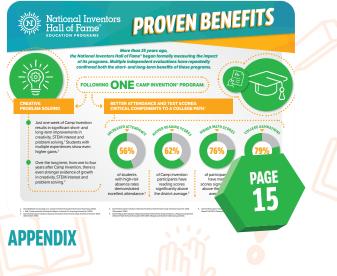
MODULE OVERVIEWS





WHAT'S INCLUDED







HANDS-ON STEM SUMMER CAMP

Our nationally recognized K-6 summer enrichment program, Camp Invention[®], has brought authentic invention education to children across the country for more than 30 years.

Each year, a brand-new curriculum is developed and tested to deliver hands-on experiences that encourage divergent thinking. Camp Invention is backed by independent research and designed to spark imaginations through open-ended engagement in creative problem solving.

I loved the environment that the program created. The days went by quickly and I ENJOYED EVERY MINUTE OF THEM!

STACEY U., INSTRUCTOR

INNOVATIVE EXPERIENCES

- Real-world challenges lead children to practice empathy and build confidence and persistence while becoming solution seekers
- Authentic STEM experiences foster critical thinking, communication, collaboration and creativity
- Job-embedded professional development helps educators cultivate an innovative mindset

FLEXIBLE & IMMERSIVE CURRICULUM

- Four all-new, themed modules with hands-on activities
- Curriculum differentiated for primary and intermediate levels
- Aligned to state, Common Core and Next Generation Science Standards
- High-energy activities and opportunities keep children active and engaged

TURNKEY IMPLEMENTATION

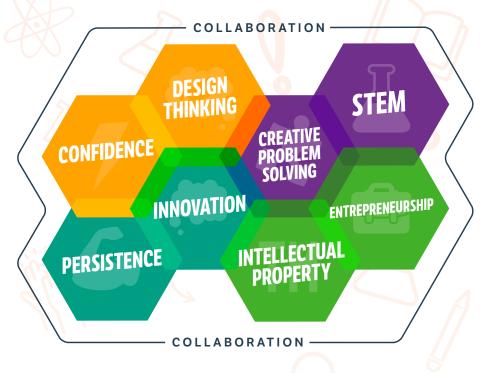
- All-inclusive program curriculum and materials
- All materials shipped in classroom sets from our warehouse to your program location
- Personalized support and resources ensure a positive experience
- Step-by-step curriculum guide and online resources reduce prep time

I CAN INVENT MINDSET

All National Inventors Hall of Fame education programs are built on the belief that every child can invent. Through open-ended, hands-on exploration, children build the I Can Invent[®] Mindset — a growth mindset infused with lessons from world-changing inventors — that enables and empowers them in all areas of their lives.

In collaboration with our National Inventors Hall of Fame Inductees, we have identified nine essential skills and traits that unlock creative potential. Each Camp Invention module highlights different aspects of this mindset, guiding children to unlock their full potential and discover the power of their own creativity.

2025 CAMP INVENTION MODULES





IN CONTROL™

As travelers on the ultimate road trip, children test their **navigation skills** using traditional maps and GPS, inventing their way out of bumps in the road and **discovering** that the journey is just as much fun as the destination.



ILLUSION WORKSHOP[™]

Immersed in the mesmerizing world of special effects, children discover the science behind **optical illusions**, then invent their own spinning animation device and moving props. Campers create their own Spin-o-scope[™] to show the illusion of motion, blending the realms of science and art.



CLAW ARCADE™

Using creativity and **engineering skills**, children experiment with **physics** to construct a functional claw machine as they draw inspiration from nature's claws, talons and pincers, then create awesome prizes to pick up.



PENGUIN LAUNCH"

Embarking on an epic eco-expedition, children investigate penguins and the **geography** of Antarctica, tapping into **design thinking** to construct planet-saving prototypes with the help of a robotic assistant.

I CAN INVENT MINDSET FOCUS AREAS

- STEM
- Creative Problem Solving
- Persistence

STEM
 Persistence

r er sistene

Innovation

Entrepreneurship
 Intellectual Property
 STEM

Confidence
 Persistence
 STEM

MODULE OVERVIEW IN CONTROL

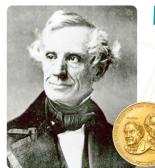
Students take control of their innovative journey by testing their navigation skills as they study travel maps and discover the use of artificial intelligence (AI) in everyday road trip items like GPS. They assemble their own receiver and custom Control Panel and exercise their communication skills as they make exploration decisions.

WHAT THEY TAKE HOME:

Custom cardboard Control Panel with radio transmitter and receiver, "AI Assistant" dashboard bobblehead







MEET A HALL OF FAMER SAMUEL MORSE

This module was inspired in part by National Inventors Hall of Fame Inductee Samuel Morse, who invented Morse code.

KEY SKILLS & CONCEPTS

Electrical Engineering Artificial Intelligence

Circuitry

Navigation

Physics

I CAN INVENT MINDSET FOCUS AREAS



Exploring STEM concepts by assembling a transmitter and receiver.



PERSISTENCE

Practicing creative problem-solving and decision-making skills while receiving challenges at each stop along the way. Staying persistent while inventing solutions to unexpected road trip detours.

KEY SKILLS & CONCEPTS

Neuroscience

Biopsychology

Electrical Engineering

Optics

Physics

I CAN INVENT MINDSET FOCUS AREAS



Discovering STEM concepts through exploring the phenomena of illusions.

INNOVATION

Practicing persistence while building and wiring a Spin-o-scope.

PERSISTENCE

Discovering innovations of National Inventors Hall of Fame Inductees through hands-on activities.

MODULE OVERVIEW ILLUSION WORKSHOP

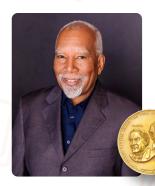
Students are introduced to captivating optical illusions, discovering the mechanics of how the mind and eye perceive surroundings. Then, they blend science and art to create their own spinning animation device and moving props, becoming special effects experts and designing new entertainment experiences of the future.

WHAT THEY TAKE HOME:

Custom built Spin-o-scope™, personalized pneumatic prop







MEET A HALL OF FAMER

This module was inspired in part by National Inventors Hall of Fame Inductee and Walt Disney Imagineer Lanny Smoot, inventor of Theatrical Technologies and Special Effects.

MODULE OVERVIEW CLAW ARCADE

Students use hands-on physics and engineering concepts to make a DIY claw machine inspired by the claws of the natural world, from lobster claws to eagle talons to crab pincers. Once they build their clawsome cardboard machine, they create one-of-a-kind prizes and explore entrepreneurship principles as they hook investors on their arcade experiences.

WHAT THEY TAKE HOME:

Custom cardboard DIY claw machine, mini NIHFty Bot™ plush keychain, pompom creature, light-up spiky ball







MEET A HALL OF FAMER PATRICIA BATH

This module was inspired in part by National Inventors Hall of Fame Inductee Patricia Bath, inventor of Laserphaco Cataract Surgery.



Materials Science

Biology

Design Engineering

Mechanics

Physics

I CAN INVENT MINDSET FOCUS AREAS



Developing entrepreneurship skills by creating a pitch to hook investors.



STEM

Discovering intellectual property skills by creating a logo and designing a billboard. Discovering STEM concepts like physics and mechanics by design engineering a claw machine.

KEY SKILLS & CONCEPTS

Environmental Science

Biology **Electronics and Robotics**

Magnetism

Physics

I CAN INVENT MINDSET FOCUS AREAS



Engaging in hands-on exploration of physics and materials science through STEM.

INTELLECTUAL ENTREPRENEURSHIP PROPERTY **Building entrepreneurship** skills by creating a

brand and looking at

target audience.

Gaining intellectual property literacy by designing a logo.

MODULE OVERVIEV PENGUIN LAUNCH

Students embark on an eco-expedition to investigate penguins in their Antarctic habitat, entering penguin colonies with the help of a Snow-ver - a rover equipped with a robotic research penguin that can roll and glide across icy surfaces. Then, they unleash design thinking as they create flippers and launchers to propel their own plush magnetic penguin.

WHAT THEY TAKE HOME:

Plush penguin with magnetic feet and flippers







MEET A HALL OF FAMER JACQUELINE QUINN

This module was inspired in part by National Inventors Hall of Fame Inductee Jacqueline Quinn, inventor of Emulsified Zero-Valent Iron (EZVI).

CAMP INVENTION GAMES OVERVIEW

Camp Invention Games supplements our four core modules by giving children the opportunity to engage in more teamwork, out-of-the-box thinking and physical fun through energetic and enriching activities. Games can be used during the daily lunch break or implemented during Base Camp, where children begin and end each day.



Building persistence to overcome fun challenges, from balloon tosses to relay races.

PERSISTENCE



Applying creative problem solving to devise strategies in games using unusual objects and new rules.



Gaining confidence and building agility through both collaboration and competition.

I CAN INVENT MINDSET FOCUS AREAS

A TYPICAL DAY AT CAMP INVENTION

A TYPICAL DAY¹ AT CAMP INVENTION MAY FOLLOW THE SCHEDULE BELOW:



EXTENDED

DAY

Campers

MORNING **BASE CAMP** Campers engage in team-building

9 A.M.

activities to prepare for the day.



11:40 A.M.

LUNCH BREAK Half the campers enjoy lunch while the others go outside for Camp Invention Games, and then they switch.



PROGRAM **MODULES**

Campers engage in more handson STEM and design thinking challenges as they dive into the two afternoon modules.



3:15 P.M.

AFTERNOON

BASE CAMP

Campers wind

problem-solving

games before

signing out.

down with

EXTENDED DAY Campers participating in Extended Day² are picked up after engaging in

more fun, handson activities.

participating in Extended Day² enjoy activities that build on the momentum of the

7:30 A.M.

creators and innovators.

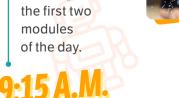
1. Activities are grouped by grade level, allowing children of all ages to build confidence as

core program.



PROGRAM MODULES Campers stretch

their imagination with STEM challenges in the first two modules of the day.



sign out at 3:30 p.m.



2. Extended Day is offered as a parent opt-in for an additional registration

fee. Participants not registered for Extended Day will arrive at 9 a.m. and







Program Overview:

Working families want our help! Extended Day is designed to meet their needs with a convenient schedule and easy-to-implement activities. Camp Invention[®] plus Extended Day includes:

- Extended Program Hours The program typically runs from 7:30 a.m. to 5:30 p.m.
- Activity Guide A standalone set of hands-on activities and materials builds upon the momentum of the core modules.
- Flexible Curriculum A combination of building, sketching, themed design engineering challenges and recess-style games is provided. This allows for customization to support the needs of each program.

How It Works:

Camp Invention provides Extended Day materials and program team stipends. The Facilitator will receive a \$650 stipend and each Assistant will receive a \$80 stipend for the week.

The host site will provide the Extended Day program team as well as the classroom space. The program team includes one Extended Day Facilitator and additional Extended Day Assistants, determined by enrollment.

"I found that parents needed before and after care to accommodate their work schedules. Extended Day allowed campers to attend that wouldn't have had the opportunity and parents were grateful!"

Erin K. | Camp Director, Tuscarawas Valley Local Schools, Zoarville, OH

Extended Day Program Team Chart:

| Extended Day Participants* | Facilitator | A.M. Assistant | P.M. Assistant |
|----------------------------|-------------|----------------|----------------|
| Up to 10 | 1 | 1 | 1 |
| 11-20 | 1 | 2 | 2 |
| 21 - 30 | 1 | 3 | 3 |
| 31 - 40 | 1 | 4 | 4 |
| 41 - 50 | 1 | 5 | 5 |

The cost for the Extended Day program is \$100 per participant.**

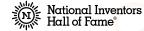
How Many More Students Can You Impact?

- According to a recent independent survey, 67% of parents would not send their child to a camp that matches their child's interests if it conflicts with their work schedule.¹
- **43% of parents** want or need camp hours beyond the traditional time of 9 a.m. to 3:30 p.m.¹
- Data shows that Camp Invention programs offering Extended Day have gained **an average of eight more campers** than locations without extended hours.

¹Meeting Street Marketing, Camp Invention Parent Research Study (August 2019). *LITs are not factored into the participant levels. **Extended Day is an additional cost to the Camp Invention program and does not include building use fees.

LEARN MORE ABOUT EXTENDED DAY





WHAT'S INCLUDED

| | | Camp Invention Provides | District or Host Site Provides |
|------------------------|--|---|---|
| Program Preparation | Program Team orientations | \checkmark | \checkmark |
| | Promotional Tools (flyers, posters, social media and digital content are provided) | Image: A start of the start of | ~ |
| | Exceptional support provided by Regional Representatives | ✓ | \checkmark |
| Implementation Support | Materials, Curricula and Instructor Guide for 32.5 hours of programming | Image: A start of the start of | Image: A start of the start of |
| | Materials delivered to the program location in classroom sets | \checkmark | \checkmark |
| | Daily schedules and instructional videos to supplement the curriculum and support session implementation | ✓ | ~ |
| | Immersive videos and digital assets to create an innovative atmosphere | \checkmark | |
| | Central Registration System | ✓ | \checkmark |
| | Camp Invention T-shirt for campers, leaders and Instructors | ✓ | |
| Site Coordination | Classroom or physical space | | \checkmark |
| | Instructor recruitment | \checkmark | \checkmark |
| | Distribution of promotional materials | | Image: A start of the start of |

Camp Invention[®]

INSTRUCTOR TESTIMONIALS

"I think Camp Invention is just as important for the teachers as the students. This is a **great opportunity for teachers to learn about inquiry** in a well mapped out and fun environment. Leading this summer program gives teachers the **hands-on experience** to incorporate inquiry into their classroom during the school year and provides the exact supports for teaching in a truly 21st-century model."

NICOLE F., AKRON, OHIO

"Camp Invention is a wonderful, hands-on experience for children. As a teacher, **I consistently learn new techniques to engage students** in learning and gaining deeper knowledge of the material."

DEBBIE Y., COLUMBIA, SOUTH CAROLINA

"I get so many ideas of ways to level up my own teaching and get students more engaged in thinking. I love how much creating kids are able to engage in during the week. They learn quickly to try new ideas, and collaborate in ways I don't usually see using traditional lessons."



EMBEDDED PROFESSIONAL DEVELOPMENT Supporting Educators With Transferable Strategies

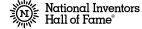
Camp Invention includes embedded professional development, preparing educators with hands-on learning strategies they can easily transfer from this STEM program to their day-to-day classroom.

Through hands-on experience, we provide educators with the tools and best practices they need to instill essential 21st-century skills, promote empathy and teamwork, and help students build the I Can Invent[®] Mindset.

According to a recent post-camp survey of Directors and Instructors who were involved in Camp Invention:

- 98% will take an experiential, hands-on approach to learning
- 98% have enhanced their knowledge of STEM application
- 97% will integrate different disciplines and subject areas
- 97% will use open-ended inquiry as an instruction technique
- 99% will create problem-solving challenges for their students
- 99% will foster risk taking in their classrooms

Data collected from 2023 Camp Invention Instructor and Director Surveys



BETHANY V., DALLAS, GEORGIA



PRICING

With our traditional parent-paid model, the district or host site provides the space needed for the camp and secures the qualified local educators who serve as Program Team Members. The program cost is covered by each participant, and there is no added fee to host the program.

- \$350 per participant¹
- \$450 per participant including Extended Day
- Registration discounts available for Program Team Members and families
 - Registration discounts for Program Team Members' immediate children
 - Seasonal, sibling and multi-week discounts available
 - Convenient payment plans

1. Per-participant registration and Extended Day costs may vary to cover building use and other district fees.

If parent funding is not an option, our education programs also qualify for Title I, Title II, Title III, Title IV, 21st Century Community Learning Centers, Migrant Education and Early Learning Challenge funding, as well as state and local district resource funding.

Inspiring Future Innovators*

2. Discounts may vary.

National Inventors

Hall of Fame®

HOW IT WORKS

PARTNER WITH NIHF

- **NIHF:** Regional Representative provides exemplary support throughout the experience
- HOST SITE: Confirm program location and dates
- HOST SITE: Confirm program Director
- NIHF: Registration opens

KICK OFF CAMP PROMOTIONS

- NIHF: First flyer is provided including seasonal participant discount²
- NIHF: Ship Welcome Box to the Director
- NIHF: Host Director promotional orientation
- DIRECTOR: Secure Program Team Members

AMPLIFY CAMP PROMOTIONS

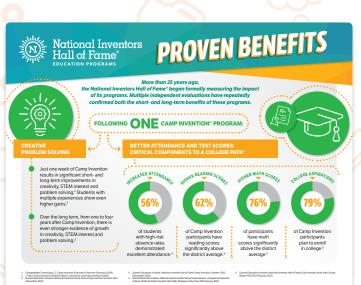
- NIHF: Additional flyers are provided including seasonal participant discount
- PROGRAM TEAM: Spread the word about Camp Invention using the provided resources including social media write-ups, newsletters and digital ads
- DIRECTOR: Communicate all Program Team discounts

PREPARE FOR CAMP WEEK

- NIHF: Host Director logistics orientation
- NIHF: Schedule program materials and curricula for delivery
- DIRECTOR: Confirm Program Team based on enrollment
- **DIRECTOR:** Summer is here! Launch your Camp Invention program!

© 2024 National Inventors Hall of Fame®, Inc.

APPENDIX



EVALUATION SUMMARY

Learn more about the proven benefits of participating in Camp Invention.

ACTIVITY

Astro-Arm (Oldest Class Only) Participants in the Oldest Class Only explore hydraulics and spacesuit cooling technology. They then assemble their hydraulic Astro-Arm in preparation for departure.

H Materials

pans, filled with Kits (cylinder water and frozen attachment piece bags cylinders, tubing zip ties) Astro-Arm (black paper cups □ Markers craft sticks with holes, long brad Masking tape, fasteners, short preripped brad fasteners. Paper towels triangular clips)

Hvdraulic

Step-By-Step Instructions D This version is for the Oldest Class Only. Each activity part is aligned with the end of the Definition of the Oldest Definition of the Oldest

parts of the Hydraulic Assembly sheet.

J Play one of the "Spacecation Background Music" Tracks as participants are entering.

 Welcome participants in the <u>Oldest Class</u> <u>Only</u> back to Spacecation, and announce that it is almost time to blast off toward the Milky Way.

 Show the Spacesuit Cooling digital poster.



 Say the following to participants in the <u>Oldest Class Only</u>:
 K Spacesuits were invented to help protect

CURRICULUM EXCERPT

View a sample of our curriculum to see how we provide detailed guidance for easy-toimplement program experiences.



INVENTOR LOG EXAMPLE

View an example of the Inventor Logs that provide campers with step-by-step guidance and space for writing and sketching ideas.

BE INNOVATIVE – BRING CAMP INVENTION TO YOUR DISTRICT TODAY!

TO LEARN MORE, CONTACT:

invent.org | 800-968-4332 | inventioneducation@invent.org



Inspiring Future Innovators[®]

The National Inventors Hall of Fame provides STEM education programs for young innovators from PreK through grade 12.