



Invention Project®  
GRADES 6-9

# AT-HOME STEM PROGRAMMING



FROM THE CREATORS OF CAMP INVENTION® – A NATIONAL INVENTORS HALL OF FAME® EDUCATION PROGRAM



# REAL-WORLD CHALLENGES BUILD CONFIDENCE AND SKILLS

Through inspiring, hands-on challenges, middle school students learn how to turn their ideas into inventions. Each student receives an activity kit packed full of materials for each of four units, providing them with empowering experiences that emphasize perseverance and goal-setting skills.

## PRICING:

**Licensed:**  
**\$140/participant**  
(12 participant minimum)

**Parent Paid:**  
**\$200/participant**  
(Program designed to serve up to 25 participants.  
1 instructor/25 participants. 12 participant minimum)

## INNOVATIVE EXPERIENCES

- Research-based curriculum allows educators to lead with confidence
- Open-ended exploration promotes creativity and builds 21st-century skills
- Children are empowered to use their imagination and make their thinking visible as they explore STEM concepts

## FLEXIBLE CURRICULUM

- The Invention Project At Home program includes four unique, hands-on units
- Each unit provides six hours of programming and can be delivered asynchronously or synchronously. For districts running synchronously, there is an additional experience on the fifth day.
- Flexible pricing options; license using district or school funds, or offer as a parent-paid opportunity
- Aligned to Common Core and Next Generation Science Standards for grades 6-9

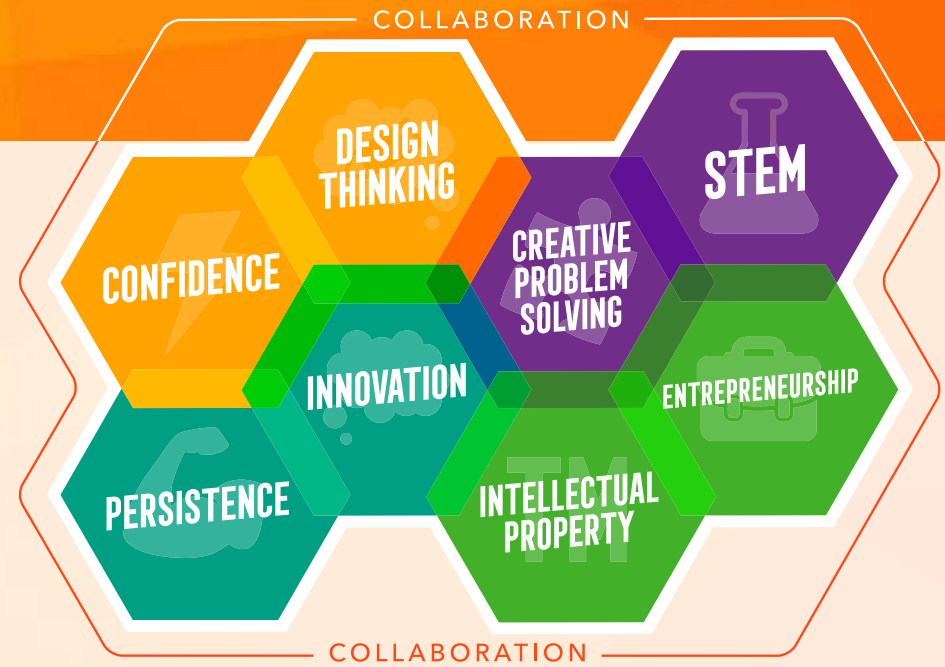
## TURNKEY IMPLEMENTATION

- Each unit delivers a complete activity kit and step-by-step guide for each student, filled with all the creative materials they will need
- Educator script and easy-to-follow interactive video included with each unit
- Dedicated National Inventors Hall of Fame® (NIHF) support

# THE INNOVATION MINDSET

Each National Inventors Hall of Fame education program is built on the belief that every child can invent. Through open-ended, hands-on exploration, children build an Innovation Mindset – a growth mindset infused with lessons from world-changing inventors – that enables and empowers them in any area of life.

The Innovation Mindset is made up of these nine essential skills and traits that are strengthened every time a child applies them. Each Invention Project 6-9 unit highlights different aspects of this mindset, and by participating in all of the units, children unlock their full potential and discover the magic of their own creativity.



## INVENTION PROJECT 6-9 AT HOME UNITS



### E-RACER BOTS™

Students investigate the infinite possibilities of robotics as they create a simple robot that moves through vibration.

- ◆ Persistence
- ◆ Innovation
- ◆ Creative Problem Solving



### FLY GLIDERS™

Curiosity reaches new heights as students experiment with planes and heli-balls to explore the science of flight.

- ◆ STEM
- ◆ Confidence
- ◆ Innovation



### RC ORIGAMI BOT™

Getting creative with technology, students construct and operate their own remote-controlled robots.

- ◆ Design Thinking
- ◆ Persistence
- ◆ STEM



### WEAR IT OUT™

Students prototype, protect and promote wearable technology that is both fashionable and functional.

- ◆ Creative Problem Solving
- ◆ Intellectual Property
- ◆ Entrepreneurship





# E-RACER BOTS™

Children develop persistence as they:

- Create simple robots using a motor and eraser.
- Use vibration to make their robots move through trial and error.
- Gain insight on advanced batteries from Collegiate Inventors Competition® Finalists.

## MATERIALS

Binder clips

Chart paper

Coin batteries

Corks

Erasers

E-Racer Bots sheet

Feathers

Large paper clips

Markers

Masking tape

Pencil

Pushpins

Rubber bands

Scissors

Small paper clips

Step-by-step activity guide

Vibrating motors

Webbing Out sample sheet





# FLY GLIDERS™

Imagination takes off as children:

- Receive all the materials they need to explore flight, inspired by NIHF Inductees Orville and Wilbur Wright.
- Experiment with an electronic heli-ball and airplane structural design.
- Build a rescue plane prototype and explore the role of wing shape and nose weight in an airplane's trajectory.

## MATERIALS

Hand-copter

Classic paper airplane sheet

Color copy paper

Markers

Masking tape

Paper clips

Scissors

Heli-ball

Masking tape

Safety glasses

Step-by-step activity guide





# RC ORIGAMI BOT™

Children explore new possibilities as they:

- Receive all the materials they need to construct and operate a remote-controlled robot.
- Apply creative thinking to transform their bots from 2D figures to 3D objects.
- Explore remote-control technology, including the use of medical robots.

## MATERIALS

AA batteries  
Black permanent marker  
Markers  
Masking tape  
RC Origami Bot Kit  
Safety glasses

Scissors  
Screwdriver  
Step-by-step activity guide  
Transparent tape







## WEAR IT OUT™

Children bring innovative ideas to life as they:

- Use creative problem solving to engineer clothing of the future to function in extreme weather.
- Follow step-by-step instructions to protect their idea, draft a business plan and launch a powerful pitch.
- Receive complete materials and inspiration from NIHF Hall of Famers to tap into their creativity.

## MATERIALS

- Adhesive notepad
- Business Basics sheet
- Coin batteries
- Conductive thread
- Copy paper
- Fabric
- Feathers
- Felt
- Go-to-Market sheet
- LEDs
- Markers
- Masking tape

- Pencil
- Pipe cleaners
- Recyclables
- Scissors
- Sewable sequin lights
- Sewing needle with cork
- Step-by-step activity guide
- The Creator's Key to Intellectual Property poster
- Threader
- Umbrella
- Wear It Out sheet



# CUSTOMIZE A SOLUTION FOR YOUR DISTRICT TODAY!

**TO LEARN MORE, CONTACT:**

**800-968-4332**

**NIHFatmyschool@invent.org**

[invent.org/at-my-school](https://invent.org/at-my-school)



National Inventors  
Hall of Fame®

*Inspiring Future Innovators®*

In partnership with



UNITED STATES  
PATENT AND TRADEMARK OFFICE

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