



STEM Education Works®



**INDIANAPOLIS  
MOTOR  
SPEEDWAY  
MUSEUM**

## EMPOWERING EDUCATION THROUGH MOTORSPORTS INNOVATION

### CHALLENGE: STEM THAT STICKS

The Indianapolis Motor Speedway Museum draws over 140,000 visitors a year, including families, students, and race fans alike. But reading plaques and peeking at vintage cars only goes so far. The museum team knew they wanted more for their guests. They wanted people to *feel* the thrill of innovation.

What if visitors could not only learn about engineering, but try it themselves? What if a museum could be more than a place to observe history, and instead become a space to *build* the future?

That's where the Innovation Workshop was born.

*"We wanted to give people the opportunity to not only come in and learn about the stories by reading about them ... we wanted to give them an actual way that they could engage with the stories and the history ..."*  
— Jake Apollos, Director of Education, IMS Museum

### VISION: STEM YOU CAN TOUCH, TINKER, AND TEST DRIVE

The goal wasn't just to add a few gadgets to a gallery. The museum imagined a fully hands-on workshop where learners could code, design, build, and problem-solve – just like the pros behind IndyCar.

To make that happen, IMSM partnered with STEM Education Works to design an interactive space that brings STEM principles to life through racing. Whether you're 8 or 80, a teacher or a first-time visitor, the Innovation Workshop invites you to dive into real-world technology in a creative, fun, and entirely unforgettable way.

### SOLUTION: A SPACE WHERE CURIOSITY TAKES THE WHEEL

Step inside the Innovation Workshop, and you'll find:

- **indi cars from Sphero:** Small color-sensing robots kids



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can race on custom tracks they design themselves.

- **MakerBot 3D printers:** Tools turn big ideas into real-world prototypes
- **littleBits Circuitry:** A simple, hands-on way to learn the basics of electronics and how they power modern racing

All of it is built around one idea: when kids are given tools and space to explore, they don't just learn – they invent, build, and grow.

*"I love the indi cars because those were ones that I originally did not intend to buy. And they brought them down and showed them to me and said, 'Well, you can use them to build race courses.' So, that was kind of the first light bulb moment I had on this job. And then from there I've been like, 'All right, tell me what else you've got.'"*

— Jake Apollos, IMS Museum

### THE IMPACT: SPARKING SOMETHING REAL

The Innovation Workshop was launched as part of a \$60.5 million museum renovation, and it has quickly become one of the most talked-about features on the floor. It's helping guests:

- Get hands-on with the tech behind racing
- See STEM as something exciting and personal
- Connect science and history through creativity

And it's not just for kids. "We've had grandparents and college students come in thinking, 'This room isn't for us.' And the next thing you know, they're on the floor, playing and doing things too. So it's really creating that culture and atmosphere that this is for everybody," says Apollos. Looking ahead, the museum is already planning Phases 2 and 3:

- Custom programming for school and homeschool groups
- Digital and mobile experiences for those too far to visit in person

### WHAT WE'RE BUILDING TOGETHER

This is more than an exhibit. It's a model for how museums can bring STEM to life without losing the heart of their mission.

*"They come out excited about what they're learning, which means that they're a little bit more excited about IndyCar, and we're just continuing to grow that fan base for the next generation ..."*

— Jake Apollos, IMS Museum

