



APRIL 9, 2024

## BEYOND THE CLASSROOM: K-12 EXPLORATION, ENGAGEMENT, AND EXCELLENCE WITH STEM BUSES

The importance of science, technology, engineering, and mathematics (STEM) education in today's workforce cannot be overstated. According to the U.S. Bureau of Labor Statistics, occupations in STEM fields are projected to grow by 8% between 2020 and 2030 which is faster than the expected growth for all occupations.

STEM buses, mobile laboratories, and STEM innovation labs are just some of the names used to describe outfitting traditional school buses with technology to provide K-12 students with hands-on STEM learning experiences. Equipped with state-of-the-art technology and resources, these mobile classrooms are designed to spark curiosity, enhance creativity, and promote engagement in STEM disciplines. The possibilities are endless, but the most common technologies incorporated into STEM buses, include:

**Coding Stations:** Equipped with computers or tablets loaded with coding software, coding stations enable students to learn programming languages such as Scratch, Python, or JavaScript, empowering them to create their own software applications and games.

**Robotics Kits:** These kits include programmable robots equipped with sensors, motors, and other components, allowing participants to learn coding, engineering principles, and problem-solving skills through hands-on experimentation.

**3D Printers:** 3D printing technology enables individuals to bring their ideas to life by creating three-dimensional objects layer by layer. Participants can design and print their own prototypes, fostering creativity and innovation.

**Virtual Reality (VR) Headsets:** VR technology provides immersive experiences that allow students to explore virtual environments and interact with simulations related to various STEM topics, such as biology, physics, and engineering.

**Microscopes & Scientific Instruments:** These tools allow students to explore the microscopic world, conduct experiments, and make scientific observations, promoting an understanding of biology, chemistry, and other STEM disciplines.

**Circuitry Kits:** Circuitry kits provide hands-on experience with electronics components such as breadboards, resistors, LEDs, and sensors, allowing participants to learn about electricity, circuits, and engineering principles by building and testing their own electronic devices.

**Mobile Maker Spaces:** These portable workstations feature a variety of tools and materials for prototyping, tinkering, and building, including woodworking tools, soldering irons, and crafting supplies, enabling participants to unleash their creativity and innovation.

As a technology company whose mission is to enable innovation, communication, safety, and transformation through technology, **Premier** is excited to partner with school districts to foster dynamic STEM opportunities for K-12 students. **Premier's** 30 years of experience positions us as an expert in recommending routers, hardware, and other equipment to provide connectivity to the various STEM technologies listed above. In addition, we partner with school districts to seamlessly install and configure their Wi-Fi-enabled technology on their STEM buses to ensure it operates as desired, complete with CIPA-filtering. **Premier** believes in fostering STEM education, encouraging innovation, and nurturing talent to drive progress in technology. From inspiring the next generation of tech enthusiasts to showcasing groundbreaking advancements, STEM buses underscore our commitment to empowering youth to explore, engage, and excel in these critical fields.

---

### **About Premier Wireless**

**Premier Wireless'** advanced technology solutions transform schools and school districts across the nation by enabling innovation and improving safety and communication. We collaborate with you to tailor our diverse products and programs to meet your specific needs while ensuring scalability for future growth. Premier fosters lasting partnerships through unparalleled customer service and white-glove support. For more information about Premier Wireless, visit [www.premierwireless.com](http://www.premierwireless.com).