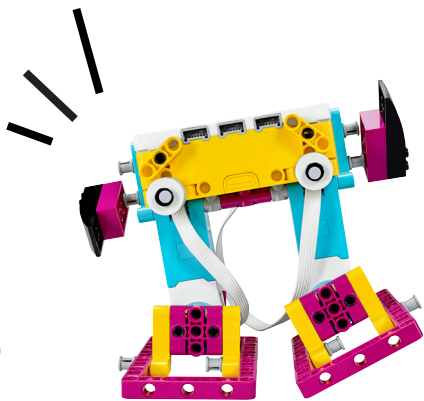


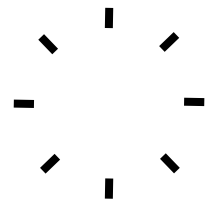


LEGO® Education SPIKE™ Prime

Welcome to the Gang!



Now...

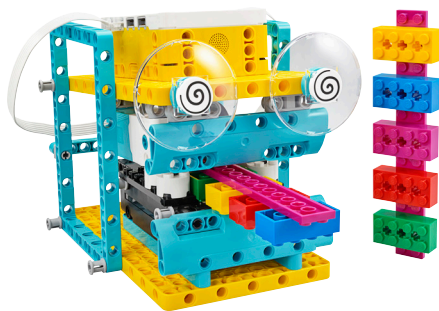


Let's Get Started!



A photograph of a classroom where students are engaged in a hands-on learning activity. In the foreground, a young girl with long brown hair is smiling and looking towards a boy on her right. The boy is also smiling and looking down at a LEGO SPIKE Prime robot on the table. In the background, other students are visible, some working on computers and others on projects. A small LEGO minifigure head is visible on the left side of the image.

Introducing LEGO® Education SPIKE™ Prime



We hope you love trying out the new LEGO Education SPIKE Prime kit in your school. We look forward to hearing back about your experience and how you think it can ignite students' passion for STEAM learning!

LEGO® Education SPIKE™ Prime is Australia's most popular curriculum-aligned STEAM solution for students Years 5-8. Partnership with Raspberry Pi computers now extends the system to Year 12 and beyond.

Combining colorful LEGO building elements and easy-to-use hardware, SPIKE Prime continuously engages students through playful learning activities to think critically and solve complex problems, regardless of their learning level.

Initially, SPIKE Prime uses intuitive drag-and-drop coding language based on Scratch. Students have the option to explore text-based coding using Python as they develop competencies.

From easy-entry projects to limitless creative design possibilities, SPIKE Prime helps students learn essential STEAM and 21st century skills needed to become the innovative minds of tomorrow... while having fun!

"Using this kit made delving into programming and robotics lessons surprisingly easy and enjoyable. I love that SPIKE Prime lets you drag and drop code because it gives students freedom

at every point of the activity to add fun elements or change outcomes to make the it into what they want to make with it."

What's included in the kit?

SPIKE Prime consists of a main classroom brick set with a wide variety of LEGO elements and intelligent hardware. With the SPIKE Prime Hub, motors, and sensors your students can create a variety of smart inventions while applying and analysing real world data. The kit is **supported by the easy-to-use SPIKE App**. Download it once onto your platform of choice - iPad, PC, laptop or mobile device. When using the app, choose 'teacher' or 'student' access.

Curriculum-Aligned Lesson Plans

SPIKE Prime offers **six engaging Learning Units with 40+ curriculum-aligned, 45-minute lessons**.

Students have fun and get hands-on with STEAM learning, developing coding, robotics and AI skills. Oral communication skills are also practised as students present and analyse solutions in collaborative discussions that make learning STEAM concepts fun.

"It can be exhausting and overwhelming trying to keep on top of all the advances in technology that we are expected to teach the kids. That's what I love about SPIKE Prime. You get access to over 50 hours of engaging, curriculum-aligned lesson plans - developed by education experts - that make teaching STEAM fun again! The students love it, it stimulates creativity and imagination, and together we all learn some really quite complicated coding concepts without even realising it! Well done, LEGO."

Is it hard to use in class?

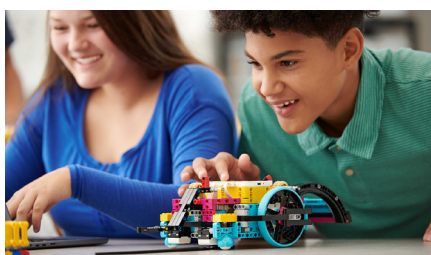
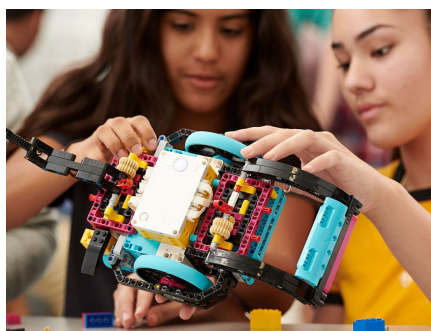
The feedback we hear back from teachers about LEGO Education SPIKE Prime is how easy it is to use:

"Using SPIKE Prime meant I became more of a facilitator for activities rather than 'teacher'. In fact often students would point out new ways of doing things and support me as I learned. Once the app was downloaded, I could just give students the kit and say, 'there you go!'"

"Students have the option to say 'hey let's have a go at doing this,' but it doesn't neglect the ones who aren't ready for Python. They can carry on with block coding. That gives everybody the ability to access robotics and programming at their own comfortable level!"

Are teachers supported?

The LEGO Learning System supports teachers with free **personal development units online** which can be accessed and completed at your own pace. Training can be accessed at: www.education.lego.com/en-au/professional-development#about MTA also holds **regular in-person training sessions and fun workshops** - in locations around Australia - to support and inspire STEAM teachers. These sessions help you to get the most out of the LEGO Learning System and count towards PD requirements. For information on upcoming dates, please talk to your Rep or call MTA on 1800 251 497.



Isn't it a bit simplistic for older kids?

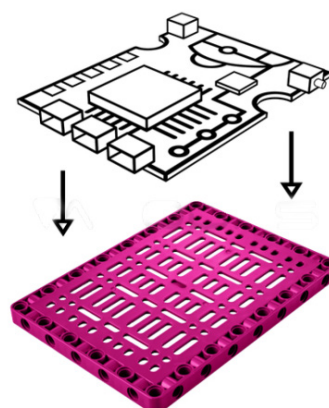
SPIKE Prime may be an easy-to-adopt learning tool for the classroom but don't be tricked into thinking this makes it 'simplistic'. It forms part of the curriculum-aligned LEGO Learning System, a range of interconnected solutions that work to scaffold STEAM learning for students from early primary through to late high school.

What this means is that **students can work at their own level**. Hands-on learning and simplified lesson plans engage students needing additional support, while those seeking extension can access advanced STEAM projects.

Schools using LEGO Education products can also take part in popular Robotics competitions held in locations around Australia and the wider Asia Pacific Region, including First LEGO League, RoboCup and RoboRave. For details, talk to your Rep.

What's the deal with Raspberry Pi?

Launched in 2021 the BuildHAT, from Raspberry Pi computers, ensures LEGO Education SPIKE Prime remains a cutting-edge coding and robotics resource for high schools. The BuildHAT sits on top of the



Raspberry Pi (a low cost, credit-card sized computer). Both elements clip securely into the new, hot pink LEGO maker plate, allowing students to control up to four motors and sensors from the SPIKE Portfolio. The maker plate (pictured above) is included as a standard element in SPIKE Prime Expansion sets (code 45681). Raspberry Pi elements available for purchase separately.

By adding programmable, networked computers with access to online data sources to the heart of LEGO builds extends SPIKE Prime all the way to Year 12 and beyond!

How do I get started?

That's the easy part! Over the page we've created a simple 4-step process to get you started. Enjoy!

For more information on the LEGO Education Learning System or SPIKE Prime please call 1800 251 497 or visit www.teaching.com.au



Getting Started

Step 1: Open the Box



The adventure begins! Inside the box you'll find an assortment of LEGO packets, storage trays, motors, sensors and a sticker sheet.

We recommend you pop online before you do anything. Go to www.LEGOeducation.com/start. Select your product: LEGO® Education SPIKE™ Prime. This takes you to a very easy-to-follow tutorial. Take a moment to watch the two minute video.

Step 2: Assemble the Goodies



Open the plastic baggies and put each colour in a **separate** tray compartment. Use the sticker sheets to label them. There are also stickers provided for each electrical component as well as for the outside of the box.

A great TIP - particularly when you've purchased multiple kits for the classroom - is to allocate a number to each box and write this on its hardware. Helps with clean up after class!

Step 3: Download the App

**Download the
LEGO® Education
SPIKE™ App v. 2.0.1**

Now you're ready to download the LEGO® Education SPIKE™ App and try the tutorial activities. The SPIKE App is compatible with Windows 10, ChromeOS, macOS, iOS, and Android. It requires administrator rights, and a stable internet connection during installation.

Step 4: 'Serious' Play Time!



It's as simple as that. Check out the large number of curriculum-aligned lesson plans available online or via the app. Visit: www.education.lego.com/en-au/lessons
We've also got a dedicated Facebook page for educators. Join us @ **LEGO® Education - Modern Teaching Aids**.

