



How to... Plan a learning activity

Work together with your partner to bring STEM to life in the classroom and inspire the next generation of problem solvers and innovators.

This guide will support you to plan and deliver a learning activity as part of your partnership.

To feel confident running an activity together, start by agreeing on what will work best for you both – and what’s realistic within the time you have.

Teachers can support STEM professionals during delivery, drawing on their knowledge of students and the curriculum.

STEM professionals can share real-world experience, help build teacher confidence in STEM, and provide mentoring.

“The ability to meet beforehand and plan together means we can create a pathway that suits our cohort of students and our school.”

Lea Brodie, Teacher, South Australia

Understanding each other’s environment

If you are an educator

When planning activities, it’s helpful to be aware that:

- Some STEM professionals may have limited or no experience working directly with school students and may appreciate guidance on classroom dynamics and age appropriate delivery.
- STEM professionals often need employer approval to participate, which can affect availability and lead times.
- STEM professionals may be unfamiliar with school routines, terminology or curriculum structures and benefit from clear explanations and shared expectations.

If you are a STEM professional

When planning activities, it’s important to note that:

- Most schools operate across four terms per year, commencing in late January and concluding in December. Check term times to avoid school holidays and assessment periods.
- In most primary schools, teachers are allocated to a year level and teach most subjects. Some schools have a specialist STEM teacher.
- In most high schools, teachers specialise in subject areas and may teach across multiple year levels. Some schools integrate STEM across subject areas.

Choosing and planning your activity

There are many ways to deliver engaging STEM activities. What matters most is choosing an approach that works for you and your partner. There's plenty of scope and flexibility around the activities you can do, both in and outside of the classroom.

Discuss what the STEM professional is doing at work, what the needs of the curriculum might be, or if there's an opportunity to work on an integrated project.

Refer to the Learning activity planning prompts below to help you and your partner make your activity a success from start to finish.

In preparation, consider:

- School term dates and daily schedules
- Where the partnership can add value to teaching plans and curriculum
- Student age, ability and number
- Visitor policies and consent requirements
- Time available and work commitments
- Health, safety and environmental requirements
- Materials, props and logistics (e.g. parking, classroom location)

During the activity:

Working together

Sessions are most effective when both partners contribute:

- The STEM professional introduces real world problems, examples or experiences
- The teacher supports discussion, questions and understanding
- Both partners support students during hands on activities

Allow time for students to ask questions and explore ideas.

“Teachers are extremely busy and may miss emails. Don’t be afraid to send them updates or ‘bumps’ – they’ve chosen to be part of the program and want to engage.”

Luc Nederhof, STEM Professional, Queensland

Top tip: Supporting student engagement

There are many ways STEM professionals can work with teachers to build STEM knowledge and increase student engagement. Here are some suggestions to support confidence when running activities:

- Try different formats to see what suits your partnership best (e.g. experiments, presentations or mentoring). What you start with may evolve as you go.
- STEM professionals can share their own journey, their workplace and what they do.
- Avoid jargon where possible – it’s fine to use correct terms, but break them down clearly to support understanding.
- Build in time for students to ask questions and absorb new information.
- Use visuals, props and artefacts to bring activities to life and support learning.
- Work together to lead hands-on activities, drawing on your combined strengths.
- Keep ideas accessible. STEM topics can quickly become complex — break them into clear, simple steps, and explain why they matter in real-world or industry contexts to support students’ understanding.

For more tips, ideas and peer support

join the STEM Professionals in Schools LinkedIn group

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