



STEM Professionals in Schools

How to... Guide for Principals and Education Leaders

About the program

STEM Professionals in Schools is Australia's leading skilled volunteer education program, partnering teachers with STEM professionals to bring real-world experiences into the classroom.

Every partnership is a bespoke arrangement between the teacher and STEM professional based on their combined interests and expertise, local context and student needs.

The program is free and open to registered primary and secondary school teachers around Australia.

Support and assistance

STEM Professionals in Schools is a national program, with Project Support Officers based around Australia to offer advice and support to partnerships.

We conduct events and webinars to support the sharing of best practice and ongoing development of partnerships. Additionally, a range of resources are available on our website to inspire your partnership activities.

Child safe standards

As part of the program's mandate to keep all children and young people safe, all STEM professionals are required to undergo security screening.

The STEM Professionals in Schools team supports professionals to obtain relevant checks and manages this administration process.

Who can apply?

Teachers must:

- be registered and working in an Australian primary or secondary school
- abide by CSIRO's Child Safe Procedure.

STEM professionals must:

- have a Bachelors degree in a STEM-related field, relevant qualification, or demonstrated experience in a STEM-related discipline
- abide by CSIRO's Child Safe Procedure
- obtain a Working with Children/Vulnerable People Check for their state, and a National Police Certificate.

STEM Professionals in Schools is funded by the Australian Government Department of Education, Skills and Employment.

How can the program benefit your school?

The STEM Professionals in Schools program has been shown to benefit schools by:

- increasing the profile of STEM in the school (and broader school community)
- engaging students in innovative ways
- supporting teachers to deliver the curriculum
- providing mentoring for teachers (building confidence in STEM disciplines)
- raising awareness of STEM related career pathways
- providing a proven industry-school engagement model.

The program has been independently evaluated on a number of occasions since its inception in 2007. These evaluations found that partnerships are effective in delivering value to a range of stakeholders; with clear benefits for teachers, students and STEM professionals.

The most recent evaluation reported that major areas in which the program provides teachers with benefits include: improving their STEM teaching capability, providing them with professional learning and networking opportunities, and helping them to improve their students' STEM learning¹.

How you can support staff involvement?

The support of Principals and Education Leaders is critical to the success of partnerships. You can support staff by:

- encouraging participating teachers and providing time to plan, implement and evaluate activities with their STEM professional partner
- fostering collaboration with the STEM professionals by engaging them in the broader school community
- supporting a STEM community of practice in your school and sharing of ideas
- providing opportunities for teachers and STEM professionals to showcase their partnership stories to the school community and providing recognition of their efforts and achievements
- understanding the program expectations of teachers.

When getting involved in a partnership, we expect teachers to commit to:

- making contact with their STEM professional partner
- working collaboratively with their partner to establish a mutually agreeable plan for STEM learning
- building an ongoing partnership (rather than a one-off visit)
- providing updates to the program team as requested.

On the back page you will find a template with some questions to assist with planning for success in your school.

How does participation support best practice?

The program provides a framework not only to engage with industry but to assist your teachers and school to:

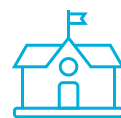
- meet the areas for action outlined in the National STEM School Education Strategy (COAG, 2015) including:
 - increasing student STEM ability, engagement, participation and aspiration
 - increasing teacher capacity and STEM teaching quality
 - supporting STEM education opportunities within school systems
 - facilitating effective partnerships with tertiary education providers, business and industry
 - building a strong evidence base
- deliver and bring to life the Australian Curriculum, including
 - learning areas: Mathematics, Science and Technologies
 - general capabilities
 - cross-curriculum priorities
- provide evidence towards meeting some of the AITSL standards to improve practice inside and outside the classroom. Depending on the partnerships, this may include for examples:
 - 3.7 *Engage parents / carers in the educative process* i.e. many STEM professional partners are also parents
 - 6.2 *Engage in professional learning and improve practice* e.g. specialist webinars
 - 7.4 *Engage with professional teaching networks and broader communities.*

What do we provide?



Support from Project Support Officers

We will create and support partnerships.



Access to Industry Professionals

We will partner teachers with STEM professionals.



Access to resources

We will provide teachers with STEM Professional in Schools partnership activity resources.



Access to Professional Development

We will provide teachers with webinars and networking events which allow participants to connect, share ideas and learn from other partnerships about activities they have undertaken.

¹ Evaluation undertaken by Tessellate Communication (2020).

Planning for success

This template will help your school with early planning to ensure success.

How could this program be championed in your school?	
How could the partnership best support learning in your school?	
What specific curriculum area and/or STEM-related school activity would benefit from a partnership?	
How can the program enhance professional learning and development for your teachers?	
How could you establish a STEM community of practice for teachers in your school?	
How could the school include the participation of parents working in STEM disciplines and the broader school community?	
Are there specific organisations you would like your school to connect with through the program?	
Does your school have existing relationships with industry, government or universities that you would like to formalise through the program?	
How can this opportunity better connect your school community to local industry?	

Next steps

If your school is interested in being involved, our Education Stakeholder Manager can assist with your enquiry.

For further information on the STEM Professionals in Schools program or to apply to be involved, please visit our website csiro.au/STEM-Professionals-in-Schools

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