Scientists in Schools

What, how, why

Background

Scientists in Schools is an initiative of the former Chief Scientist, Dr Jim Peacock. Funding for the program is provided by the Australian Government Department of Education, Employment and Workplace Relations and this has been supplemented by funding from CSIRO. *Scientists in Schools* is managed by CSIRO Education.

The aim of *Scientists in Schools* is to create and support long-term professional partnerships between scientists and teachers. Its purpose is to promote a deeper understanding of the importance of science in our society for students and teachers, and through them, the wider school community.

The definition of a scientist for this program includes any professional who is actively engaged in the fields of science and/or technology. It includes engineers, mathematicians, IT professionals, applied scientists and medical practitioners amongst others.

Participation

Scientists in Schools began in July 2007 with a target of 100 teacher-scientist pairs by National Science Week (August) in 2007 and 500 pairs by the end of 2007. These targets were achieved, and there are currently well over 1450 partnerships across Australia.

Participation by schools is spread across government, Catholic and independent sectors and includes a fairly even split of primary and secondary schools. Almost half the schools involved are from outside major cities, including some remote schools and at least four identified indigenous schools. Scientists come from federal, state and local government organisations, universities and the private sector in all States and Territories.

How does it work?

The key word to the program is flexibility.

Both scientists and teachers register on-line, giving contact details and some indication as to the type of preferred partnership (and preferred location in the case of the scientist). The *Scientists in Schools* team looks at the registrations and personally matches the teacher and scientist based on the information provided.

The scientist and teacher are then sent an email with both sets of contact details and some support materials. It is then up to the pair to get in contact with each other.

Once in contact, the scientist and teacher decide between themselves how they will proceed based on their respective workloads, the scientist's expertise, the curriculum and the school needs. There are as many variations in partnerships as there are partnerships themselves. Some scientists visit the school once a year, some never and some once a week. It very much depends on the participants.

The *Scientists in Schools* team provides support for the partnerships through resources, ideas, contact, various gatherings and workshops.

Some examples

- An Antarctic scientist in Hobart has formed a long-distance partnership with a primary school in Townsville, sending regular emails to the students about his research and answering their questions.
- A Queensland materials scientist sends regular email newsletters to his partner teachers with information on interesting science news, ideas for activities and just to keep in touch.
- A primary school in Esperance, working with a climate change scientist in Canberra, has extended their program to develop links with scientists from throughout their local community.
- A Melbourne vet pathologist is conducting workshops for the teachers at his partner school on topics such as animal dissections.
- A South Australian defence scientist and his partner teacher are coordinating a science fair at a local primary school, including providing training to students, teachers and parents.
- A NSW energy scientist organised for his partner teacher to undertake research at his workplace during her school holidays.
- All 10 Year 6/7 students at a school on Hamilton Island spent two days in Townsville visiting 'their' environmental scientist and his colleagues.
- A plant genetics scientist in Canberra is mentoring students at a local high school who are completing high-level science projects.
- A Western Australian defence scientist is spending half a day each week running an extension science class at his local primary school.

Why Scientists in Schools?

From the scientists:

"A lack of scientists in the future will mean we are not able to innovate and develop. *Scientists in Schools* is an investment in Australia's long term future." (Tas)

"The flexibility is great. I am glad that we are able to come up with a structure that works well and is convenient for both parties." (Vic)

"Our problems are often uniquely our own, we need keen young scientists of our own to solve them." (Vic)

"Children see things from a different perspective - they can help you to look at your work with excitement and awe again, and that has been very valuable to me." (Vic)

From the teachers:

"Not only have the students discovered that science is fun, we have all developed a working relationship with a ….very accomplished scientist." (Qld)

"*Scientist in Schools* has provided opportunities for students to develop understandings and skills necessary to function productively as problem-solvers in a scientific and technological world." (Vic)

"The teachers are excited to have [our scientist] on hand to extend the science curriculum and develop their own knowledge and skills for transfer to the students." (Qld)

"The opportunity to visit our partner's labs was a highlight. It re-energised me as a teacher and re-energised my thinking in relation to what's possible." (Qld)

Further information

More information about the program, including online registration forms, showcases of successful partnerships and contact details, is available at

www.scientistsinschools.edu.au