Why study Science in Practice?

Science and technology play significant and increasing roles in modern society. To have an informed voice in charting the future of society, and to effectively participate in society and everyday life, students need to be scientifically literate. Science in Practice contributes to the development of scientifically literate individuals, who can:

- discuss science issues
- identify science questions and investigate and draw scientific, evidence-based conclusions
- challenge claims made by others about scientific matters
- make informed decisions about the environment and their own health and wellbeing.

The scientific skills developed in Science in Practice are relevant to employment in many fields and may form the basis of further training and education, e.g. animal welfare, biotechnology, food technology, forensics, health and medicine, the pharmaceutical industry, recreation and tourism, research and the resources sector.

What is studied?

In each year of the course students will explore through particular scientific contexts at least three of the following areas:

- science for the workplace
- resources, energy and sustainability
- health and lifestyles
- environments
- discovery and change.

Students will learn about and enact:

- Scientific literacy and working scientifically
- Workplace health and safety
- Communication and self-management skills.

Students will also participate in at least 10 hours of practical field work.

How do students learn?

Through the processes of practical and investigative approaches, students will:

- think critically about the scientific basis of significant contemporary issues
- apply their knowledge in a broad range of relevant practical situations
- foresee consequences for their own and society’s activities on the living and physical world
- participate as informed and responsible citizens in decision-making processes
- use community and industry resources
- collaborate and work effectively in teams.

How are students assessed?

In Queensland, assessment is standards-based. The standards for Science in Practice are described in the dimensions: Knowing, Investigating and Connecting. These standards identify the valued features of the subject about which evidence of student learning is collected and assessed. The standards describe the characteristics of student work.

Assessment in Science in Practice has a strong practical component where students are involved in the “doing” of science. Students may produce science products, perform science activities, and participate in science investigations and experiments. Students will have the opportunity to use technology in both learning and assessment contexts.
How can parents help?

Parents can help students by providing a supportive environment in the home, by showing an interest in what students are doing on a daily basis, and by encouraging them in their studies. Frequent communication between home and school also provides additional support for students.

Parents and guardians might wish to consider the following:

- Peruse the Study Plan from which schools plan their programs of work.
- Discuss the learning and assessment of your child’s progress with the teacher and relevant school personnel.
- Draw attention to relevant issues and science programs as presented in the media.

More information

If you would like more information, please email senior.syllabuses@qsa.qld.edu.au You can also visit the QSA website <www.qsa.qld.edu.au> and search for “Science in Practice”.