Class Experimental Research Project

Section Coordinators: Sarah Shatford and Marisa Jarvis

The Class Experimental Research Project of the Science Talent Search is a unique section in that it is the only one that allows an entire class to work collaboratively on a common investigation topic. Through this section, students have the opportunity to become emerged in an investigation where they firstly develop and refine questions of an experimental nature. They then seek answers to their questions following an experimental research structure. On completion of their experimental work, they evaluate and reflect on the entire process and look at ways to extend their learning further. The culmination of the project is on Judging Day where they celebrate and communicate their learning to the wider community.

The criteria for this section is closely aligned with requirements of the Australian National Science Curriculum, in particular, the Science Inquiry Strand. It also enables cross links between other areas of the curriculum, including Mathematics, in collecting, recording and analysing data, English with report-writing and communication, and some aspects of ICT where students may use spread-sheets to help create graphs of results. The Class Project Experimental Research can also complement the programs of those primary schools using a PYP or similar inquiry model. It is important, however, for schools coming from an inquiry style approach to remember that they use the traditional terminology linked to scientific method, as this was an area that caused some challenges.

Topics are not limited to the year's national science theme so a project can be chosen that integrates well with a class's learning focus. Students completing a class project often use this experience as a stepping stone to group and individual entries in other sections in following years.

A variety of schools from all educational sectors entered this year, with both new and returning schools, which was fantastic to see. All of the main fields of science were covered in the entries received this year, demonstrating the diversity of learning going on in primary schools in Victoria. We would continue to encourage teachers considering allowing students more freedom with their choices. While it can be a little 'overwhelming' to hand over control, the best projects were the ones that were truly developed and led by the students. Their understanding of concepts was at a deeper level than relying just on the boundaries of the formal curriculum. We would also remind teachers to make use of the criteria rubric that can be found on the Science Talent Search website to ensure that everything has been included that was required. The judges are still finding that important sections such as the discussion and risk assessments are being overlooked in the actual report. This does impact the final results.

A most satisfying aspect as Class Project Coordinators is having the opportunity to speak with the students as they wait to present their work and again as they exit the judging room. Aside from a few nerves, the students had obviously loved being part of the learning journey and were very excited and eager to share their science learning. It is clear from many of the returning students, that this is one of their more memorable experiences each year. We always enjoy catching up with past students who come back year after year.

For primary teachers who are thinking of entering Science Talent search next year, please consider the Class Experimental Research Project. It is an easy way to involve all students. Remember, Science is often inexact and 'messy', but often problems and mistakes can teach far more than obtaining perfect answers. It is the mess and the clarity that comes out of the mess that produces some amazing Science Projects and Scientists! Remember, also, that the best learning comes from students when they can make links beyond the task or initial topic. Have fun, allow mess, and be open to problems and discussions. Good luck and we look forward to seeing more fantastic science being communicated to us next year!