



**Catholic Education**  
Diocese of Parramatta

**Submission to the NSW  
Innovation Strategy**

**Catholic Education Diocese of  
Parramatta**  
15 April 2016

# 1 Introduction

The Catholic Education, Diocese of Parramatta (CEDP) submission to the NSW Innovation Strategy focuses on Theme 6: Meeting business demand for education and skills.

## 1.1 Theme 6: Meeting business demand for education and skills

### **What do you see as the role of industry in supporting the development and retention of the skills needed for the future?**

There is a need to create new models of learning and schooling that respond to our understanding of what schools will need to deliver in the future. Partnerships between industry and schools ensure students have access to real world learning opportunities and develop 21st century skills such as collaboration, communication, critical thinking and creativity.

Partnerships between industry and schools can serve a variety of purposes:

- Real world learning opportunities

Through industry partnerships, students can be given the opportunity to apply their knowledge and understanding to real world, authentic learning opportunities. These real world experiences gained through industry can subsequently drive and shape inquiry and problem based learning that takes place in schools. For example, students could partner with a local business to help develop a marketing plan, or submit space designs for sustainability to their local council in partnership with industry professionals, or apply their coding skills in a local start up.

- Flexible post school opportunities

Industry can provide students access to internships, traineeships and work experience opportunities that can extend and deepen their learning as well as provide multiple, flexible pathways from school to work. For example, school-based apprenticeships could be widened beyond trade to include other industries and businesses. Industry professionals could work in the school context to set up a 'micro-business' and give students the opportunity to assume a role in the operation of this business. Industry could develop learning sites open to students of local schools to give them hands on experience. This would provide multiple options for students to engage with industry, gain hands on experience and transition from school to work.

- Learning from industry experts

Students can gain valuable insights and skills by learning directly from industry experts, for example, through internships while at school or project specific engagement. Secondment opportunities could also be used to give teachers access to industry experience. Industry professionals could be employed within the school context as trainers, mentors, strategists or analysts.

- Access to resources

Industry can give students and teachers access to specialist physical and online resources that they may not otherwise be able to access. This is particularly relevant in the area of Science, Mathematics, Engineering and Technology (STEM).

An example of a learning network that actively partners with industry to inform the learning and teaching is the Ohio STEM Learning Network in the USA. Business is involved in this network through their participation in hubs, training centres and individual schools. Both the public and private sector design and operate STEM teaching and learning systems to provide students with authentic and engaging learning opportunities.

Catholic Education Diocese of Parramatta will continue to embed industry partnerships throughout its system of schools. One such partnership already in operation is the Delany Connective between Delany College, Granville and Telstra and Cisco. The Delany Connective uses connected and agile spaces to support a contemporary model of learning and teaching to provide personalised and integrated learning experiences for students. The school has collaborative spaces that utilise education specific technology, which were delivered through a partnership with Telstra and Cisco. This is the first partnership between Telstra and any school in Australia.

Catholic Education Diocese of Parramatta will collaborate with Celestino to develop a 'STEM' school at the proposed Sydney Science Park. The STEM school will integrate learning seamlessly with the life and work of the community, drawing upon the many resources and business partners of the Science Park to give students real world, authentic learning opportunities.

It will ensure that learning is not confined to the traditional school day of 9am to 3pm and will encourage students to take advantage of the many formal and informal learning and industry opportunities that will be available through the work of the Science Park. Catholic Education's STEM school will draw upon the connectivity of the Science Park to ensure that facilities and resources are shared and that learning takes place in the context of the research and development undertaken in the Science Park.

Through these different types of partnerships, industry can play an active role in informing what and how students learn at school. Partnerships between industry and school will ensure that learning is not confined to 9am to 3pm and instead takes place in a real world, authentic context.

By rethinking the boundaries between industry and schooling we can rethink what schools look like in the future and create new, innovative models of schooling that better address the changing nature of learning and teaching and the skill set needed for students in the future. The Delany Connective, the planned Catholic Education STEM School in the Sydney Science Park and the Ohio STEM network are models that could be used to inform industry partnerships with school in the future.