

## What people are saying about technology education

*Over the past few years the teaching of Technology in New Zealand schools has undergone a quiet revolution. For parents helping their children decide what to take in school, it is vital to understand the exceptional benefits that technology education can offer.*

### In a nutshell...

Technology challenges students in ways unlike any other subject. Through learning good technological practice within areas such as control, food, communications, structural, dynamic, and bio-related technologies, creative design processes and materials, students work creatively and analytically to identify, trial and evaluate potential solutions, and then put their ideas into practice.

In Technology classes, students not only gain specialised knowledge and skills, but also generic ones, essential to all kinds of work, university study and a successful life. They are encouraged to show initiative, be innovative and creative, learn independently and to take responsibility. They learn teamwork and communication skills and the importance of contributing to the community both socially and economically.

### What parents are saying

*“Technology improved Kate’s work ethic, her ability to solve problems and develop solutions. It also enhanced her eagerness to learn.”*

*“We could tell at home that Technology had become Matthew’s favourite class as he started talking about it more and more. Part of the appeal for him was being*



*In this project, which won a 2006 Transpower Neighbourhood Engineers Award, ten Year 5 and 6 pupil from Elm Park Primary School worked with an engineer to design and create a fountain for their primary school.*

TECHNOLOGICAL LITERACY is vital to all young New Zealanders. It is important for students to have a broad understanding of technology so that they can contribute as informed members of society.



*“There is currently a strong global demand for engineers – a profession that requires a high level of understanding of technology and an ability to use that understanding in solving complex problems. Careers in engineering are rewarding, both financially and through their participation in developing our productive economy and the infrastructure which supports it.*

*“Technology education develops skills that will assist our future leaders to engage with and gain benefit from increasingly sophisticated new technologies.”*

**Professor Peter Jackson**, Pro-Vice-Chancellor, College of Engineering, University of Canterbury

*given a project that went from concept to design to manufacture and then actually seeing his product put to serious use.”*

*“I highly recommend this subject if you want your son or daughter to learn how to think through problems, create solutions and then to apply it. These are all skills required for success in today’s world.”*

### What students are saying

**Alice Irving, ex-technology student, now studying law and philosophy at Otago University:**

*“Studying technology through to Year 13 was an invaluable experience. It taught me how to approach and solve everyday issues and challenges in a systematic and informed way. I have discovered that the technology process is of application far beyond the discipline of the materials I focused on. I really enjoyed the fact that technology goes far beyond design and puts you in the context of the real world: dealing with stakeholders, considering what will be suitable for mass production and so forth. This gave me a taste of the industry itself.”*



GLOBALISATION AND technological change are two key features that are changing and shaping our lives. The technology curriculum has now developed to a level that I strongly recommend it as a subject, both to students who have an

interest in making a career in engineering, technology or science, and generally as a means of better understanding the modern world.

**Professor Bob Hodgson**, Director, School of Engineering, Massey University

**Year 13 student, Queen Margaret College, Wellington:**

"I quickly appreciated that it was an academic subject... It wasn't easier than other subjects but more fun, you get involved more... I enjoyed the skills stuff, the interaction with a focus group and a feeling of doing something real."

**Year 13 Student, Carmel College, Auckland:**

"The reality of working with a client was that it was no longer all about me (as hard as it was), which only made it more a challenge and therefore more appealing!

"This year has been truly remarkable. Actually taking the time to look back and see how far I have come really puts things into perspective. If you had shown me the final solution at the beginning of the year, I honestly don't think I would have believed it.

**What educators are saying**

**Claudia Wysocki, Former Executive Principal, St Margaret's College, Christchurch:**

"In primary and secondary schools a great deal has changed in the way in which the curriculum is delivered but the greatest and most influential change can be seen in the technology classroom.

"Learning is interactive. Students are involved in analysing, discussing, trialling and evaluating in order to seek the most appropriate solution to the problem on which they are working. Team solutions are encouraged and students learn to work with others, to show initiative, to demonstrate creativity and to find compromise when this is appropriate. There is also a great deal of peer tutoring and support. Students are engaging in a way that means real learning is taking place.

"Among technology teachers there is a high level of professional discussion as they share with one another best practice, reflect on their classroom programme and constantly strive for ongoing development.

"What is happening in the technology classroom and among good technology teachers is beginning to influence other areas of the curriculum."

**Professor Janis Swan, Associate Dean of Engineering, University of Waikato:**

"Technology helps us transform ideas into reality, turn discoveries in the lab into full-scale production, develop new things and services, and to find new ways of doing things. Technology offers innovative ways of solving many of the challenges and problems we face today.

"We urgently need people with the skills to look at a situation in an innovative way, who can develop a new material, a new process, a new device, or a better way of doing what we are currently doing."

**What people in industry are saying**

**Dr Sally Hasell, Former President, NZ Institute of Food Science and Technology:**

"The food industry in New Zealand is a major generator of wealth, both in terms of income and employment opportunities. A large proportion of the people working in it and in its supporting industries are technologists.

"Specialist food technologists and biotechnologists work to develop new crops, foods and processes that increase the diversity, convenience and desirability of the foods New Zealanders purchase and export. In addition producing, transporting, storing, selling, packaging and all the other aspects of managing food production from the farm to the table require input from a diverse range of technologists in areas such as IT.

"Technology is the life blood of the food industry and therefore of New Zealand's prosperity and well-being. NZIFST encourage and support young people to see technology as a great future."

**How to find out more**

To find out more about Technology and how it is being taught in schools, visit [www.techlink.org.nz](http://www.techlink.org.nz)



In this project, technology students designed and manufactured original lighting units for a local popular city nightclub, in consultation with the client, university design students and industry professionals..