Technology – a smart choice for Years 11-13

So much has changed in primary and secondary school classrooms over the past few years – in what is taught and how it is taught. Nowhere is this change more radical than in the teaching of Technology. This handout aims to answer some of the questions parents frequently ask about this new and exciting learning area.

Technology – isn't that just metalwork and cooking?

Not at all. Technology is a completely new learning area. The world of metalwork and baking sponges that many parents knew at school is as different from the teaching of technology today as a cake is from a computer.

So what do kids do in Technology classes?

Technology explores the entire process of why, what and how we make things. Anything and everything. Technology is taught in a wide range of areas – including soft materials, hard materials, food technology as well as information and communication technology (ICT).

Students work on projects, where they are are asked to identify real opportunities and needs, come up with viable solutions, choose the most appropriate, and then create that solution.

Learning is interactive. and teamwork is strongly encouraged. Students learn to work with others, to show initiative, to be creative and to find compromise when required.

> 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.
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> **Professor Bob Hodgson, Director, School of Engineering and Technology Massey University**

A technology project could be anything from designing a rabbit hutch at Year 1 to the design and creation of souvenir items with support and advice from Te Papa. Case studies that represent the wide range of Technology projects in schools throughout New Zealand can be found at www.techlink.co.nz

Who is teaching in Technology classes?

The Technology curriculum is now 10 years old and most larger schools have a team of highly experienced specialised technology teachers. Technology is a very exciting and innovative area to teach, attracting teachers who are highly motivated and passionate about a subject that enables them to explore new ways to inspire and engage their students.

In many classes there is a great deal of peer tutoring and mentoring support – within the classroom, within the school from more senior students, and from outside the school, from ex-students and others doing tertiary study and working in industry.

Many schools are bringing industry professionals into the classroom to advise and help manage individual and class projects, through intiatives such as the Futureintech Ambassador scheme – see www.futureintech.co.nz.

The facts…

- TECHNOLOGY explores the entire process of why, what and how we make things.
- TECHNOLOGY uniquely merges the practical and academic, teaching essential skills invaluable to high achievement in life, learning and all working situations
- ALL STUDENTS study Technology in Years 1-10.
- IN YEARS 11-13 most secondary schools offer Technology as an option.
- TECHNOLOGY is on the 'approved subjects' list for university entrance

Careers and technology

For those interested in a career in science, engineering or technology, and with the recent addition of Technology on the list of approved subjects for University Entrance, then taking Technology at school can be seen as a core subject at senior level at school.

There's a huge range of careers in technology, both in New Zealand and overseas. The main areas in New Zealand include agricultural & horticulture, biotechnology, chemical products and processing, civil engineering, electrical & electronic engineering, environmental engineering, fashion, food technology, forensics, information & communication technology, mechanical engineering, medicine and product design.

In employment, the pay is excellent, and graduates often have a wide choice of work opportunities and locations. This shortage is worldwide, and is forecast to get worse, so the opportunities for technology graduates are excellent in the long-term.

For a range of profiles of young people working in technology, visit www.futureintech.org.nz

My daughter wants to be a lawyer – what's the point of her doing technology at school?

Technology is an ideal foundation subject for all areas of study and work – not only in terms of technological literacy, but also in the essential life and work skills it helps provide through the encouragement of interaction with other students and people outside the classroom.

Here is a comment from Alice Irving, ex-technology student, now studying law and philosophy at the University of Otago:

What the kids are saying…

"In technology you're not confined. You have the freedom to find your own solutions. You have a different interaction with the teachers and have opportunities to mentor younger students." – Thomas

"I like being able to take a project home, something I can hold in my hand. Studying technology has taught me that if I need a solution to a problem, I know I can do it myself." – Shannon

"Studying technology through to Year 13 has been an invaluable experience. It has taught me how to approach and solve everyday issues and challenges in a systematic and informed way. The technology process is of application far beyond the discipline of the materials I focused on.

I also 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."

How to find out more…

Talk to the careers advisor at your school to find out the opportunities available for your child

The Techlink website www.techlink.org.nz has case studies of high quality technology teaching and student work in New Zealand.schools.

To find out about the tertiary technology, engineering and science courses available in New Zealand, the wide range of scholarships offered, and profiles of people working in technology, visit www.futureintech.org.nz.