futureintech enewsforschools #2 February 2005

futureintechinaction

Students at Blockhouse Bay Primary in Auckland are getting a new playground, thanks to the Neighbourhood Engineers Award.

The first prize of $2,000 means work can start this year on the playground, which was designed by a group of students with the help of local engineer Sanjesh Lal.

The Neighbourhood Engineers Award is run by the Institution of Professional Engineers (IPENZ), and is one of the key programmes promoted and supported by Futureintech. It involves teams made up of teachers, students and a volunteer engineer carrying out technological practice to meet an identified need or opportunity in the community.

Teacher Victoria Calendino, in charge of the school's environmental group "Kawakawa kids", leapt at the chance to enter the Neighbourhood Engineer Award because "you can never have enough adults in the room when you're trying to undertake a project with children."

A humbling experience

According to Victoria the project was an opportunity for the students to be "genuinely involved in the planning process of something pivotal to their enjoyment of their time at school - the senior playground. Having an engineer involved also helped the students gain respect for their ideas and work."

For Sanjesh the work was enormously rewarding.

"With this project I realised that a lot could be learnt from a child. Children can be intelligent enough to consider access for a handicapped student, even considerate enough to design playground seats so that a wheelchair can park alongside and the disabled child can sit beside her friends!

"This was really very humbling for me."

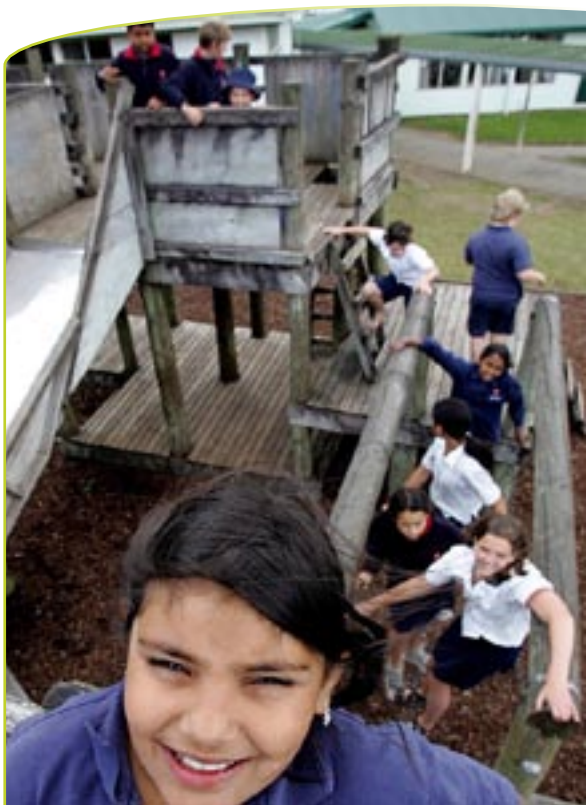
Other winners for 2004 include St Johns Hill School in Wanganui for their design and construction of homes for snails, and Tararua College in Pahiatua for their Tararua Chocolates project.

Working to a plan

After struggling for a while to choose a project, the school's deputy principal finally suggested designing a new playground.

"The kids were ecstatic," says Sanjesh Lal of Opus International. "They were drooling at the thoughts of racing tracks, play station studios, flying foxes and arcade games, but, alas, the issue of constraints needed to be explained."

Sanjesh's role was to show the students, piece by piece, how to work through a major project like this. He helped the students carry out detailed research, including checking the school's accident records, writing to the Board of Trustees, and surveying their fellow students.



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To find out more about Neighbourhood Engineers Award at all levels, go to www.ipenz.org.nz/ipenz/Education_Career

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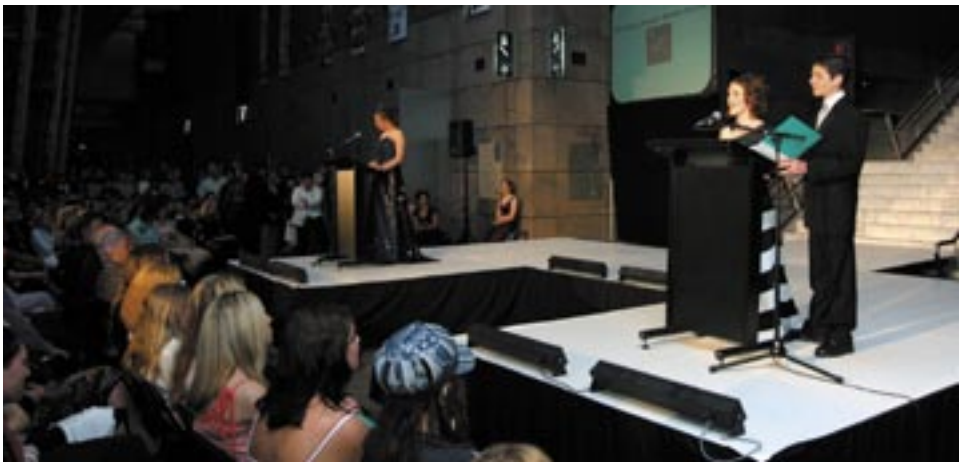
young designers + futureintech

The next generation of designers, engineers and technologists are about to receive a big boost in 2005, thanks to a new partnership between Futureintech and the Young Designers Award. Futureintech will promote and supporte the Young Designers Award in schools along with our other key programmes - CREST, Bright Sparks and the Neighbourhood Engineers Award.

Designing success

The Young Designer Awards is New Zealand's premier national design competition for secondary schools. It offers a range of categories for students to enter, including electronics, communication, fashion, products, landscape and built environment.

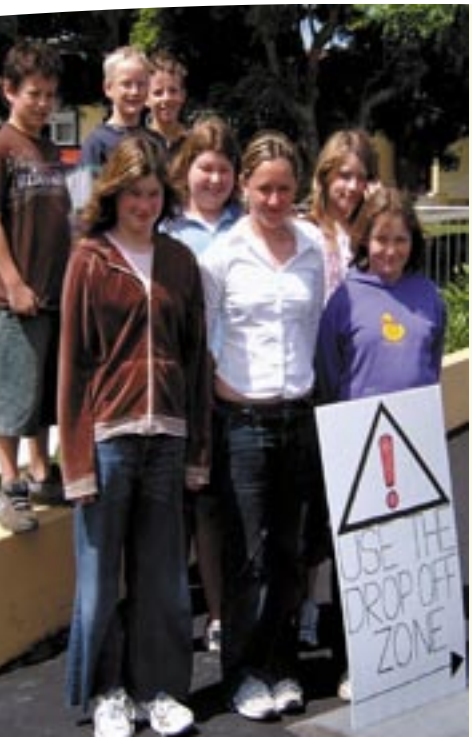
Since starting in 1990 the Awards have gone on to become highly successful, prestigious, and popular amongst schools and students. The Awards are based around encouraging young people to promote their creativity in a way which can eventually be employment related, and by enlisting industry support it has helped show students a range of different career possibilities.



Many previous winners have received tertiary scholarships, and there are many more examples of students who have entered the event and come out of it with renewed confidence and self-esteem.

It's the kind of programme ideally suited for Futureintech, given that it encourages practical learning, innovation and links with outside industry.

The first prize is the Young Designer of the Year award worth $1,000, and a study grant of $3,000. There will also be a range of different prizes for different categories announced later in the year, including cash prizes, study allowances, and scholarships from Lincoln University and the Christchurch Polytechnic Institute of Technology.



Operation Drive-By

Another example of Futureintech in action comes from Pahiatua School, where Room 10 students have been working on Operation Drive-By. With the help of two engineers – one a traffic engineer from Wellington, and the other locally-based – the students have been redesigning their drop-off area to make it safer.

Parents and the community have been consulted and a driver education programme is underway to make sure people understand the new signs and markings and use the drop-off zone properly.

Already the project has won the school a merit prize of $500 in the ACC Think Safe Competition, and a merit award of $500 in the Neighbourhood Engineers Award.

Ambassadors are a fantastic asset for any classroom – they are well trained, passionate and enthusiastic about what they do. Get in touch with Futureintech to find out how they can help on your next project.

futureintech's new facilitators

Futureintech moves into full implementation this year, which means three new Facilitators joining the team. Facilitators are the face of Futureintech. They provide the link between schools and industry, helping to inspire students by showing how subjects like maths, science and technology are used in different careers.

Central North Island

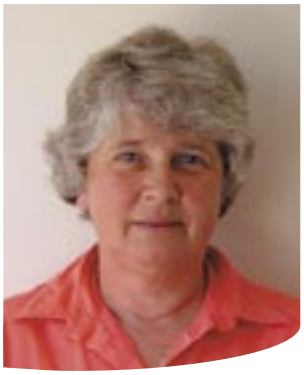
Margaret Brunton
mbrunton@futureintech.org.nz
Cell 021 479 803

Margaret Brunton's Masters thesis has given her the perfect background for Futureintech: she studied industry-school linkages, with a focus on biotechnology and rural schools.

Based in Whakamaru, just south of Tokoroa, Margaret covers the central North Island and is hoping to put her thesis into action. She is excited about the possibilities to enhance learning in technology education, and to increase awareness and enthusiasm for careers in technology.

Outside work Margaret's family keeps her busy and involved in various water sports.

Otago/Southland



Bernadette Hannagan
bhannagan@futureintech.org.nz
Cell 021 479 804

Covering the lower South Island is **Bernadette Hannagan**, based in Dunedin. Bernadette's previous role as liaison officer for Massey University introduced her to a wide range of schools and industry, connections that should be useful in her new role.

The chance to work on linking careers with learning was too good to pass up for Bernadette. She says she saw many young people ending up on inappropriate courses, simply through not knowing enough about different options available. Futureintech is a chance to help correct that, particularly through showing how subjects like maths and science can open doors.

South Auckland

Gay Watson
gwatson@futureintech.org.nz
Cell 021 479 802

South Auckland Facilitator **Gay Watson** is another former technology teacher.

Last year, Gay received a Royal Society Technology Teacher Fellowship which enabled her to spend a year in different workplaces studying technological practice. As well as spending time with lingerie and possum fur clothing companies, she worked on the movie set of **The Lion, The Witch and The Wardrobe.** One of her more unusual tasks was 'aging' the costumes, which meant spending hours scratching and creasing expensive new costumes to get the desired look.

Futureintech's other Facilitators:

Angela Hart – North Auckland Facilitator, tel 09 302 0901, ahart@futureintech.org.nz
Phil Sadgrove – Wellington Facilitator, tel 04 473 2025, psadgrove@futureintech.org.nz
Neil Potter – Canterbury Facilitator, tel 03 365 4120, npotter@futureintech.org.nz

Facilitators are an excellent resource for all schools. Don't miss out, get in touch with Futureintech to find out how we can help in your classroom.

Beacon practice underway

An exciting new initiative to support technology teaching has started in Wellington, with four secondary schools working on the Technology Beacon Practice Project.

The aim of Beacon Practice is to build teacher capability in technology education through a focus on quality teaching, innovative environments and supportive relationships. It's all part of the Government's **Growth and Innovation Framework (GIF) – Technology.**

Four schools in Wellington have been selected for the pilot project, which will be case studied in detail and the results available for all schools to use in improving good practice. Futureintech is facilitating the project, creating and managing sustainable links for schools with tertiary and industry groups.

Plan of action

The four schools involved each have very different, but exciting plans on how to improve their technology teaching.

Wellington High's Head of Technology Geoff Keith wants to use the project as a means to improve technology teaching, and in particular, to add elements of science and technology to computing and bring in achievement standards.

The school also has a Beacon Practice class working at level 2, designing lighting for an inner-city café/ restaurant/bar.

For Brian Allen, Head of Technology at St Patricks College, it's a chance to raise standards and achievement by students through the professional development of his teaching staff. He wants his technology teachers spending time with mentors in private industry to help improve their knowledge and inspire possibilities for classroom practice.

Wellington College's proposal is a very different project again. A class of year 12 students will be working with St Marks primary school, with the younger children as their design clients.

Queen Margaret College plans to build links with businesses and organisations outside the school, giving the students the experience of working for real clients outside their usual circle of acquaintances. Potential clients could include Te Papa.

The first steps

The first combined meeting took place earlier this month as representatives from Massey and Victoria Universities met with technology teachers from each of the schools.

This first meeting was a good opportunity for the participants to meet, hear each others backgrounds and goals, and to start building relationships and cooperation. An email group has been set up and another meeting will be held soon to report on progress – stayed tuned to **enews for schools** for more details.

Futureintech's website **www.futureintech.com** is a one-stop shop for information on careers, tertiary courses, scholarships in technology, science and engineering and features profiles of young professionals, their work and their employers.

It's aimed at students, teachers, parents and careers advisors, and is a great resource for everyone interested in a career in technology, engineering and science.