

Helping graduates to hit the ground running

So you've hand picked the best students from the most relevant course for your business. You may even have pre-selected them through scholarships or work experience. But what happens when they arrive in their first full-time job and have no idea how to cope with real life situations? Or when they drop out after a year, realising that your workplace isn't where they want to be?

Increasing numbers of companies are offering structured graduate trainee programmes to overcome these potential hurdles, and provide new employees with a smooth transition from student life.

Graduate trainee programmes can take many forms, but they usually enable graduates to spend time working with a range of teams across the company, in order to make an informed decision about where they want to end up.

Graduate trainees are usually supported by mentors who help them adjust to the demands of the workplace.

TRANSPOWER:

"A positive effect on our industry and on tertiary courses offered"

Transpower's graduate recruitment programme has been in place since 2001, and most former graduates remain Transpower employees. According to Transpower Communications Manager Rebecca Wilson, the benefits include "the ability to slot well-trained and knowledgeable engineers into permanent positions at the end of the rotational training. The support of the students at university has positive effects on the continuation of the courses offered in



Paula Nunweek is a 23 year old current Transpower graduate. In addition to the financial benefits of a reduced student loan, she feels the programme has greatly enhanced her understanding of her field.

"It's given me a good opportunity to look around the industry and find out where I want to work. I really like the fact that I'm going to have a larger overview of the company when I finish."

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power systems, and that has positive effects for the electricity supply industry."

Transpower in Wellington recruits up to six graduates in mechanical and electrical engineering from the Universities of Auckland and Canterbury each year, to be trained as power systems and transmission line engineers. If, as is often the case, they are chosen before finishing their degrees, Transpower pays the remaining course fees and employs them over the summer.

"On graduation we put the graduates through a defined individual rotational training programme," says Rebecca Wilson. "This differs between the power systems and transmission line people. In both cases they are rotated through relevant engineering groups within Transpower, but we also give them placements with an engineering consultant, one or two contractors, a distribution network company, and they're also put through specific training courses."

**TIWAI ALUMINIUM SMELTER:
"Growing our own people"**

At Rio Tinto's Tiwai Aluminium Smelter, outside Invercargill, the initiation programme is short but intensive. Graduates spend six weeks shuttling between different areas, experiencing both day and night shifts as well as gaining an essential overview of the work of the smelter.

For Andrew Love (right), 25, who was employed as a graduate process engineer four years ago, these "tastes of lots of different areas give you experience that can't really be trained."

Tiwai's human resources specialist Barry Simmonds points out that Rio Tinto's expansion overseas means that new graduates are constantly needed to replace those who choose to work abroad.

"We're better off growing our own people if we can, then they're trained our way."

**FONTERRA:
"A 90% graduate retention rate over the past five years"**

One of the longest standing graduate schemes is at Fonterra Co-operative Group, whose programme is in its 37th year. Fonterra operate a highly structured, year-long course which is simultaneously a first year of employment and a one year Masters qualification in dairy science and technology administered by Massey University.

Participants spend a month in each of the four sectors of the dairy industry (cream products, protein, cheese and milk powder), interspersed with academic lectures, tutorials and development courses. Although there is no formal commitment to stay within Fonterra on completion of the course, 90 per cent of graduates who have taken part over the past five years are still employed by the company.

"Fonterra is a big business, with a wide range of opportunities," says

Fonterra's Industry Training Manager Bryce Bartley. "This gives graduates a chance to look around and see what direction they want to go in.

"It also gives the managers a chance to look at them, and decide who would be suitable in what area. It's much easier to do that from within the company than from university."

How to find out more...

For a Futureintech factfile on scholarships, contact Laura Fergusson email lfergusson@futureintech.org.nz



Scholarships

Providing scholarships used to be seen by many companies as a form of community service or altruism. Such symbolic gestures of charity were often the first items on the chopping block when budgets were tightened.

Times are changing. Many industries are struggling to find skilled staff within New Zealand and are realising that supporting education has a major part to play in recruiting top young talent. It's not just a contribution to the community - it's also a great way of promoting your industry, encouraging excellence, and attracting the best young staff.

Futureintech has been researching the different kinds of scholarships on offer and the benefits this investment can bring. We've case-studied several groups who have successfully implemented education programmes - Transpower, Beca, and the Electric Power Engineering Centre at Canterbury University, which was set up with the help of funding from the electricity industry.

So why offer scholarships?

- **Recruitment** Offering scholarships to top students is a sure-fire way of meeting and influencing the most talented students. Many employers wait until students have graduated before they start trying to attract them. Why not find and grab the best people in their respective fields early on? Many companies are forced to spend large amounts of money every year on advertising and recruiting for new staff. Offering scholarships and some form of graduate recruitment programme can be a very cost-effective way to reduce these expenses in the long term.
- **Publicity** Scholarships are advertised and promoted by universities to thousands of students. This is a chance to build some recognition and awareness amongst the next generation of the workforce. And it can be a chance for good PR for your company in local media and university publications. Financially it can be a far more cost-effective way of promoting your industry than paid advertising, because it offers a built-in incentive.
- **Support for education** helps make studying technology, engineering and science more financially viable. Without this kind of assistance many students incur substantial student loan debts, and head over heels upon graduation, or decide against doing valuable (but expensive) post-graduate research. Many talented students are avoiding these subjects altogether - choosing over-crowded subjects like law and commerce because they see them as more affordable and financially rewarding.
- **Scholarships** together with graduate work can be a strong incentive for graduates to stay in New Zealand (for a while at least). Recipients of scholarships and financial assistance often feel a loyalty to the company that has supported them.
- **Scholarships** and awards encourage excellence. They give students something to strive for, and recognise achievement in specific fields or subjects.



Ambassador changing people's lives

Futureintech Ambassador Scott Abernethy, a software engineer from Harris Stratex, has been a powerful influence on the possible career paths of Information Technology students at Wellington High School.

Over the past two years, Scott has worked with students in Year 12 and 13 IT classes, explaining his job and helping them with projects.

Since Scott's involvement, students he has worked with have come third and fourth in the New Zealand Programming Contest, with one going on to compete in the International Olympiad in Informatics – the first time a New Zealand team has taken part.

Another student attained a Silver CREST award in ICT, while another was awarded a Massey Scholarship to study engineering.

According to Information Technology teacher Vincent Brannigan, Scott inspired the students he worked with and "made software engineering a real option for them".

"Many of last year's Year 13 students were very seriously considering ICT careers – at one point it was nine

out of ten in the class! When they meet someone who's working in the industry and talk to them they realise they are real people just like them, and maybe it's not that hard.

"It was the same reaction with my 2005 students, with whom Scott had a lot of contact.

"Last year we had university student mentors as well, and students identified with them too, and made a connection with people who were on the pathway to an ICT career."

As well as describing how he uses IT in his own work, Scott discussed code structuring and teamwork, and gave advice on Java programming.

"Lots of the kids don't plan code, or break it down into manageable chunks," says Brannigan.

"They just sit down and

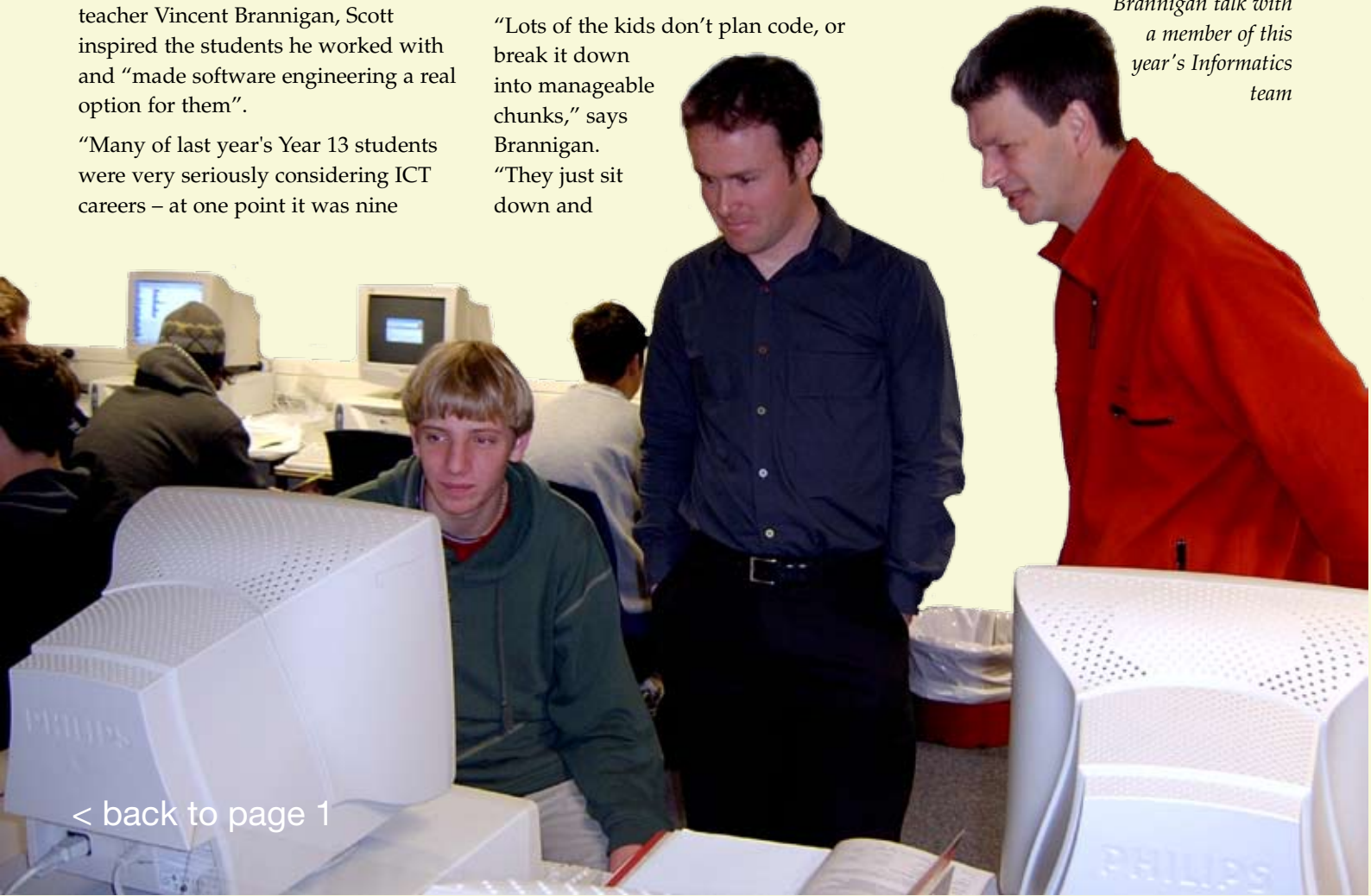
write. Scott gets them to break it down. We teach them that, but when you get someone from industry telling them how it works in real life it really sinks in."

Scott says he has found the experience of being an Ambassador "really rewarding – especially after hearing these results; that makes it all worthwhile."

His employers at Harris Stratex have been extremely positive about his involvement with Futureintech, and have ensured that he has been able to take on the role without affecting his work.

"I'm surprised that it's had this much impact, but it really gives hope for the future. Hopefully this can happen again and again and again with future Ambassadors."

Scott Abernethy (centre) and Vince Brannigan talk with a member of this year's Informatics team



Futureintech news

Futureintech now in Hawke's Bay



Jenny Dee joins the Futureintech team this month as a part-time Facilitator based in Hawke's Bay.

A freelance food technologist and consultant, Jenny has been a strong advocate of Futureintech through her work on the careers committee of the New Zealand Institute of Food Science and Technology (NZIFST). Thanks to her, there is a growing involvement of the food industry in Futureintech's work, both through a number of Ambassadors and individual projects.

Jenny first became involved with Futureintech 18 months ago when the Hawke's Bay branch of NZIFST liaised with Futureintech director Angela Christie to discuss collaborative methods of careers promotion. This resulted in the training of four food technologists from Heinz Wattie's as Futureintech Ambassadors, and successful engagements with local schools.

Jenny is currently working with Futureintech in her NZIFST capacity to jointly produce a brochure for students on careers in the food industry. In her new position she will be able to maintain and make use of her existing contacts, while establishing connections with a wider range of companies.

She says: "I have heard from the four Ambassadors in Hawke's Bay about the work they did with schools last year, and seen some of the results of that work. It's impressive! I can see that they make a difference, explaining how what you study at school relates to the real world. I would have loved to have had a Futureintech

Ambassador around when I was at school."

Jenny's first Ambassador training session will take place on 12 April.

200 Ambassadors and counting

In a new milestone for Futureintech our Ambassador numbers have now reached over 200, after training sessions in Auckland, Wellington and Rotorua. Owing to the generous cooperation and encouragement we receive from companies across the country, we are able to provide schools with confident, enthusiastic young advocates for the careers that technology, maths and sciences can lead to. We would like to thank all our industry partners for continuing to offer your employees' time and skills in support of Futureintech's goals.

Farewell to Bernadette



Thank you to Bernadette Hannagan, who is stepping down as Futureintech's Otago Facilitator this month.

Over the past two years Bernadette has created numerous links between schools and industries in Otago and Southland, and recruited young professionals to act as Ambassadors and Neighbourhood Engineers across the range of primary and secondary schools and many industry sectors. The rest of the Futureintech team wish Bernadette all the best for the future.

We would like to thank Farra Engineering Ltd, Dunedin, for hosting Bernadette over the past year.

We look forward to welcoming a new Otago based Facilitator in April.

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