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Teachers take the lead

The best suggestions for how to make use of Futureintech Ambassadors come from teachers themselves. Who knows better than you what your students need to support their learning? Regional Facilitators are increasingly hearing from teachers who know exactly what they want from Futureintech, and how to make it fit in with their programmes and the curriculum.

Students at **Haumoana School**, Hastings, have been combining skills in maths, science and environmental awareness through a project involving surveying predators in the Tukituki Estuary.

Ambassaor Adam Forbes, an environmental scientist with MWH, has been working with the students to monitor mammalian predators and their impact on native flora and fauna. The project combines educational value with a genuinely important local investigation.

“Introduced mammalian predators have been one of the key drivers of decline in native biodiversity in New Zealand,” says Adam. “The research that the students are involved with provides a perfect opportunity to grasp an understanding of the issues, which I hope will have positive environmental spin-offs in the future.”

Principal **Marty Hantz** agrees. “Community involvement in the school is high and this Predator Survey is a fantastic way to add value to an unappreciated area of our community as well as allowing us to extend a group of nine Year 6 children who have skills in numeracy, science, and a strong ecological awareness,” he says.

“Through involvement of these children, their parents, the Board of Trustees and wider community will be more widely informed of what is on their doorstep, its ecological importance and the issues faced in sustaining the area.”



Industry and schools are collaborating to monitor predators in the Tukituki Estuary. Adam Forbes of MWH canvasses the opinions of students at Haumoana School, Hastings.

Kate Hamilton, HOD Science at **Bayfield High School** in Dunedin, wanted to demonstrate the range of career possibilities offered by science to her Year 11 students. Each Wednesday throughout Term 1, 30 interested students gathered to find out about the options opened up to them by taking science further. With the help of Dunedin Facilitator Lynne Newell, Futureintech Ambassadors proved to be an ideal source of inspiration.

“Lynne was a fabulous resource for me,” says Kate. “She coordinated the visits each week and came along to listen to the presentations. It has hopefully opened the minds of our students to the possible career paths in science that they could pursue, and made them aware of resources such as the Futureintech website that they can access.”

At **Karamu High School** in Hastings, HOD Science **Kevin Beaumont** was keen to ensure that his Year 10 students understood the importance of science, rather than seeing it as a subject they were forced into continuing in Year 11.

“I wanted to generate more interest in science for the following year, and to answer the question ‘why do we have to do science?’”

Kevin invited two Futureintech Ambassadors to talk to the year group about their own science-based careers and the value in general terms of continuing to study science. Another Ambassador visit later in the year was targeted at more able students and aimed at encouraging them to see science as a positive choice for NCEA.

In addition Kevin has made use of Futureintech Ambassadors with his Year 12 and 13 chemistry, physics

Gareth Lampitt, a mechanical engineer with RCR Energy Systems, describes his job to students at Karamu High School, Hastings.



and biology students, to demonstrate that science can be a valid career option.

“The Ambassadors present themselves as ordinary, everyday people who work in jobs that are interesting and exciting, and well paid,” says Kevin.

“They help the students appreciate that it is possible for them to follow similar career pathways. I now have Year 13 students who are definitely considering engineering, food technology, nanotechnology, etc as university courses. It’s great for the students to be exposed to ‘real’ scientists and realise they are ‘real’ people who live normal lives and enjoy the same things that students do.”

Gill Hedworth teaches Food Technology at **Rangitoto College** in Browns Bay, Auckland, and has embraced the opportunity Futureintech offers to provide her students with up to date information on tertiary level technology courses and the careers such courses can lead to.

Seema Datt, a food technologist with J.C. Sherratt & Co, and Fiona Greig, a nutritionist with New Zealand Beef and Lamb, have both visited the school several times, giving careers talks and small group discussions.

Gill has been delighted with the way the Ambassadors have encouraged her students to see the potential in food technology as a subject and a career option.

“Both Ambassadors came across as very professional and were inspirational to my students. Their talks were outstanding as they were extremely informative and presented to the students in an interesting manner.



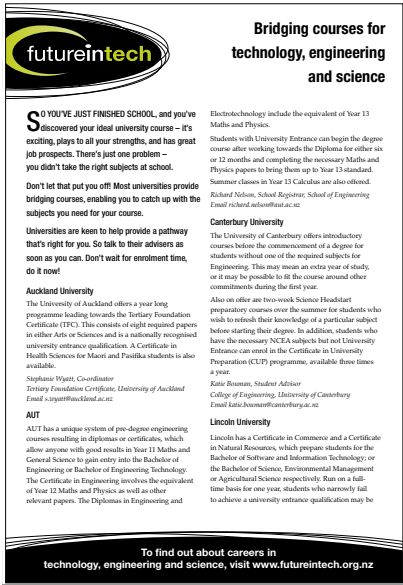
Futureintech Ambassador Selai Letica, a scientist with AgResearch, speaks to students at Bayfield High School, Dunedin, as part of a weekly programme of presentations on science-based careers.

As a teacher it has increased my enthusiasm for my subject even further as it reminded me of the fabulous careers it can lead to. Futureintech has taken us to a higher level.”

Futureintech Ambassadors can support existing projects, introduce careers, or supplement the curriculum with real-world applications and perspectives. If you have ideas for how your students would benefit from working with Futureintech, or would like to discuss the possibilities, please contact your regional Facilitator.

Contact details are on the last page of this **e-news**.

New guide to bridging courses



If you're looking for up-to-date advice for students whose tertiary choices demand NCEA subjects they haven't taken, Futureintech's new guide to bridging courses can help. Outlining the courses offered by universities to prepare students for the degrees they want to take and fill in the gaps

in their prerequisite subjects, the guide was prepared with the full endorsement and assistance of participating universities, and also offers contact information for full details.

Printed copies of the guide to Bridging Courses are available at no cost from www.futureintech.com/order-form.cfm

Other Futureintech publications

Futureintech's print resources and support materials are all available free of charge and can be requested individually or in bulk using our online order form. This has been redesigned to make it clearer and easier to use.

Publications include brochures on a range of career sectors and general introductions to Futureintech for parents and caregivers.

To order printed copies of any of these publications, visit www.futureintech.com/order-form.cfm

For pdfs of some of these publications, visit www.futureintech.com/other.cfm

For archived copies of **enews for schools**, visit www.futureintech.com/e-news.cfm

Condolences

The Futureintech team wish to extend sincere condolences to everyone affected by last week's tragedy involving students from Elim Christian College. Elim have been long-standing supporters of Futureintech, and we were all deeply shocked to hear of the accident in Tongariro National Park in which six students and a teacher died. Our thoughts are with the school and its wider community.

Final call for applications

Schools interested in the opportunity to represent New Zealand at the **International Hydrogen and Fuel Cell Student Forum** in Brisbane have one more week in which to apply.

The Forum, held on 17-18 June, offers students in Years 9-11 the chance to take part in discussion with contemporaries from around the world on sustainable fuel sources. The programme includes lectures and tutorials from world-renowned scientists working on relevant projects, and the chance students to share their thoughts and to collaborate on practical projects.

Futureintech is delighted that the Ministry of Economic Development has generously agreed to sponsor four New Zealand students and their teacher to attend the forum by providing transport and accommodation costs.

The closing date for applications is Friday 2 May. To find out more, see www.futureintech.com/fuel-cells.cfm or contact Laura Fergusson on lfergusson@futureintech.org.nz



About Futureintech

Funded by NZ Trade and Enterprise, Futureintech is an initiative of the Institution of Professional Engineers New Zealand (IPENZ). Established in 2003, Futureintech is a practical attempt to increase the number of young New Zealanders choosing careers in technology, engineering and science – crucial sectors for the infrastructure and social and economic growth of the country.

Futureintech Ambassadors

Futureintech Facilitators around New Zealand work to develop links between schools and local industries. Central to this work is the recruitment of Ambassadors – young people working in technology, engineering and science who are trained by Facilitators to volunteer in schools. Their contribution includes giving presentations, explaining their work, supporting projects, providing a real-world perspective and demonstrating the practical applications of the curriculum. There are currently 350 trained Ambassadors working with Futureintech, representing a wide variety of industries. Their support and that of their employers is greatly appreciated.

Futureintech partnerships

Futureintech maintains partnerships with over 200 companies, representing a diverse cross-section of New Zealand industry. Partners work with Futureintech in a variety of ways, from encouraging staff members to become Ambassadors to providing expert information for publications or promoting Futureintech to a wider audience. Futureintech's work would not be possible without their generosity and commitment.

Futureintech publications

Futureintech produces an ever-increasing range of print resources for teachers, students, careers advisors, caregivers and industry, all of which are available free of charge by request from head office.

Futureintech's website www.futureintech.org.nz is another key component of the initiative. It offers profiles of Ambassadors and their employers, a database of relevant tertiary courses and monthly regional news, and is regularly updated.

Futureintech's monthly newsletter **enews** is distributed in alternate months to schools and industries, and aims to ensure that all stakeholders are kept fully informed of Futureintech's activities and of the resources we provide.

Futureintech Facilitators

Futureintech's regional Facilitators promote and maintain relationships with schools and industry employers. This involves recruiting and training Ambassadors, advising teachers on how Futureintech can best support their programmes, arranging, planning and supervising Ambassador visits and distributing resource materials.

Facilitators are supported by Host Partners, who provide the office space which enables them to work remotely from the Wellington head office. Host partnerships ensure that Facilitators not only benefit from a collegial atmosphere but also have daily exposure to an industry-related workplace.

If your staff might be interested in volunteering as Ambassadors, or your business benefit from being involved in any way with Futureintech, please contact your local Facilitator to discuss how we can work together.



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