

IN THIS ISSUE ...

... we introduce you to the new sets of case studies on the E2E website and report on the National Engineering Education Plan reference group meeting held in November

SEASON'S GREETINGS

and a huge thank you to all those from both industry and education sectors who have given their support this year.

Have a relaxing summer break and we look forward to working with you to make 2015 a great year for us all!



Neville Jordan
Chair,
Engineering E2E
Steering Group

Engineering E2E case studies – spotlighting exciting education and industry initiatives

As part of a refresh of the Engineering E2E website, a series of case studies is being developed to showcase educational pathways and outcomes.

The Engineering E2E website – www.engineeringe2e.org.nz – is undergoing a facelift, as we work to provide information and inspiration for the various groups working to help raise the profile of engineering as a challenging, fulfilling career choice.

An important focus has been the development of case studies which are published on the pages of our two major stakeholders: Education and Employers.



EDUCATION CASE STUDIES

www.engineeringe2e.org.nz/education

The Education case studies feature both individual student pathways and industry-linked initiatives by tertiary institutions to provide graduates with the knowledge and skills for New Zealand's changing employment needs.

The first Education case studies focus on the individual pathways of three students:

Amy Pauling, a young mother and Diploma in Science graduate who has returned to study and is in her second year of a BEngTech (Civil) at WelTec.



Robinson Research Institute Junior Engineer **Mike Davies** offers a

fascinating perspective as he talks about his journey through education to employment in engineering via a Diploma in Engineering.



Ashley Archibald is finishing a BEngTech in Mechatronics this year and discusses his experience of trying out different tertiary providers.

Soon-to-be-published stories include a case study on NorthTec's tutoring programme for their NZDE (Civil), where 80% of the tutors are industry experts employed in the field. The head tutor Mike Mullany gives advice for other ITPs looking to collaborate with industry to provide interesting, relevant programmes for students.

EMPLOYER CASE STUDIES

www.engineeringe2e.org.nz/Employers

Case studies on the Employer pages are industry-focused. They look at internships, scholarships and other ways that companies have taken active steps to attract students to the engineering sector and equip them with work-ready skills directly relevant to their recruitment needs.

The first of these is 'Cadetships - an answer to NZ's skills shortage?', which briefly backgrounds cadetships and looks in New Zealand at its current resurgence through the eyes of Opus NZ.

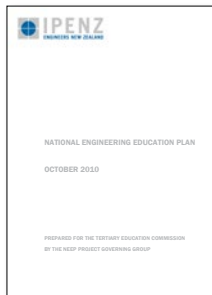
Many more industry-focused case studies are in the pipeline and will be published over the coming weeks.



NEEP Reference Group Meeting

The National Engineering Education Plan - four years on.

In 2010, IPENZ published the National Engineering Education Plan (NEEP), which highlighted likely future demand for engineers. The engineering numbers were generated as a result of analysis of OECD data, DOL and Ministry of Education statistics and, importantly, feedback from the industry and tertiary sectors.



On 18 November 2014, TEC and IPENZ convened the first meeting of a reference group of employer, tertiary education and professional body representatives to review the Plan and to provide recommendations to industry and education organisations, which can be used to help inform future engineering education funding decisions.

The Group comprised Bill Sole (Competenz), Lindsay Crossen (Board of Engineering Diplomas), John Findlay (Otago Polytechnic), Michael Kerr (Beca), Jane Goodyer (Massey University), Mark Ewen (NorthTec), Graham Carson (Weltec), Neville Jordan – Chair (Endeavour Capital), Phil Brownlie (Rakon), Tim Davin (IPENZ), Grady Cameron (Delta Utilities), Don Christie (Catalyst), John Laurenson (MBIE) (TEC), Melissa Julius (MBIE), and Stuart Cambridge and Murray Johnson (TEC).

The Group considers that the proportions of engineers with qualifications at levels 6, 7 and 8 indicated in the 2010 NEEP report are still valid. The process to determine the figures was a robust one and without any more relevant recent data it was agreed that it is difficult to update the figures at this stage.

There was general consensus amongst the Group that aspiring to match the average OECD levels of

employment in engineering is a worthwhile goal. This will mean an increase in engineers in New Zealand at all levels will be required. It was agreed that fundamental to creating a demand for engineering graduates in a sustainable way was to increase understanding of the various engineering fields and roles through promotion of engineering as a career within both the schooling sector and engineering sector.

There was also consensus that the potential social and economic benefits to New Zealand justify such effort.

The recommendations of the Group to industry and education organisations, via the Engineering E2E Steering Group, were:

- Research the requirements of “new disciplines” to support an innovation-led economy.
- Provide clear pathways to and between the three qualifications
- Be more innovative with programmes and pathways to engineering
- There is no ‘right number’ of engineers to provide, based on current available data, but there is consensus that the proportions of graduates are still valid.
- Different levels and qualifications of engineering need to be understood better by all stakeholders, particularly Level 6 and 7.
- Be aspirational and focus on a target, which will support an innovation led economy, rather than the status quo.

The National Engineering Education Plan is online at www.ipenz.org.nz/ipenz/forms/pdfs/NEEP_Project_Report.pdf

IF YOU HAVE ANY ENQUIRIES, PLEASE CONTACT US: ENGINEERING E2E PROGRAMME TEAM

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