ENGINEERING e2e EDUCATION TO EMPLOYMENT 35
NEWSLETTER : SEPTEMBER 2017

WORK WITH US TO ACHIEVE THE GOVERNMENT GOAL OF INCREASING ENGINEERING GRADUATES BY 500+ PER ANNUM

IN THIS ISSUE . . .

THERE ARE MANY SOURCES *of materials and practical tools to assist small to medium sized companies to recruit, retain and grow employees.*

During 2016, Engineering e2e explored with engineering employers what materials and tools they want and how they want access to them. An engineering employer resource portal was suggested that would link to engineering specific materials and tools wherever they are available – a 'one stop shop' for engineering employers.

To explore this idea further we formed a working group of industry stakeholders and Engineering e2e Steering Group members. This working group consulted employers and heard from them that a portal would be useful.

I'm very pleased to announce that Business NZ has agreed in principle to host an engineering employer resource portal that will be built by Engineering e2e.

This month I've been on the road meeting with professional organisations and other groups interested in increasing the numbers of engineering graduates. On behalf of Engineering e2e, I signed two MoUs, visited Ara Institute of Canterbury's new engineering facilities and attended our micro-credentials workshop at Victoria University.

Our work continues to gain momentum, and we've published an article about our approach. We hope that the lessons we're learning will be of use to those promoting careers in other disciplines.

Sir Neville Jordan
Chair, Engineering e2e Steering Group

Initiatives undertaken through the Engineering e2e programme contribute directly to the achievement of the Government's Business Growth Agenda priority of building a more productive and competitive economy.

Micro-credentials pilots begin

As a response to the Productivity Commission's call for innovation in the tertiary sector, the Minister for Tertiary Education, Skills and Employment Paul Goldsmith has announced the launch of three pilots in micro-credentials.

These micro-credentials pilots,undertaken with three organisations – Udacity, Otago Polytechnic and the Young Enterprise Scheme – from 1 August 2017 to 30 June 2018, cover a range of micro-credential options and will help NZQA consider how a full micro-credential system might be developed.

Micro-credentials allow for specific skills or components of learning to be recognised. NZQA says they're not units of learning towards a full qualification, but recognise specific skills, experience and knowledge.

Engineering e2e has been exploring the possibility of micro-credentials for engineering, as we believe they offer learners and employers relevant, just-in-time skills in a way that suits their individual needs and circumstances. In April this year, we published **Micro-credentials: a model for engineering education?** about how micro-credentials could be used to improve the uptake of engineering education. Over the past few months we've consulted educators, government agencies and employers who've indicated a high degree of interest in the concept but some concern that the 'rules of the game' were yet to be defined.

LAST CHANCE TO GIVE YOUR VIEWS IN OUR RECRUITMENT PRACTICES SURVEY

If you are involved in recruiting and managing engineering graduates, don't forget to complete a short online survey to help us understand recruitment challenges and behaviour. **The survey closes 15 September**.

See: **www.surveymonkey.com/r/Q6YQ53V**

Over the next few months Engineering e2e will continue working towards piloting micro-credentials in engineering. We'll keep you up to date with our progress.

See: **www.nzqa.govt.nz/about-us/future-state/quality-assurance/micro-credential-pilots**

MoUs SIGNED WITH IET AND IFE

Engineering e2e has recently signed Memorandums of Understanding (MoUs) with the Institute of Engineering and Technology and the Institute of Fire Engineers and we look forward to working together on initiatives promoting engineering as a career.

Institution of Fire Engineers (NZ) Branch President Trent Fearnley (signing MoU) and Executive Director Ed Claridge, with Sir Neville Jordan, Chair, Engineering e2e Steering Group.

EVALUATING ENGINEERING E2E – WHAT CAN WE LEARN?

Engineering e2e is a field-specific e2e project. This means we have been able to enlist a wide range of stakeholders to address a particular national workforce development issue. This approach may have great potential to be used elsewhere for example, workforce needs in other fields.

To see how well Engineering e2e is doing we're undertaking some evaluation to learn from our experience. Our model has been attempting to act as a "systems integrator" – an approach recommended by McKinsey Center for Government's reports mentioned above.

We would like to evaluate the Engineering e2e model in order to develop a clear picture of:

- the effectiveness of the approach Engineering e2e takes to systems integration; and
- what can be learned that might apply to Engineering e2e in the future and/or to education-to-employment projects in fields other than engineering.

FEATURED CASE STUDY

WAIKATO DISTRICT COUNCIL STARTS A CADETSHIP PROGRAMME

Waikato District Council's new cadetship programme is focused on starting small, with two Wintec students employed in 2018. The council will increase the number of cadets in the following two years, and is considering how the initiative could be expanded in the future.

A cadetship programme is a practical solution to the skills shortage in industry and the general lack of awareness around engineering careers – particularly the New Zealand Diploma in Engineering and Bachelor of Engineering Technology pathways.

Read more... **www.engineeringe2e.org.nz/Employers/Case_study.cfm?ID=71**

Engineering e2e has therefore invited the New Zealand Council for Educational Research (NZCER) to examine and evaluate the programme, during October and November this year.

Given that Engineering e2e has been running for three years, NZCER will focus on how effectively Engineering e2e has worked as a systems integrator. NZCER will also cast a developmental eye over things, to consider what has been learned that could be used to guide future actions for Engineering e2e or other e2e projects.

The evaluation results will be available late this year.

WHAT DIFFERENTIATES ENGINEERING E2E FROM OTHER INITIATIVES?

We've just published a four-page flyer on what differentiates Engineering e2e from other initiatives. In it we discuss why Engineering e2e was set up and how the McKinsey Center for Government's reports *Education to employment: Designing a system that works* (2013) and *Education to employment: Getting Europe's youth into work* (2014) were key influences on the programme design. We relate Engineering e2e's work to the three interventions recommended by McKinsey and finish by identifying some opportunities for the programme.

See: **engineeringe2e.org.nz/Documents/Integrating-the-systems.pdf**

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