

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

IN THIS ISSUE ... we look at developing a possible *MicroMasters* model for the New Zealand context, future work with IPWEA NZ and share some of the stunning results of our *Make the World* public awareness campaign.

LATE LAST MONTH, I met with Peter Higgs, President of the Institute of Public Works Engineering Australasia in New Zealand (IPWEA NZ). We discussed their extensive assessment on the future capacity and capability of the public works profession, featured in this issue. Engineering e2e is in the process of forming a Memorandum of Understanding with IPWEA NZ and look forward to working with them this year.

During March, we worked on three significant projects in our Employer Engagement work stream:

- we initiated a project to assess whether the *MicroMasters* initiative provides a potential model for engineering education at Levels 4-6 in New Zealand – see our lead article, right
- we continued our work to investigate success factors for engineering education hubs
- we began work to develop a standard for a potential sponsored degree.

Reports from the latter two projects will be available mid-year.

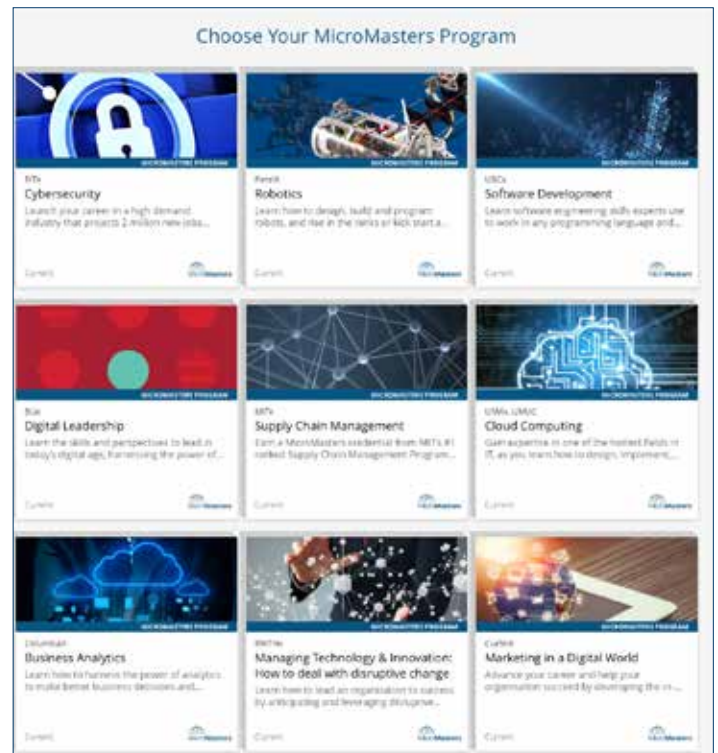
We farewell Richard Muggleston, Fiona Kingsford and Grady Cameron from the Engineering e2e Steering Group. Richard and Grady were founding members and like Fiona, who joined the group more recently, have given generously of their time and advice. I would like to thank each one of them for their valuable contribution. I would also like to welcome three new members to the Steering Group:

- Geoff Douch, CE Counties Power, is responsible for planning, maintenance and operation of the Counties Power distribution network.
- Andy Goldie, Senior Engineering Manager at Fletcher Construction, has 18 years' experience in managing the design and construction of international infrastructure engineering projects.
- Brett Williams, General Manager – Professional Standards, IPENZ, works in the key areas of graduate support, continuing professional development, qualification accreditation and competence assessment.

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.



MicroMasters in the New Zealand context?

Engineering e2e recognises the need to identify successful initiatives and innovative approaches and adapt these to local conditions. A candidate for this approach is the *MicroMasters* initiative delivered by an international consortium.

MicroMasters offers curated online programmes of study that provide pathways to multiple tertiary education organisations. This approach offers flexible, highly scalable employer-validated delivery models, and is hugely popular and successful – for example, over 127,000 students from 189 countries enrolled in Massachusetts Institute of Technology's first *MicroMasters* programme in Supply Chain Management.

Adapting the most effective elements of the *MicroMasters* initiative to the New Zealand context provides an opportunity to enhance the profile of Level 4-6 engineering education, provide more consistent preparation for learners and cater better to the needs of under-represented student

groups. The MicroMasters model could offer opportunity to leverage the range of innovative teaching practices underway and being developed in New Zealand and overseas, and could challenge existing policy and regulatory settings, and make it possible to credential 'bite-sized' chunks of learning.

A report that identifies the key characteristics of the MicroMasters and develops a possible model for a 'Micro' approach in New Zealand will be available in late April.

IPWEA NZ: FOSTERING OUR FUTURE

New Zealand's public works profession is entering a phase of sustained pressure not experienced since the nation-building era of the mid-20th century. It faces difficulty in attracting, developing and retaining the skilled people it needs to deliver core services to the public.

The Institute of Public Works Engineering Australasia in New Zealand (IPWEA NZ) recognised the need for the organisation and its members to change how it fosters the future of the public works profession.

In response, IPWEA NZ established a project team to investigate the scale and nature of this problem and to find support for a way forward. The project team completed a strategic assessment which outlines the current problems and the likely impacts to New Zealand. Crucially, any way forward needs shared agreement from stakeholders around the problems and a collaborative approach to any solutions.

IPWEA NZ is now looking to develop a programme of strategic interventions, and will distribute the assessment to industry stakeholders to gain their support to co-invest in the initiative.

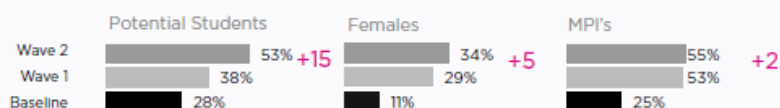
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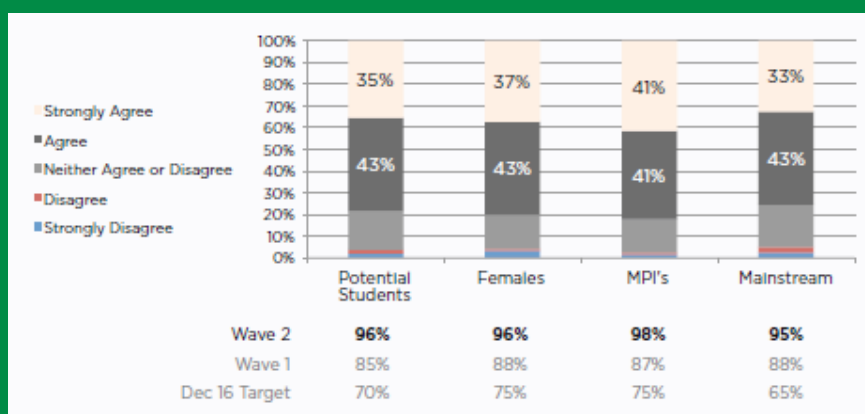
GREAT RESULTS FROM MAKE THE WORLD

The second wave of tracking shows that the **Make the World** public awareness campaign is delivering exceptional results:

- Positive perception of engineering has risen from 31% to 52% among potential students
- Consideration of engineering as a career has skyrocketed, from 10th to 3rd
- Over three times as many females now consider engineering as a possible career (34%, up from 11%)
- Māori and Pasifika student interest in an engineering career has also more than doubled (55%, up from 25%)



Wave 2 results show an increased positive perception of engineering among potential students (male driven), and Māori and Pasifika:



The key message that engineers 'help make the world' is clearly understood by over 98% of respondents.

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

Tertiary Education Commission Te Amorangi Mātauranga Matua
Phone 04 462 5205 Email engineeringe2e@tec.govt.nz
www.engineeringe2e.org.nz