SCIENCE AND ENGINEERING CHALLENGE STATE FINAL
REMARKS BY
HER EXCELLENCY PROFESSOR THE HONOURABLE KATE WARNER AC
GOVERNOR OF TASMANIA
UNIVERSITY OF TASMANIA, MONDAY 1 JUNE 2019

Well, that was fabulous to watch! Who would have thought that Bridge Testing could be so exciting? Many congratulations to all 8 teams.

Ian Shuey, your Rotary District Chair of The Challenge assures me that Tasmanian students always "punch above their weight" in the annual Science and Engineering Challenge, and I can see he's quite right about that – with the huge turnout here today and the record number of Tasmanian schools and students taking up the challenge of The Challenge, if I can put it that way. It is most commendable of all of you.

May I also take this opportunity to acknowledge the University's College of Sciences and Engineering STEM Outreach Team, for your excellent work in engaging groups of school students in a range of annual activities, including The Challenge.

Likewise, thank you Susie Haley, as the State Coordinator of the Challenge.

The aim of stimulating secondary school students to reconsider their perceptions of science and engineering is, I daresay, not without challenges of its own. There is such a broad range of subjects available in Years 11 and 12 and maths, chemistry and physics can be perceived as more difficult and more challenging than some of the more applied choices. And we know too that girls, despite having the same ability at maths and science as boys, have less confidence in STEM subjects than boys in response to stereotyped abilities. We need to not only have more boys studying STEM subjects, we need to have as many girls as boys studying them.

Travelling around Tasmania, Dick and I have met many young Tasmanians whose education in STEM has landed them with jobs that are rewarding not just personally but in terms of making a positive contribution to society in the future. I will mention four of them.

Dr Krystel Wooley was educated at Huonville High. In 2018 she completed her PhD in Chemistry and she is now part of the Drug Discovery Group at UTAS which assists in speeding up the discovery of hew drugs with 'out of the box' approaches.

Just two weeks ago we met Oliver Walters at Currawong Engineering, Kingston. Oliver is a young engineer who designs UAV (unmanned aerial vehicle) engines and components for clients around the world. Currawong plans to employ two more engineers this year, so clearly there are opportunities here.

Fiona Kerslake was brought up on a sheep farm in the Derwent Valley. After her agricultural science honours year she worked in California and New Zealand before completing her PhD on vineyard practices for Pinot Noir. She is now working at the Tasmanian Institute of Agriculture on sparkling wine. She has spoken about her research at conferences in UK, France, Portugal, Canada and Italy.

Earlier this year, at IMAS at Taroona we met Dr Alan Henderson who is the lead engineer at the ARC Research Hub for the commercial development of rock lobster culture. In collaboration with an industry partner he design the tanks for growing rock lobster.

Clearly, getting a sound education in a STEM subject is a pretty good start, believe me.

And so I will conclude by going back to what we've been watching today, namely bridge testing. It may seem like fun, and little more. Not so! Recently, as Governor, I have been marginally involved with the long-running decision to build a new Bridgewater Bridge. It will be one of the largest Tasmania infrastructure projects for many years.

A major engineering consulting firm has recommended a precast concrete beam bridge with spans of approximately 35 metres and a maximum navigable height of 16.2 metres, to match the Bowen Bridge, with an estimated cost of $533 million in 2019 dollars.[i]

That is a huge amount of money for a bridge. And to think that what you're doing here, now, is what you may well be doing for real in the decades ahead.

So, well done again to every one of you for participating in the Science and Engineering Challenge, and we now look forward to the announcement of the placings in the 2019 State Finals.

Thank you.

[i] 'Review of Bridgewater bridge Design mand Cost Estimate", Infrastructure Tasmania, March 2016 [pdf]