**World Technology Universities Network**
**Congress Report, 2017**

## Executive Summary

The Congress, delivered 31 August – 1 September, attracted 89 attendees from universities and businesses from across the world. Through both open sessions and technical sessions, the following themes were explored: the role and impact of technology universities in both local and international contexts and more specifically the interface between technology universities and business, and secondly, the role of technology universities in supporting the creation of graduates with potential for the workplace. This report captures the key themes and outcomes of the Congress, which in turn will aid future conversations between members and inform the 2018 Congress.

## Enabling collaboration: the interface between technology university and its partners

Collaboration between institutions and their partners be they business, community, government are important. It was recognized that many universities are making a considerable impact in both their local communities and economies and this learning can, in turn, can be applied to more global issues. Examples discussed were how universities were supporting local SMEs to exploit global markets and opportunities, with some highlighting innovative approaches such as outward facing labs and interdisciplinary clusters. Although access is often the challenge for stakeholders external to a university, utilising the key stakeholders such as banks can facilitate opportunities for engagement. The role of co-production (business and university) in university taught programmes was considered essential. This is ever more relevant with the rise of the degree apprenticeship in the UK.

## The next generation of graduates

How do universities educate students for jobs that don't exist yet? Are universities producing graduates with the skills required in the complex world of work? These were some of the questions the network explored at the Congress. The higher-level skills gap of graduates when entering into employment continues to present challenges particularly as its becoming harder to understand the jobs they will do since they do not exist yet. A range of characteristics were suggested, such as strong communication, leadership skills, critical thinking, flexibility and responsiveness, cultural awareness, creativity and emotional intelligence. Most importantly, employers are looking for the *potential* of a graduate who can be shaped to support business needs; a graduate who is curious; one that is keen to continue learning throughout their career. Embedding enterprise learning and skills development in the taught curriculum is therefore paramount.

Three technical sessions were held in parallel. The first explored Advanced Healthcare which highlighted how digital interventions improve wellbeing, yet there is a need to understand the challenges and needs before the technology and systems. A discussion regarding co-production took place whereby universities should to engage with the service users and industry to respond to the needs. The second session explored intelligent and innovative engineering, in particular the study of engineering and whether it should be re-designed so that students acquire core transferable skills for the workplace. The gender imbalance in this field was also highlighted. Finally, the third session explored Cyber Security in the 21$^{st}$ century which has become a global problem that involves people, technology and

processes. At this stage, the technology is more advanced that the technical capability and understanding of people using the technology.

**Concluding comments**

It was agreed that technology universities were best placed to support students who want to make an impact in their own community, or society at large, because of the applied nature of such universities.