



QUEENSLAND  
FUTURES INSTITUTE



# BETTER IDEAS

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WORKFORCE, EDUCATION  
AND TRAINING

# Better Ideas

## Workforce, Education and Training

Wednesday 17 May 2023

7:30am – 9:00am

Customs House,

399 Queen St, Brisbane

### PANELISTS:



**PROFESSOR  
HELEN BARTLETT**

**Vice-Chancellor  
and President**  
University of the  
Sunshine Coast



**PROFESSOR  
CAROLYN EVANS**

**Vice-Chancellor  
and President**  
Griffith University



**PROFESSOR  
GERALDINE MACKENZIE**

**Vice-Chancellor**  
University of  
Southern Queensland



**PROFESSOR  
MARGARET SHEIL AO**

**Vice-Chancellor  
and President**  
Queensland University  
of Technology



**PROFESSOR  
DEBORAH TERRY AO**

**Vice-Chancellor  
and President**  
University of Queensland



**ANA RODGER**  
**General Manager  
East Coast Region**

TAFE Queensland



**MODERATOR  
JEMMA HORSLEY**

**Partner**  
Skills Lead, Education  
KPMG Australia

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# Snapshot

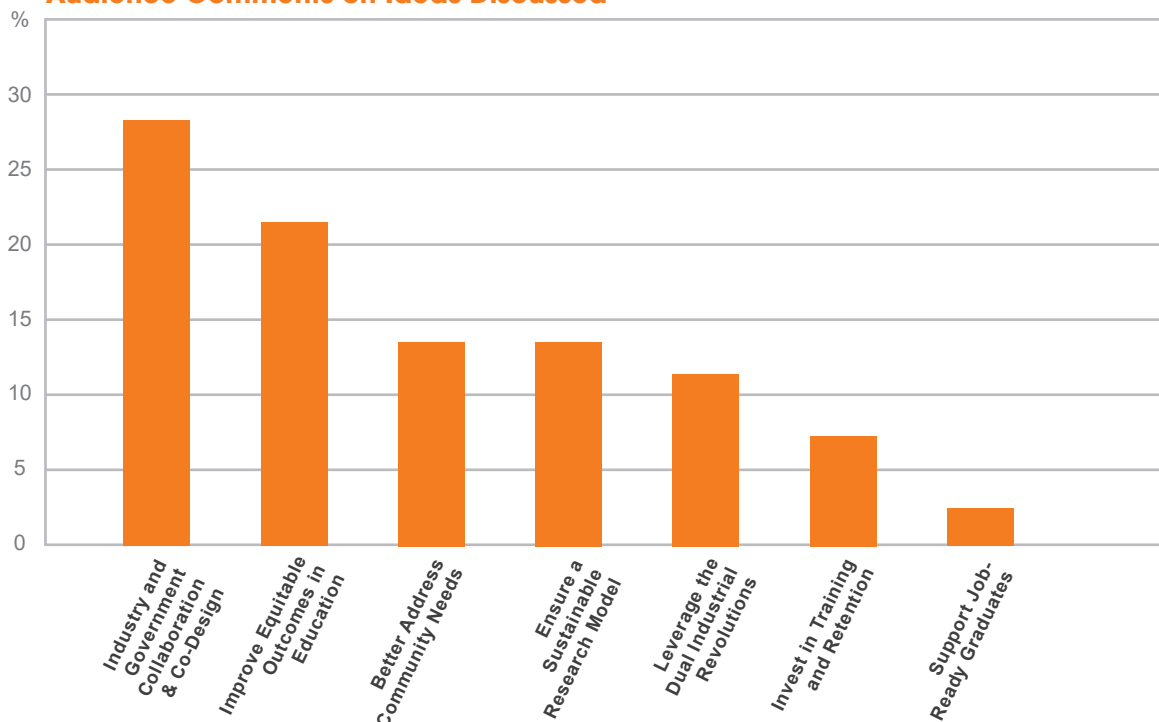
The key theme from the 2023 Queensland Futures Institute's Workforce, Education and Training Forum was the need for collaboration between the education sector, industry and government to deliver innovative approaches to training and workforce development. We are now facing a rapidly changing economic environment, with strong demand for a highly skilled workforce that is ready for technological developments which are changing the ways we work and creating new jobs of the future.

The discussion highlighted the role for institutions and industry to better service the regions, and other demographics, including those with disabilities and international immigrants, who are currently underrepresented in the workforce.

## Policy Opportunities

- **Greater consultation, collaboration, co-design between the education sector, government and industry is needed** to ensure students are receiving the necessary training and skills to enter a rapidly changing workforce. This may lead to innovative methods of delivery, including work integrated learning, or the inclusion of microcredentials which can be developed into further qualifications. This collaboration could also help to develop job-ready graduates.
- This will also be important in reskilling and upskilling workers throughout their careers as trends around the dual industrial revolutions of new technological advancements and sustainability change the ways we work. **Investment and collaboration by industry with the education sector will become increasingly valuable to support retention of skilled workers.**
- Education will also play a significant role in improving equitable outcomes and addressing community needs. **The sector must take advantage of the opportunity to support the regions, and diverse demographics of students who will go on to improve their communities and the workforce.** Education institutions should work to better understand what these underrepresented cohorts – including those with disabilities and mental health issues – need in order to achieve success.
- **The education sector should be supported with better policy settings to ensure they maintain a sustainable research model.** This includes addressing the dependence on international students for funding and income. Ensuring a sustainable funding model is critical to continuing to invest in high-quality research and innovation.

**Audience Comments on Ideas Discussed**



# Comments from Panel



## Professor Helen Bartlett

- The University of the Sunshine Coast is the youngest and one of the fastest growing public universities in Australia, with campuses located from North Brisbane at Petrie, Moreton Bay and up to the Fraser Coast. 90% of our students are employed within three months of graduating and around seven in ten of our students will go on to live and work in the regions. This provides a strong regional perspective on the education sector.
- The challenges that we are currently experiencing relate to the changing world that we are in – with shifting expectations from students, businesses and industry. This, in addition to a very challenging policy and funding environment and increasing costs, requires an agile response from the education sector.
- The sector is currently undergoing a review which is being conducted by the Commonwealth Government and will be completed by the end of the year. This Accord process is a once-in-a-generation opportunity to set the direction for higher education for the coming decades.
- Many other opportunities are emerging through this process – so it is critical for the sector to help shape the future of the sector. This can be achieved by engaging and interfacing with business and industry to unlock further employment and training opportunities.
- 50% of Queensland's population lives outside of the Brisbane statistical area but is disadvantaged through low education participation rates – which are sometimes half that of the greater Brisbane area. It is critical to provide education and training opportunities to these communities.



## Professor Carolyn Evans

- Griffith University has campuses running from Brisbane through Logan and down to the Gold Coast. We are seeing extraordinary demand for a highly skilled, trained and educated workforce, and we are facing a major challenge in meeting this demand across multiple industries.
- Businesses, universities and TAFE have done things the same way for a long time, but there is a growing impetus to work more collaboratively to create opportunities for students and employers. This may include new ways of delivering degrees, apprenticeships and integrated work and study options to people who are already in the workforce.
- When employment levels are high, people tend not to go to university, so universities must think of new ways of keeping domestic students in the sector. The education sector needs the help of employers to find and train the highly skilled workforce they require. There is an opportunity for existing staff, educational institutions and employers to work together to ensure staff are both fit for the workforce and also retained. Industry should be encouraged to engage in this given the high demand for highly skilled workers and high costs to employ and retain staff.
- A recent LinkedIn study found that 60% of new employees are looking for a new job opportunities outside their employer within three years of starting a job. This drops to 40% for the employers who are highly focused on internal mobility and professional development. This shows the higher potential return of investment in retention and education opportunities, compared to returns from spending on hiring.

# Comments from Panel

- An example of investment in current workforce rather than hiring is in Griffith's recent work with the Commonwealth Bank of Australia to upskill 3,000 staff on financial crime detection and investigation. This has brought together a multidisciplinary team from Griffith to develop a particular specialisation for CBA which strongly positions these employees and the bank as an employer. This reflects strong investment in its own capabilities which will likely result positively on retention in this area, in addition to providing a competitive advantage compared to other banks.
- Finally, we need to stop wasting human talent and maximise participation from the working age population. Less than 50% of disabled people of working age are employed. While educational institutions have improved the opportunity for people with disabilities, we need to do better to support these people in gaining employment. We should also work on having more women in the STEM areas, ensure opportunities for our migrant and our refugee population, and for international students with post-study work rights. Many of these people are often very talented and have strong global networks, and yet these demographics are underrepresented in employers' talent pools.
- We are now at a critical turning point and have an opportunity to work more closely together to achieve better outcomes for our businesses, for our educational institutions and most importantly for Queensland and for Australia.



## Professor Geraldine Mackenzie

- The University of Southern Queensland has campuses at Toowoomba, Ipswich and Springfield. We are at a critical point in our history and have an opportunity through the Accord process to address the fundamental problems that we are currently facing in funding higher education.
- The National Skills Commission have recently outlined a five-year projection showing that 9 in 10 new jobs are projected to require post-school qualifications. We are currently not meeting this demand.
- Taking a regional perspective, we have long-term underrepresentation in higher education. The participation rate is even lower when adding in other factors such as those students with a disability.
- Remote students have less than half the participation rate of other students, and regional students have 70-80% of the participation rate of other students.. Considering the current demand for further education in the workforce, this will start reflecting as a massive problem through underemployment. This gap will impact regional communities as well as Australia as a whole.
- We know that 70% of students who complete their studies in regional areas stay in those regional communities. We need to boost education outcomes for regional communities and address the regional skills shortages we are currently facing, preventing brain drain from the regions into the cities.
- The biggest challenge we are currently facing to address these issues is building relationships between universities, government and industry, and supporting greater collaboration required to address the above problems. We need to be able to move much more quickly to meet the needs of industry.. While this has been possible to some degree before, the current Accord process must better support the sector to do this.

# Comments from Panel



## Professor Margaret Sheil AO

- QUT has two major campuses at Gardens Point and Kelvin Grove, and seven distributed sites around Queensland as far as Mackay. QUT strongly engages with business, both in research and in teaching, which has historically been a strength of the university. This is continued through the design of programs in integrated learning and engagement with industry professionals in our courses.
- We must do better to leverage the existing skills and talent in an underemployed international graduate workforce or from those who cannot find the right role. So often, these people are highly educated and have immigrated from overseas either for work or education and find themselves driving Ubers. We must try harder to create opportunities for these people and in doing so, we will address labour shortages and create more diversity in the workforce.
- We can also be more collaborative with industry by aligning degrees or education programs with professional accreditation, as these are not moving as quickly as we need to continue meeting demand for highly skilled professionals. For example, professions accredit programs based on headcount rather than the load that students are undertaking. We know that given the current high cost of living, students are taking on less than full-time loads, which is resulting in vacancies in areas that are experiencing workforce shortages. This must be addressed going forward.



## Professor Deborah Terry AO

- The University of Queensland is not alone in addressing the significant challenges the sector is currently facing. Considering the Queensland Government's Jobs Plan, which indicates a need for 300,000 skilled workers in the next few years, we are facing a significant skills gap, and must better attract talent and address the regional maldistribution of the workforce.
- While this is a local issue, looking globally shows widespread shifts and a rapidly changing nature of work – which will continue to place pressure on the workforce. For example, a recent Goldman Sachs report found that generative AI would impact 300 million jobs, many of which are white collar. The World Economic Forum has also recently explored the future of work and found that 23% of jobs will change by 2027, 44% of skills will be disrupted, and 60% of workers will require retraining or upskilling by 2027.
- This is driven by two rapid changes – advancements in technology and sustainability. These may lead to an overall loss of existing jobs, but at the same time, there will be a net increase in jobs as a consequence of two industrial revolutions around these rapid changes.
- We must work harder to create opportunities for those who do not currently have access to education, across higher and tertiary education and the VET sector, at the levels we see in metropolitan areas. The Accord presents an opportunity to achieve this.
- We must also work in partnership with government and industry to co-design what we need for the future, training for new roles and in new areas such as in sustainability and health. This must not only be for entry levels; we must empower workers at all stages of their lives through upskilling and reskilling to ensure people and communities are not left behind and can remain productive and competitive.

# Comments from Panel



## Ana Rodger

- TAFE Queensland has 130,000 students and is celebrating 140 years of educating and working seamlessly with industry. A great example of this collaboration is the Mitsubishi BHP Alliance “Future Skills Partnership” where TAFE Queensland has developed and is delivering autonomous technology solutions.
- This year, there have been 34,000 fee-free places for TAFE Queensland, which has helped to change the narrative and perception of TAFE. This was achieved because of supportive government policy which is significantly shifting the sector to reflect the value that VET plays in the national economy. The fee-free places are part of an interim one year agreement which will be followed by a five-year National Skills Agreement to support training places related to significant skills gaps across Australia.
- Reskilling and upskilling represent incredible opportunities for the sector as the nature of work changes. For example, TAFE has worked with the hybrid and electric vehicle industry to provide training for technicians and avoid having this talent drop out of the system.
- A significant challenge is providing training while people are in the workforce, and unable to cease employment to undergo upskilling. This was somewhat addressed through Covid, as methods of delivery changed and the sector introduced virtual delivery, and both virtual and augmented reality, enabling more efficient delivery of training. This challenge must urgently be addressed. If students are unable to undertake the required upskilling for their jobs, they will not be productive enough in the workforce and this will adversely impact industry.
- Given the cost and pace of technological development and resources required to provide this training, it is critical that industry works with training providers in partnership to ensure that training can be provided at an affordable cost.

# Comments from Panel

**Audience Question: The upcoming University Accord comes with a high degree of expectation. What would you like to see as the key priorities coming out of this process?**



**Ana Rodger**

- We must prioritise the access across a Vocational Education and Training system which is currently very difficult to navigate. This is important to provide better outcomes to students and employees and provide flexibility in training so that people can be aware of and take advantage of opportunities available to them.



**Professor Deborah Terry AO**

- The Accord process is very important to all institutions and we hope it will result in a better, more integrated and holistic tertiary system.
- A key priority for UQ is developing a sustainable research and innovation system, future industries, and facilitating the transition to net zero. This will help to unlock health breakthroughs and advanced manufacturing, which are greatly dependent on research and innovation. While we have a very strong research system, it is highly dependent on international student revenue to function.
- Across the last 15 years, industry funding of research and innovation in Australia has decreased, alongside government funding as a proportion of GDP. However, university funding has increased and as a consequence, the education sector maintains a very strong international profile. This has created a dependency on international students to help fund Australian research and innovation.
- Addressing this dependency is critical to ensuring economic and social prosperity into the future.



**Professor Margaret Sheil AO**

- In line with the above, our sovereign research capability is highly dependent on international students. Further, we are not doing enough to serve this group of students as well as we should be. This is because of confused policy settings and incentives which impact universities' income and funding flows.
- We need clearer arrangements and policy settings that are not reliant on price signals and income. This includes addressing measures which disadvantage students as part of job ready graduate program.
- Finally, we must better understand the different costs of delivering education in the regions to different student cohorts and in different disciplines in order to support diversity across our institutions.



# Comments from Panel



## Professor Geraldine Mackenzie

- The Accord outcomes must provide true fairness and equity for all students. Too often, regional communities have no opportunity to access higher education. We need a system that supports students who are underrepresented, which includes those with a disability and our First Nations students.
- The current funding system actively discriminates against students who are studying in areas like humanities, arts and social sciences, who are facing massive HECS debts. This is creating huge disincentive to engage in higher education.
- We are now seeing an 8% drop in mature age students coming to university across the sector, which will flow through to problems in employment and an undertrained workforce.
- The current funding system must be overhauled through the Accord process to address these issues, and ensure universities receive better funding for infrastructure so they can more sustainably provide education without needing loans or use of cash reserves, which is our only alternative at the moment. Ensuring a proper, sustainable funding system for higher education will benefit everybody, and more broadly, the economy in Queensland and in Australia.



## Professor Carolyn Evans

- The education sector is currently experiencing a lack of funding and structural sustainability. The higher education system is highly dependent on international students, and recently, the Federal Government has placed more financial burden onto domestic students. State Governments have provided little support to universities, and now these institutions are paying more in payroll tax than the supports they receive from States.
- We need to move away from the idea that higher education is a ladder to climb and start thinking about it as a network of opportunities that people take up across the course of their life – which may be done in a different order than what is traditionally expected.
- The Government must do more to further incentivise the collaboration required between universities and industry given the urgent need for these programs to meet the demand we are currently seeing.
- Incentives would support multifactor partnerships in both research, as well as in teaching and learning side. This would provide better value-for-money for the tax money being spent on research and development through tax incentives by the Government. These partnerships would be a more productive use of this funding, creating new intellectual properties, industries, and jobs, in a cost-effective way.



## Professor Helen Bartlett

- Higher education must not leave the regions behind. We must address the inequity between metro and regional Queensland and Australia, which have been highlighted several times through the Bradley Review and Napthine Review. The regions are essential to Queensland's economic prosperity, so we must leverage this opportunity and set strong, new targets to ensure equitable access to education at all levels across the state.
- We must also better understand what students in the regions need to be successful. Now is the time to support students with disabilities and mental health issues by understanding what these and prospective students need in order to properly ensure their success. This may also require re-imagining proper measures of success rather than blunt instruments to better reflect these student's success journeys now and into the future.

# Audience Questions

**Audience Question: What courageous things are you implementing within your institutions over the next 12-18 months to solve the problems that have been discussed?**



**Professor Deborah Terry AO**

- In partnership with the University of Southern Queensland and Central Queensland University, UQ is working to address the medical shortages in the regions by committing to end-to-end MD medical programs that can be delivered regionally - in the Darling Downs or in Central Queensland. This has involved collaborative delivery with multiple Hospital and Health Services and our partner universities.
- As we know, there is evidence that education and training completed in the regions results in these students remaining in the regions after completion – which in this example means successfully addressing the medical shortages in these communities.
- This exemplifies initiatives which will need to be supported by all institutions in the future to help solve these problems.



**Professor Geraldine Mackenzie**

- This is similar to another program being delivered collaboratively between institutions in Charleville which is providing end-to-end training for nurses.
- Roughly 70% of students at the University of Southern Queensland are online, mature age and part-time – and this trend will continue. This reflects a shift in thinking about the way students approach education and will need to be supported by institutions going forward.



**Professor Helen Bartlett**

- Work integrated learning is another example of a development being delivered to better provide value for students. Co-creating an integrated curriculum with industry will be key to producing job-ready graduates.
- This may involve embedding industry certifications into education programs. The University already delivers that for IT and business programs and will continue to provide students with credentials throughout their studies. This also leads to job opportunities for part-time work throughout students' studies.
- The trend of working whilst studying will likely continue as students need income as they undertake courses. Institutions recognise that they cannot hold students back from this, so rather than students holding various part-time jobs, institutions should partner with industry to provide opportunities for work placements. For example, this can be done in aged care and disability work with providers taking on students for work placements, paying them, and then ultimately benefiting from a ready-made workforce when students graduate.

# Audience Questions



## Professor Margaret Sheil

- Previous changes of the Job-Ready Graduates package introduced flexibility around the allocation of places across pre-tertiary, undergraduate and graduate programs.
- QUT has opened its university college, which was previously for international students only, to domestic students. They can undertake a diploma, for those who may not have finished high school or wanting to change profession. It provides a base qualification or a qualification that can be used to enter in other places.
- There is a strong uptake of vertical double degrees as it accelerates students through to employment with the kind of skills that they need across a range of discipline areas.



## Ana Rodger

- While some learning materials may not necessarily be accredited, they are stackable. These can form parts of microcredentials and then become part of a qualification. This, in addition to a range of short programs introduced during Covid, are providing modular forms of delivery which are better encouraging people who otherwise may not have sought training or further education.
- This is important for those who may be returning to the workforce who may need assistance in reacquiring or improving skills or finding confidence to re-enter employment.



## Professor Carolyn Evans

- We are training mature workers as teachers, offering them accelerated programs and government supported scholarships. It is critical to build our school teaching workforce if we are to solve the skills and education problems.
- Integration of undergraduate and graduate programs – known as vertical double degrees – are also another innovative delivery combination which is seeing very strong uptake. These are ultimately accelerating students through to employment and ensuring the right skills across a range of discipline areas.



## Professor Helen Bartlett

- The University of the Sunshine Coast is delivering similar initiatives to those already discussed, such as an end-to-end regional medical program.
- There is also a focus on the teaching workforce – with a pilot program recently being run to attract and support mature age people into the teaching workforce through an accelerated degree and a grant to help them enter the workforce earlier.
- The entire education sector is dependent on a strong school system and great teachers, so this program is a vital investment in supporting students and the entire sector.

# Audience Questions

**Audience Question: What can the business community do to support universities and how can industry advocate for investment in education infrastructure, support and integration?**



**Professor Helen Bartlett**

- The sector needs industry collaboration and consultation around the products and offerings it can provide industry. The business community can offer expertise and input into industry advisory committees to help shape programs on the education and training sector.
- One-off sessions, student engagement and mentoring alongside other networking opportunities are also proven methods to promote industry to students.



**Professor Geraldine Mackenzie**

- Universities are often engaged by industry groups who are desperate for talent, due to a lack of enough new graduates to cover demand.
- Industry must work collaboratively with education and training institutions to encourage students and outline industry opportunities, scholarships and work experiences they can benefit from.
- Traditional methods of advertising these opportunities are now proving less effective, and in the tight labour market, with limited opportunity to hire international talent, industry must collaborate with universities who can do much to help with innovative ways of attracting students.



**Ana Rodger**

- The Queensland Government is running a forum called 'Reimagining Queensland's Workforce' as part of the Queensland Workforce Strategy 2022-32. This strategy places a strong emphasis on inviting businesses, organisations and industry to these forums to engage, provide input and share their views on a range of important topics, including attraction and retention of employees. This is an important and valuable opportunity to provide input to the challenges which have been discussed today, and work collaboratively to address them.



**Professor Deborah Terry AO**

- Consultation, collaboration and co-design is needed to address the issues being faced by the education sector, industry and government. If we do this, we will be able to develop the programs and opportunities required to address the problems we've discussed.



**Professor Margaret Sheil AO**

- Advocacy is an important element in supporting a strong education sector, the economy and strengthening businesses and industry. In addition to the collaborative work already discussed, continued advocacy to encourage the State and Federal Government to support the sector in addressing these challenges is also needed.

# Audience Questions

**Audience Question: While there is a strong focus on skills development, what is the role of higher education in addressing productivity - which is critical to addressing the long-term inflationary pressure being seen in the economy today?**



## Professor Carolyn Evans

- Skills are only a subset of education, and in the current pace of our fast-moving economy, we are not just seeking to train skills but rather support people throughout the rest of their careers. We must therefore educate people, not just provide training on specific skills, but to think critically and be able to understand the complexities of the world. This will ensure we don't become fixated on a particular short-term skills gap, but educate a workforce, citizenry and a community able to participate in the democracy of the future.
- We must also do better to strategically incentivise both universities and industry to work together on real world problems. This requires commercial consideration, allowing Australian-made intellectual property to create Australian jobs.
- Productivity is not only important when measured by the generation of IP or production in the economy. We must also consider how we can effectively solve many societal problems, such as those faced by our health workforce. For example, these problems will require innovative solutions and new, digital technologies which will require research, collaboration and engagement to deliver.
- Similarly, the roles of today may look different in the future as role descriptions change. An example of this may be shifting towards preventative health instead of just crisis response in the health industry. These developments could all lead to greater productivity and better use of our resources, but this must be done in collaboration between universities and industry.
- This innovation must be reflected through productivity measures, otherwise the measure would drive unsustainable growth of the economy. Reconsidering productivity would therefore ensure sustainable growth which properly considers these advancements.



## Professor Geraldine Mackenzie

- Queensland Universities work collaboratively together, plus with government and industry to solve these issues..
- Together, the universities are delivering game changing research. For example, the University of Queensland has recently announced its food and beverage accelerator with UniSQ as a key partners, while UniSQ is building Australia's sovereign launch capability in our Space Trailblazer project, alongside two interstate universities. These collaborations are delivering research outcomes on a scale never seen before, so the future is bright, and will hold many exciting opportunities for collaboration across universities, industry and government.

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