



RETHINKING AND REVITALISING TERTIARY EDUCATION IN AUSTRALIA

| Peter Dawkins | Peter Hurley | Peter Noonan |



About the authors

Professor Peter Dawkins AO

Professor Dawkins (AO) is the Vice-Chancellor and President of Victoria University, as well as a Professor of Economics and Professorial Fellow of the Mitchell Institute. He has had a distinguished career that includes high level leadership roles in the Victorian Government and 36 years in the university sector. He was Deputy Secretary of the Victorian Department of Treasury and Finance and Secretary of the Victorian Department of Education and Early Childhood Development between 2005 and 2010. In 1996 he was appointed to the University of Melbourne where he was the Ronald Henderson Professor, and Director of the Melbourne Institute of Applied Economic and Social Research until 2005. In 2001 he was elected as a Fellow of the Academy of Social Sciences in Australia for his research on Australian economic and social policy issues and has subsequently been elected a National Fellow of the Institute of Public Administration in Australia, and an Honorary Fellow of the Australian Council for Educational Leaders. He was inducted as an Officer of the Order of Australia in 2017.

Professor Peter Noonan

Professor Peter Noonan, Mitchell Institute Professorial Fellow, has played a major role in shaping tertiary education policy in Australia through 25 years' experience working as a policy adviser, senior executive and consultant to federal and state governments, universities and public and private VET providers. He was a member of the Expert Panel for the Review of Australian Higher Education (Bradley Review) in 2008, and in 2010 undertook a Review of Post-Secondary Education in Queensland for the State Government. He also served on the government's 2016-17 expert panel on higher education reform and is currently the Chair of the Council of Australian Governments (COAG) Review of the Australian Qualifications Framework (AQF). Peter's work as a Mitchell Institute Fellow is focused on the future of tertiary education in Australia including its interface with secondary education and the labour market. He is a regular speaker at major conferences and a frequent media commentator on issues related to tertiary education.

Peter Hurley

Peter Hurley is a Policy Fellow (Education) at the Mitchell Institute. He has expertise in post-secondary education policy and international education systems and worked in various research and management roles in the vocational and higher education sectors. He has a particular interest in advocating for equitable policy solutions so that the benefits of education can be shared by all.

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About the Mitchell Institute

The Mitchell Institute for Education and Health Policy's mission is to strengthen the relationship between evidence and policy, and to improve equity of opportunity and success in both health and education. Our focus is on improving our education and health systems so more Australians can engage with and benefit from these services, supporting a healthier, fairer and more productive society. We are informed, independent and influential, with a proven ability to identify current and emerging problems in education and health, and use evidence to develop achievable solutions.

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Contents

About the authors.....	i
Acknowledgements.....	i
About the Mitchell Institute.....	ii
Executive Summary.....	1
Introduction.....	5
The Need for High-quality, Universal and Affordable Tertiary Education.....	7
The Challenge.....	13
Rethinking tertiary education to meet student and industry needs.....	13
Revitalising tertiary education for economically sustainable participation.....	15
Towards a Cost-Effective Solution.....	17
Rethinking tertiary education.....	17
Revitalising tertiary education.....	22
A Commonwealth and State Commitment to Rethink and Revitalise Tertiary Education.....	26
The Return to Public and Private Investment in Tertiary Education.....	28
Conclusion: The Need to Rethink and Revitalise Tertiary Education.....	30
References.....	32

Executive Summary

The re-elected federal Coalition Government, and their state and territory counterparts, have some important decisions to make about the future of tertiary education.

Tertiary education includes vocational education and training (VET), which comes under the Minister for Employment, Skills and Family Business at a federal level, (who also has an Assistant Minister for VET and Apprenticeships), and various state-level Ministers; and higher education under the federal Minister for Education who also has various state counterparts.

To assist governments around Australia in making the difficult decisions ahead, they will have the benefit of a range of reviews and reports on: the Australian Qualifications Framework (AQF); the VET sector; the reallocation of Commonwealth Supported Places (CSP) for enabling, sub-bachelor and postgraduate courses; the Higher Education Provider Category Standards; and Performance-Based Funding for the Commonwealth Grant Scheme.

This paper argues that it will be imperative for both federal Ministers to work together, and with their state government counterparts, to take a holistic approach to these reviews in the face of huge challenges facing the Australian tertiary education sector.

The need for high quality universal and affordable tertiary education

We are in a world in which the vast majority of job growth will be in areas aligned to the skills, knowledge and capabilities produced by the tertiary education sector (AlphaBeta, 2018; Department of Jobs and Small Business, 2018). This necessitates universal and affordable access to quality tertiary education. It also means that students must be able to mix and match a range of opportunities from both VET and higher education to obtain the right blend of skills, capabilities and knowledge.

The challenge

Since the demand-driven system of higher education was introduced in 2012, while participation in higher education has grown:

- (i) the dichotomy between higher education and VET, and lack of coherence across the tertiary sector has, if anything, become starker; and
- (ii) the overall participation in tertiary education has been in decline, because of a decline in participation in VET.

The reform agenda, therefore, that the federal Ministers need to pursue in partnership with their state counterparts is:

- **Rethinking tertiary education**, which means taking an innovative approach to ensuring that tertiary education responds to the increasing diversity of its students, and to the changing demands of the Australian labour market. Previous models of tertiary education are no longer suited to this task. Australia needs a more comprehensive, coherent and interconnected tertiary education sector that makes better use of both VET and higher education. This type of tertiary education will respond to challenges facing our students, rather than one based on outdated divisions between academic and vocational learning.
- **Revitalising tertiary education**, which means taking a strategic view of tertiary education participation trends, and ensuring that the sector achieves an economically sustainable level of participation that meets future workforce needs. This means reversing the downward trend in overall tertiary participation rates, supporting more students to make an investment in their education, and ending the fragmentation that sees different arrangements between higher education and VET.

Towards a cost-effective solution

This challenge is made greater by the fact that the federal government does not have in its current forward estimates the kind of growth in funding for tertiary education that would appear to be necessary to achieve these ambitions. Overall, state expenditure on VET has declined in recent years. Although some states have made VET a policy priority, there is no overall national commitment across the states and the Commonwealth to redress this funding decline.

While it is hard to imagine that governments will not need to find substantial extra funding to achieve these aims, realistically it does also mean that all stakeholders in the tertiary education sector need to work together to create a cost-effective, fit-for-purpose suite of tertiary education options for all students.

Rethinking tertiary education

Key policy ideas that can be pursued alongside any changes in financial arrangements include:

1. following from the COAG review of the AQF, making a shared commitment to act on its recommendations in a way that will help create a more coherent and interconnected tertiary sector, as part of a Commonwealth–State commitment to rethink and revitalise tertiary education
2. reforming the tertiary curriculum, especially in VET, to broaden the skills and capabilities of its students to better prepare them to adapt to a changing world, and to articulate into higher programs with more ease and more credit
3. reforming tertiary entry by promoting a range of pathways available to students to achieve their aspirations and take advantage of their individual aptitudes and interests, and diversifying entry requirements to recognise the diversity of knowledge, skills and capabilities students bring to tertiary education, besides their ATAR score
4. extending work-based learning and industry partnerships in VET and higher education, to improve student transitions from learning to employment

5. promoting local solutions by encouraging providers who collaborate with industry to provide locally relevant pathways that equip students to succeed in their own communities.

Revitalising tertiary education

The above five areas of reform would provide an excellent platform from which a revitalisation of tertiary education and growth in participation would become possible. In order to support such growth, it will be necessary for federal and state governments to give very serious thought to the need to increasing investment in tertiary education. Recognising that the fiscal outlook may not be supportive of a big expansion in investment in the immediate future, there are strategies that could help to contain the costs of raising tertiary participation, including:

1. a more comprehensive system of income contingent loans across VET and higher education that remove the up-front fees that many VET students currently face
2. VET provision growing faster than higher education provision, which would lower the average cost of supporting an increase in tertiary education provision
3. an increased proportion of the education received by higher education graduates being through VET pathways, made possible by qualifications and curriculum reform, and improved credit and articulation arrangements
4. an increase in “micro learning” (that provides credit towards AQF qualifications) to ensure cost-effective upgrading of skills in the workforce
5. an increased investment by industry in supporting the education and training of its employees, that should be more attractive to employers because of the enhancements in the offer made possible by the above reforms
6. as part of a Commonwealth –State commitment through the Council of Australian Governments (COAG) to rethink and revitalise tertiary education, following the review of the AQF with a review of federal and state government funding of VET and higher education, as well as student fees and industry contributions, to find a cost-effective way of achieving the higher investment required to increase tertiary participation.

A Commonwealth–State commitment to rethink and revitalise tertiary education

Many of the above proposed reforms will require a joint Commonwealth–State commitment to rethink and revitalise tertiary education. Further, we suggest that a Commonwealth–State commitment to rethink and revitalise tertiary education should explicitly address funding arrangements, and remove incentives to shift costs between the Commonwealth and states. In the COAG review of state and federal funding arrangements proposed above, specific incentives and commitments worthy of serious consideration include:

- a commitment to co-finance growth in VET enrolments
- a shared commitment to the revitalisation of TAFE through recognition of and funding for

TAFE's role as a public provider

- co-financing model (as proposed in (Noonan, 2016a) for VET — an agreed price per course agreed public and private contributions and an income contingent loan, at the national level — allowing for State and Territory governments to provide additional support to meet local needs where required
- the Commonwealth assuming responsibility for funding all AQF level 5 and 6 courses (which are offered in both VET and higher education) or courses where credit-based learning pathways are negotiated between VET and higher education providers
- expanding eligibility criteria for government supported VET places and confirming that learners can co-enrol in both higher education and VET without financial penalties and disincentives (though there may need to be some overall global constraints on the extent to which an individual can be supported, perhaps in the form of lifelong learning account).

Implications for higher education funding

Funding arrangements for higher education are, of course, the responsibility of the Commonwealth. But it will be important for them to take into account the interaction of Commonwealth–State arrangements for VET on their higher education policies.

This will include an understanding of whether the projected growth in funding for Commonwealth Supported Places (CSP) in higher education will be sufficient to raise participation rates (especially in areas of rapid population growth). This should be considered alongside the reforms to VET funding proposed above. This consideration may result in possible adjustments to the Commonwealth's forward estimates for CSP funding.

This process will need to happen with a significant degree of urgency. Otherwise, the current decline in the tertiary education participation rate can be expected to continue well into the 2020s. This would represent a significant threat to the future prosperity of Australian industry, the career chances of many thousands of school leavers, and the ongoing employability of large numbers of people in the workforce.

The return to public and private investment in tertiary education

We would argue that the range of reforms proposed in this paper should have the effect of increasing public and private returns to education and training, encouraging greater participation in tertiary education, enhancing the workforce, and promoting economic growth, while reducing the social costs of unemployment and underemployment. This in turn would generate more tax revenue for government and reduce its expenditure in dealing with unemployment and underemployment. This would justify an increased investment in tertiary education and training by governments, without imposing a fiscal burden.

Introduction

Australia's tertiary education sector is vital to the strength of the economy and society.

The tertiary education sector includes 40 Australian universities, and a diverse array of vocational education and training (VET) providers. Each part of the tertiary education system has a role to play in meeting Australia's skills needs. More than ever, the changing world of work and learning makes tertiary education a vital asset for an increasing number of Australians, as they engage in lifelong learning throughout their careers.

However, Australia has not yet created a tertiary education sector in which different levels of government, and different parts of the sector, work together in a way that meets these demands. The re-elected Coalition Government — working with state and territory governments and diverse stakeholders — has some important decisions to make about the future of tertiary education, to ensure all parts of the sector deliver high-quality, fit-for-purpose learning.

The Coalition Government will have ample material to draw on to help them in this task. During the Coalition Government's last term in office, it undertook a number of consultative reviews concerning tertiary education, some of which are still to be completed. These reviews include:

- Australian Qualifications Framework Review
- Consultation Paper on the reallocation of Commonwealth supported places for enabling sub-bachelor and postgraduate courses
- Consultation on Performance-Based Funding for the Commonwealth Grant Scheme
- Review of the Higher Education Provider Category Standards (PCS)
- Review of the Vocational Education and Training Sector.

With the Coalition Government re-elected, it now has the challenge of translating the findings from these reviews into action, and formulating its tertiary education policy. Cooperation with state government counterparts will be essential to developing a comprehensive, holistic approach to the many challenges facing the tertiary sector. There is great potential to improve cohesion in tertiary education policy and delivery, to improve efficiencies in the sector, and ensure the sector responds to the needs of the students and employers who depend upon it.

This paper canvasses current evidence about the state of Australian tertiary education, and identifies options for innovative policy reform, to achieve cost-effective transformation throughout the sector. It has grown out of work undertaken by the Mitchell Institute over the past five years. It also supports the second Mitchell Institute Policy Lecture delivered by Peter Dawkins on 28 May 2019, *Reconceptualising Tertiary Education: Five Years On*.

Five years ago, the first Mitchell Institute Policy Lecture called for a more comprehensive and coherent tertiary education sector in Australia:

*“We need to give full effect to moving from a tertiary sector which included a higher education system for the intellectual elite, and a vocational system focused on practical skills, to one that is more comprehensive and seamless for everyone.”
(Dawkins, 2014, p. 20).*

Dawkins discussed the need for the aims and measures of success for tertiary education to reflect the value-add that tertiary education providers deliver to an increasingly diverse student body. He also discussed optimal market design, and cautioned about the impact of fee deregulation on equity and access. Underpinning the lecture was a call for better connection between university and VET providers to create a seamless tertiary education sector that offered pathways to opportunity and success for all students.

Since then, little has changed to bring Australian tertiary education closer to this vision. In fact, fragmentation of the tertiary system has increased, in ways that widen inequalities in learning. In that time, five cohorts of Year 12 students have finished school, and struggled to navigate pathways through a complex system — especially if they are from disadvantaged backgrounds. Australian workers and their employers have spent another five years piecing together solutions to meet emerging skills needs, in a work environment characterised by continual change.

In this time, some institutions have taken action to address fragmentation in the tertiary sector. They have created innovative pathways through university and VET that deliver the skills graduates, workers, and employers need in their local communities. But these providers have succeeded in spite of — not because of — the system in which they operate. Policy-makers have not yet established the system settings to make this kind of innovation the norm.

New research has also emerged in this period. The Mitchell Institute has undertaken an extensive program of research and policy thinking to elaborate on this agenda (see for example Higgins & Chapman, 2015; Lamb & Huo, 2017; Noonan, 2016b; Noonan & Pilcher, 2017; Noonan & Pilcher, 2018; Pilcher & Torii, 2018). There have also been other contributions to this debate from a range of sources (see for example AlphaBeta, 2018; BCA, 2017; Go8, 2018; KPMG, 2018; Monash Commission, 2019). The evidence base for rethinking and revitalising tertiary education is growing.

Recently the Vice-Chancellors of Australia’s dual sector universities released a paper which proposed a range of reforms that would enable the higher education and VET systems to retain their distinctive roles and contributions, but also better connect them under a coherent national policy framework (Bartlett et al., 2019); of which Peter Dawkins (one of the authors of the current paper) was a co-author, in his role as Vice-Chancellor of Victoria University. This paper complements the Vice-Chancellors’ perspective, in the context of issues arising for the newly re-elected Coalition Government. It recognises the need for cost-effective solutions that are achievable within the current fiscal environment, while maintaining a long-term vision for investment in the tertiary education sector that recognises its economic and social worth.

The importance of tertiary education to Australia’s prosperity demands that all parties work together to advance towards this vision, by grasping the policy opportunities available to us now.

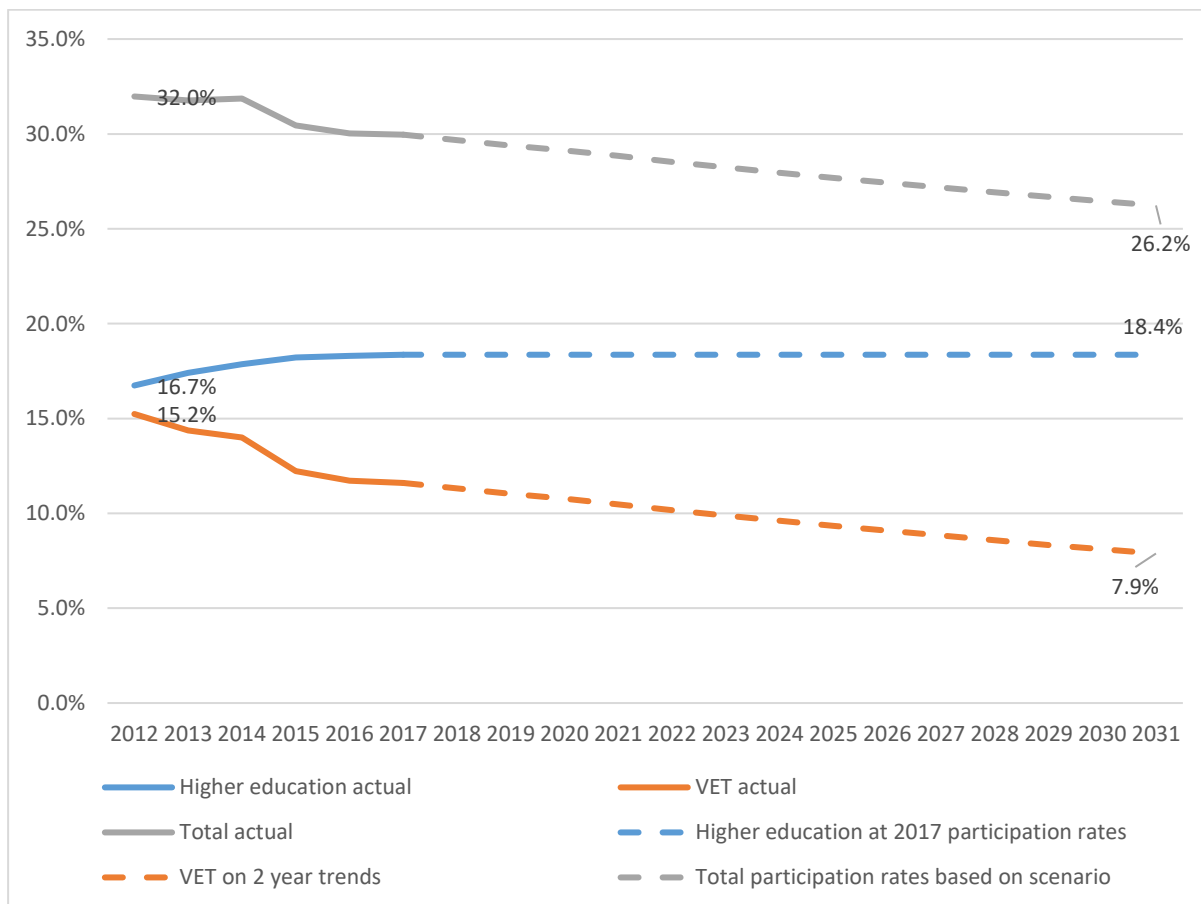
The Need for High-quality, Universal and Affordable Tertiary Education

The evidence shows that Australia’s future prosperity will rely on a strong tertiary education sector.

There is ample evidence that calls for a tertiary education sector that delivers a greater quantity, and a higher quality, of targeted education and training that meets the needs of industry and students (AlphaBeta, 2018; Productivity Commission, 2017). This evidence suggests that the opportunity to access a strong, fit-for-purpose tertiary education sector must be available to all Australians, to assure a strong future for the Australian economy and society.

Recent Mitchell Institute analysis shows that participation rates in tertiary education for 15–24-year-olds are declining. Using a scenario based on current government higher education policy, and two-year trends in VET, there is a risk that participation rates in tertiary education will decline almost six percentage points overall, or one-fifth, from their peak in 2012 (Figure 1).

Figure 1: Tertiary education participation rates, 15–24-year-olds, actual and scenario

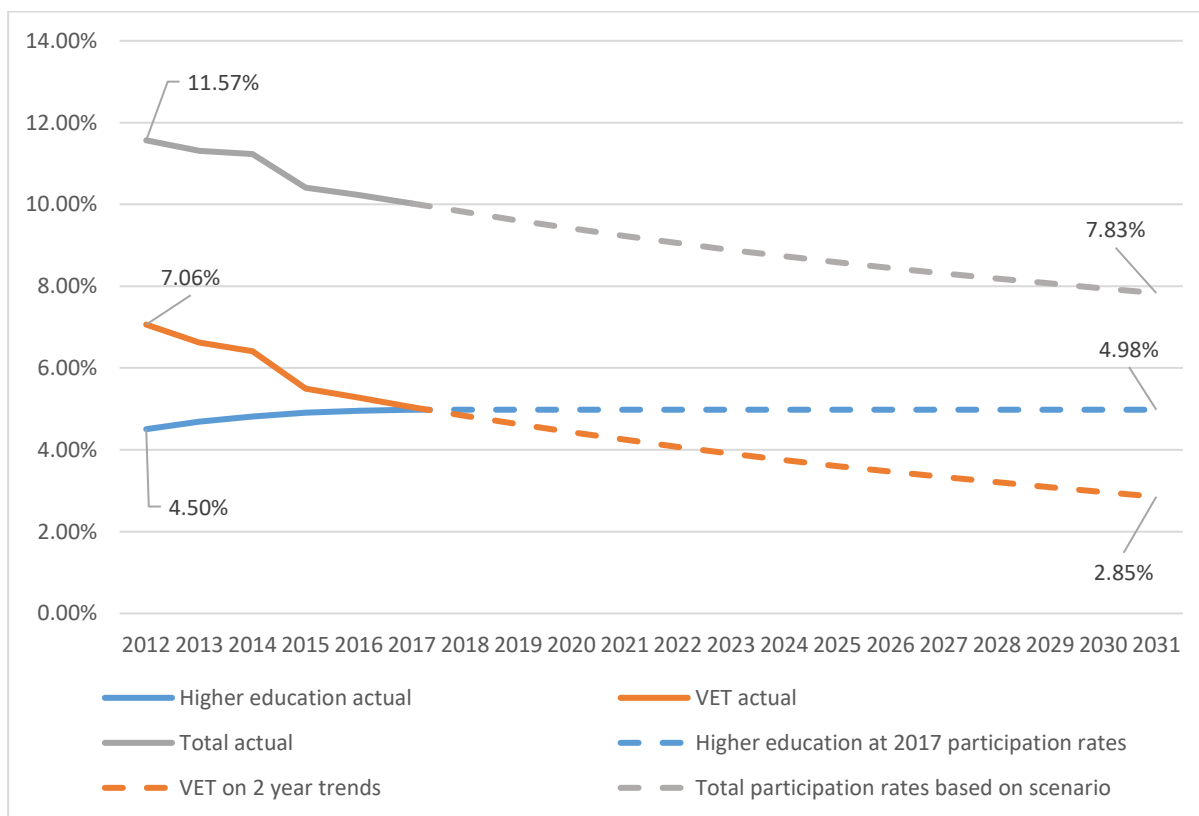


Source: Mitchell Institute analysis of ABS and NCVER data (custom request)

Figure 1 also illustrates that participation trends in the two parts of the tertiary education sector — VET and higher education — are markedly different. While participation in higher education is increasing, participation in VET has declined. Unless there is a reversal of this trend, the Coalition Government’s current policy of freezing university funding will result in a decline in overall tertiary education participation by young people. This suggest that current participation trends in tertiary education may leave Australia vulnerable to skills gaps.

A similar picture is emerging in participation rates across the working age population. Figure 2 shows the participation rates in tertiary education have been falling at a steeper rate across the working age population than for young people. This is because VET makes up a greater proportion of tertiary education delivery for the working age population than it does for the younger age group shown above. Because of their different impact on participation rate trends, it is worth examining each part of the tertiary education sector in greater detail.

Figure 2: Tertiary education participation rates, 15-64-year-olds, actual and scenario

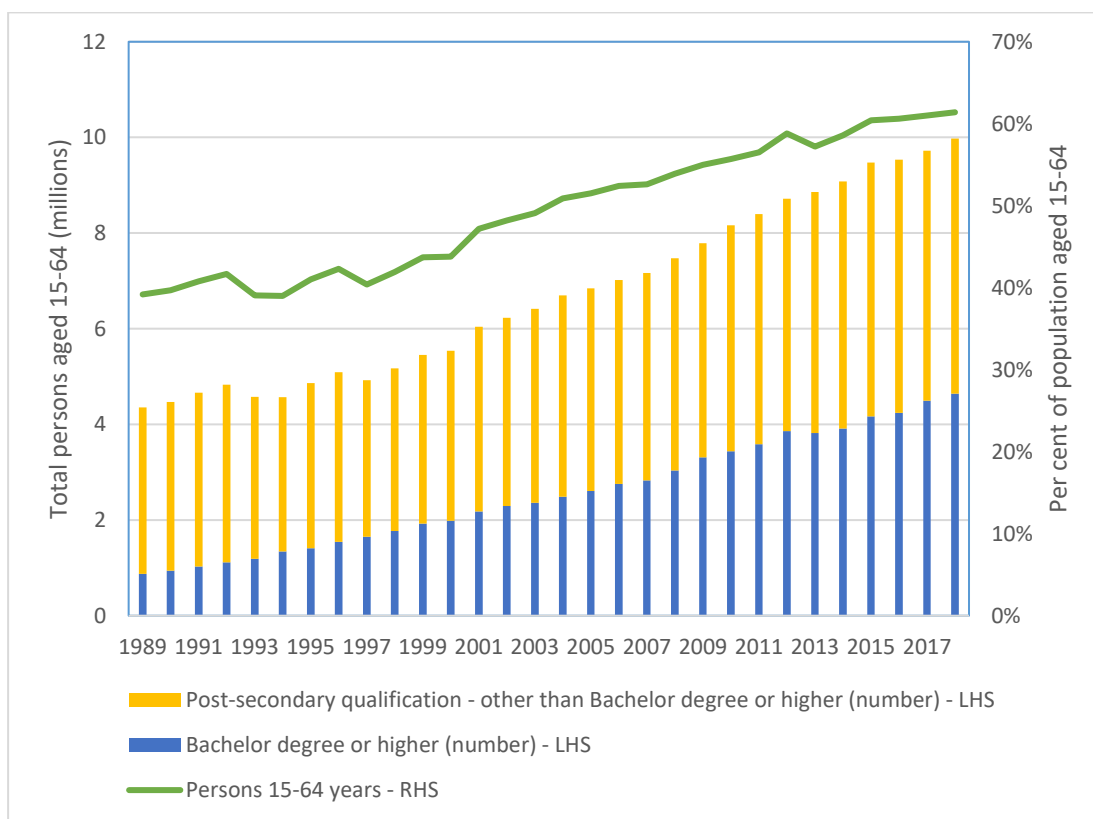


Source: Mitchell Institute analysis of ABS and NCVER data (custom request)

Higher education participation has increased

Most growth in tertiary education participation in Australia over the past thirty years has come from the higher education sector. Whereas 8% of the working age population in Australia held a Bachelor degree or higher in 1989, that figure is now almost 29% (ABS, 2018a) (Figure 3).

Figure 3: Post-school qualification attainment in Australia



Source: ABS (2018a)¹

The expansion of higher education has largely been a deliberate policy, as part of a move to extend the benefits of a university education to more people and, in particular, to those groups who have traditionally missed out. One key reform has been demand-driven funding in the higher education sector, which arose out of the Bradley Review (Bradley, Noonan, Nugent, & Scales, 2008).

The Bradley Review set two main targets concerning higher education attainment and participation for 2020. The first was a national target of least 40% of 25–34-year-olds having attained a qualification at bachelor degree or above. The second was that 20% of undergraduate enrolments in higher education should be students from low socio-economic backgrounds (Bradley et al., 2008).

On these two measures, Australia has largely been successful. In 2017, 45.1% of women and 33.7% of men aged 25 to 34 held a bachelor degree or higher, figures that have increased considerably since 2000 when the same qualification attainment rates were 24.5% of women and 19.8% of men (Pilcher & Torii, 2018).

In terms of lower socioeconomic groups, in 2017 nearly 18% of all undergraduate enrolments were from lower-socioeconomic backgrounds and the proportion of lower socioeconomic status

¹ Changes in collection method have resulted in decreases in educational attainment in some years.

students in higher education has been increasing steadily (Koshy, 2018).

However, since 2017 the funding of Commonwealth Supported Places for higher education has been capped, and the Coalition Government has foreshadowed only modest increases in these caps in the years ahead, to match population growth.

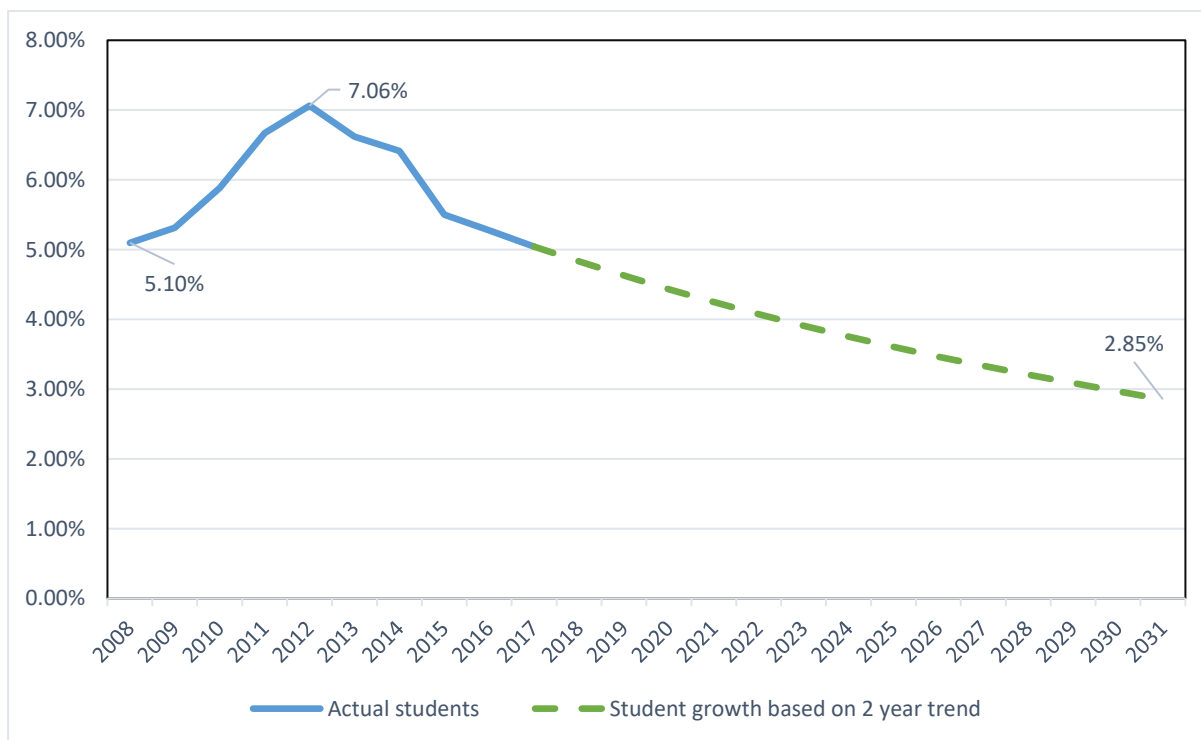
VET participation has declined

In contrast to the rapid growth in higher education participation, the VET sector has recently seen falling enrolments. After an increase which peaked at 2012, participation rates have been decreasing across the sector. From the peak of 7.06% of working age adults participating in the VET sector in 2012, these numbers have fallen to 5% in 2017 (Noonan & Pilcher, 2018).

According to a Mitchell Institute scenario based on two-year trends, VET participation rates of work-age population may fall to 2.85% in 2031 (Figure 4).

These figures need to be treated with some caution, as VET participation rates cover a range of different education experiences such as apprenticeships, traineeships, VET in Schools (VETiS), training delivered in the workplace, and traditional classroom delivery of certificate, diploma and advanced diploma courses. The overall rate may therefore obscure within-sector differences.

Figure 4: VET participation rates in Australia, actual and trend, 15–64-year-olds



Source: Mitchell Institute analysis of ABS and NCVER data (custom request)

Similar to higher education, trends in VET participation are attributable to the sector’s experience of policy reform during this time. The most likely cause of the rise in VET participation from 2008 to 2012 (Figure 4) were the reforms known as “contestability”, which involved both state and federal governments. On a state government level, this meant more

private providers could access public funds to deliver VET courses. On a federal government level, the VET FEE-HELP scheme introduced income contingent loans to diploma and advanced diploma level courses.

There has been research that questions the value and quality of this increased training delivery (Yu & Oliver, 2015). Therefore, in many ways, the decline in VET participation may actually reflect a return to a more feasible arrangement that has a greater emphasis on quality.

However, the response of state and federal governments to quality concerns in the VET sector began in 2012, and participation rates are still declining. Total state and federal investment in VET is also falling (Noonan, 2016b; Noonan & Pilcher, 2018). While the much stricter rules placed on VET providers do mean more consumer protection for students, they can have the effect of restricting access and discouraging overall VET activity.

This leaves open the question of how the VET sector can revitalise its contribution to the tertiary education sector overall, given the importance of quality VET to a cost-effective tertiary sector, which responds to the diversity of student and industry needs.

Changing industry needs require a strong, connected tertiary sector

One of the strongest arguments for the importance of the tertiary education sector arises from the projected future skills needs of the Australian labour market. The Department of Jobs and Small Business (2018) forecasts that 96% of the 1.1 million new jobs projected to be added to the Australian labour force by 2021 will require skills produced in the higher education and VET systems.

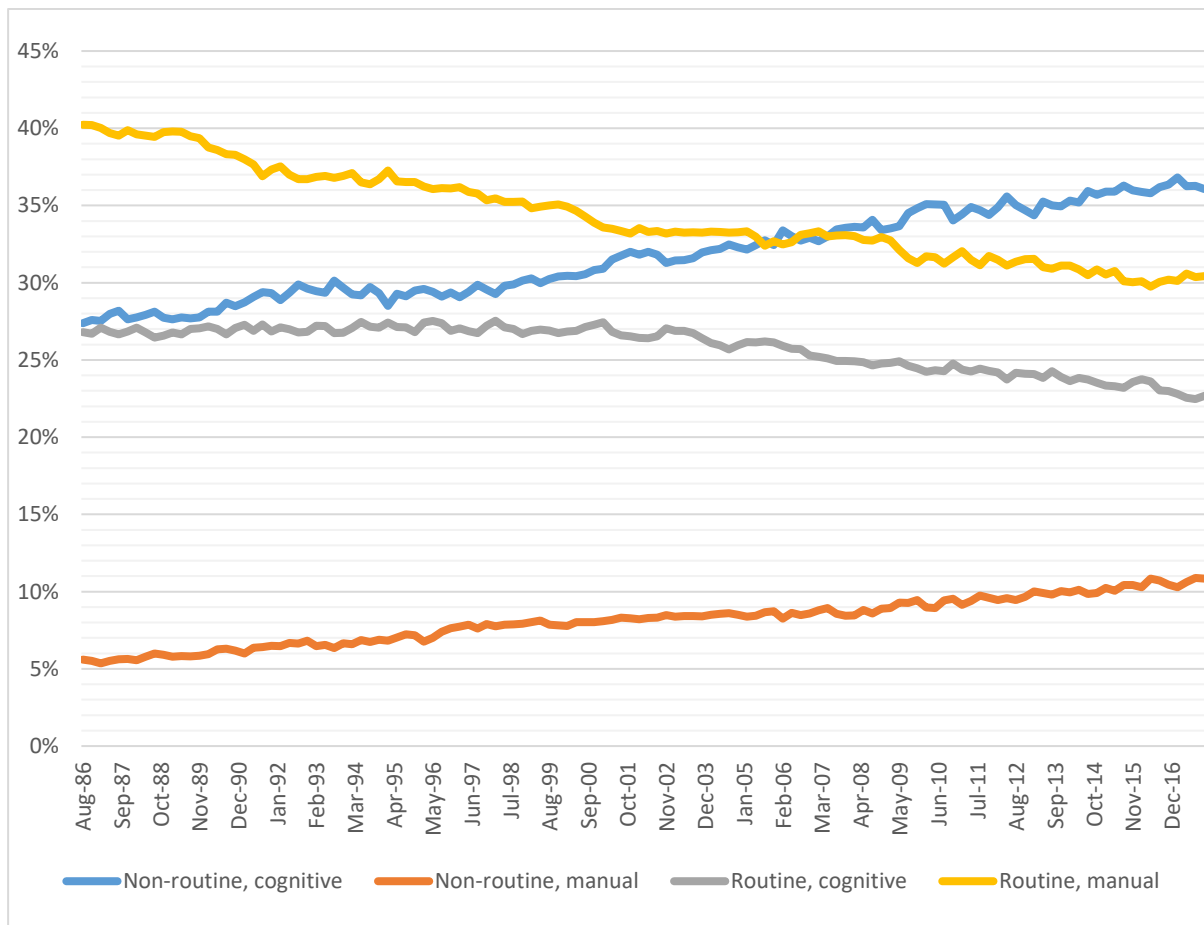
There has been substantial discussion about automation, artificial intelligence and the loss of certain jobs (FYA, 2015). However, changing industries and advances in technology have been a feature of labour markets over the past seventy years. The rate of automation and changes in jobs is arguably no higher today than in previous periods of significant change (Charlton, 2019). The Productivity Commission (2017, p. 10) has said that “it is likely that the dire predictions of rapid change suggested by some commentators are misplaced” and that the actual effects of automation will likely be less severe than some predict. The challenge of technological change is now being examined in more strategic and sophisticated ways, and is appearing more amenable to policy action.

What is unique to the current situation, though, are the types of industries affected by structural change. Historical job losses have been concentrated in areas such as agriculture and manufacturing. In the future, it seems more likely that service industries will be the most at risk (Charlton, 2019). This is a challenge for Australia’s young people, as 70% of young people enter the labour market in jobs that will be most affected by automation (CEDA, 2015; Charlton, 2019).

Meanwhile, job growth over the last thirty years has been occurring in areas considered non-routine, and particularly in areas considered non routine and cognitive (Healy, Nicholson, & Gahan, 2017). Figure 5 shows the changing skills profile of Australian employment.

While growth is greatest in non-routine, cognitive tasks, there is a decline in jobs involving routine tasks. This means that future job growth is likely to be in roles that complement rather than compete with technological innovations. It also means that the interface between education and work is changing, as the decrease in routine manual means a higher level of cognitive demand may be expected across all industries. Future workers in all sectors will need to be adaptable, entrepreneurial, and able to contend with complexity.

Figure 5: Change in share of total Australian employment, by skill type



Source: Healy et al. (2017)

The Challenge

Australia needs a clear policy vision for tertiary education.

Recent reform to tertiary education in Australia has focused on addressing some of the risks inherent in the bold reforms to higher education and VET a decade ago.

In the higher education sector, the introduction of the demand-driven system meant an uncapping of places and an increase in enrolments. In 2017, the federal government introduced a freeze on funding levels for CSPs, to contain the budgetary impact of the rapid expansion of higher education participation that ensued.

In the VET sector, the introduction of contestability and VET FEE-HELP saw a rapid increase in the number of providers in the sector. The policies led to widespread quality concerns, and caused a crisis of confidence in the VET sector. Since then, the federal government has restricted access to income contingent loans, and states have pursued different VET policy agendas.

While these reforms have responded to emerging concerns, they have not yet produced a vision of how the tertiary education sector can be accessible, effective and economically sustainable. All levels of government must now work together to create a cost-effective tertiary education sector in which participation, outcomes, and efficiency are maximised.

This is not just about tinkering with each part of the tertiary education system in isolation. Changing skills needs mean that the traditional divide between higher education and VET, and between academic and vocational learning, is becoming less relevant. To ensure tertiary education is fit-for-purpose, we need to reconceptualise tertiary education as a comprehensive offering, across higher education and VET.

From a policy perspective, this amounts to a challenge on two fronts. The first is to ensure that what the tertiary education sector is offering meets the needs of its students, industry and society. The second is making the right type of investments, to effectively balance participation and cost. These dual challenges point to the need to both *rethink* and *revitalise* Australian tertiary education.

Rethinking tertiary education to meet student and industry needs

The tertiary education of the future should not simply be the tertiary education of the past, offered to more students. Changing participation trends change the character of students, and the purpose of their study. Tertiary education students are no longer the academically elite looking to consolidate their advantage, or vocationally-oriented students aiming to gain skills for a role. They are more diverse, with diverse objectives, challenges and strengths.

In our tertiary institutions, there are now more people from lower socio-economic backgrounds, more women, more people studying online, more postgraduate students, more Indigenous

students, and more international students (Norton, Cherastidtham, & Mackey, 2018). Our students are less likely to be school leavers, more likely to study part-time, and more likely to take longer to finish their course (Commonwealth DET, 2016; Commonwealth DETYA, 2000).

Increasing diversity is also associated with students bringing a wider range of educational attainment to the sector, including lower academic achievers entering university — and some higher achievers entering VET. This means that the learning experiences offered in our tertiary education sector need to cater to different abilities. Indeed, as occurs in schools, our students start tertiary education with significant variations in their knowledge, skills and capabilities (Commonwealth DET, 2018c).

Australia's current model of tertiary education focuses on each student achieving a minimum set standard as defined by qualifications. This system is poorly equipped to respond to different initial levels of student achievement and to different student learning needs. This means that less advanced students can fall behind and the progress they make can be largely unrecognised; while more advanced students are at risk of not reaching their full potential.

As in school education, tertiary education institutions must aim to increase each students' learning, regardless of their level of learning when they commence their course. Models of tertiary education provision that engage actively with student diversity are part of this aim. Without addressing diversity, any increased participation in tertiary education could lead to a widening of inequalities, as existing models will work better for some students than others.

The changing needs of industry also drive the need to rethink what the Australian tertiary education sector offers. On one hand, tertiary education continues to retain a valuable role as the main provider of professional preparation for many industries, and therefore retains a role in fostering industry-specific skills. This is true for both university and VET, in that both sectors comprise disciplines with a strong vocationally oriented focus.

On the other hand, tertiary education must also equip graduates with durable and transferable skills. These skills will enable graduates to weather the turbulence that they are likely to experience in the transition between study and work, in potential career changes, and in changes to the nature of work. This creates a new imperative for tertiary education, which mixes traditional notions of developing a breadth of general and interdisciplinary knowledge, with contemporary demand for "21st century skills". The value of a tertiary qualification is not only as an entry-pass into a specific occupation or industry, but also as a store of versatile knowledge and skills that may be applied in many different contexts.

Connecting these two definitions of value requires a whole-of-sector approach, which will enable students in all types of tertiary education providers to build the skills, knowledge and capabilities that they need. Yet the tertiary education sector continues to compartmentalise vocational and academic learning, even as the world of work increasingly blurs the lines between them. This risks producing graduates who are stranded within the boundaries of a narrowly-defined skill set, rather than equipped with a dynamic portfolio of vocationally-specific and transferable skills.

Revitalising tertiary education for economically sustainable participation

Australia does not currently have a coherent set of tertiary education policies that encompasses both the VET and higher education sector, or the different tertiary education responsibilities of federal and state governments. Funding and provision models across VET and higher education are frequently fragmented and incoherent, with inconsistent relationships between the level of investment, the value of a course, and the level of student need (see case study).

Case study: Funding of nursing courses

Across the tertiary education sector, there is often inconsistent application of subsidies and funding. For example, both VET and higher education deliver nursing courses. Both VET nursing courses and higher education nursing courses are based on similar bodies of knowledge, and both have an occupational focus. They have different licensing outcomes where the VET course leads to a job as an enrolled nurse (EN), while the licensed outcome for a bachelor's degree is for a registered nurse (RN).

Table 1: Comparison of VET and higher education funding for nursing courses

	Government subsidy (yearly)	Student contribution (yearly)	Average weekly wage ²
Diploma of Nursing ³	\$8,193	\$6,210 - \$10,360	\$993
Bachelor of Nursing ⁴	\$14,596	\$6,566	\$1,385

In the current tertiary education system, the VET student often ends up paying similar or more money, for a course that receives less public subsidy, to end up in a job that pays less than the university equivalent. Complicating this picture are recent state government policies that, in certain circumstances, will support the VET student. However, there is little consistency to this approach and while some students may receive free training, many do not. Moreover, the provider also receives very different subsidies based on location. For instance, the same VET nursing diploma receives a government subsidy of approximately \$10,000 in Western Australia, \$8,000 in Victoria, and only \$4,000 per year in Queensland (Bolton, 2019).

There are also restrictions on eligibility to VET funding that affect those who wish to re-skill, which are not present in the university sector. While there are often good reasons for the differential rates of subsidies, as some courses do cost more to deliver than others, care needs to be taken that funding subsidies are fairly distributed and also do not act as barriers to access. In particular, students should be able to defer payment in publicly funded courses, because up-front fees can be a major deterrent to tertiary education enrolments.

² Based on the average weekly salary of 4211 Enrolled and Mothercraft Nurses and 2544 Registered Nurse (ABS, 2018b).

³ Diploma of Nursing based on a student commencing in 2019 at selected institutions including VU, Holmesglen TAFE and Swinburne University. Government subsidy rates from Victorian DET (2019)

⁴ Based on 2019 funding allocations from Commonwealth DET (2018a)

In the higher education sector, current policy settings mean that participation rates may be expected to remain stable, as noted above. It also means that instead of focusing on the quality of education delivery, the policy debate is likely to remain fixed on overall funding.

In the VET sector, this means that the fragmentation of the sector is likely to continue. State governments are currently implementing different VET policy agendas, while the federal government is lacking a policy approach that will arrest the overall decline.

The decline in VET participation is of particular concern, because VET plays an especially vital role in providing learning experiences to students that are not available in the higher education sector. Ultimately, it is students from lower socioeconomic backgrounds that suffer because they are the students who use the VET sector the most.

In some ways, the goal of increasing higher education participation for particular groups of students was incomplete, in that it focused on only one component of the tertiary education sector. Simply shifting students from one part of the sector to another can have limited benefit. University education is not for everyone; nor is it the best or most efficient vehicle for fostering all the skills required in the contemporary economy. There is a need to ensure other tertiary education options deliver quality learning for diverse student cohorts and across different parts of tertiary education.

To revitalise participation across all areas of tertiary education, there is a need for a more comprehensive strategy to improve coherence in tertiary education investment across all Australian governments. Such a strategy would consider goals across all kinds of tertiary education providers, and address what they may be expected to offer, and to whom.

Towards a Cost-Effective Solution

This section examines some promising policy levers, to meet the dual reform imperatives outlined above.

This section begins by examining reforms that contribute to a *rethinking* of tertiary education, or a fundamental change to the nature of the learning experiences offered to Australian students. It then considers reforms to *revitalise* the tertiary education sector, to achieve the sustainable and coherent investment that will enable tertiary participation to flourish.

Rethinking tertiary education

Rethinking tertiary education is a shared responsibility between providers and policy-makers, where the aim should be to deliver the greatest possible value to the greatest possible number of students.

In saying this, we recognise that providers and policy-makers operate in social structures that distort the value of tertiary education in ways that may be outside their control. For instance, public perceptions of the status of an institution may act as a signal for the value of a learning experience, rather than the learning that occurs (Spence, 1973). Other factors that influence the value of qualifications include the relative strength of the labour market; or whether a licensing regime is associated with a particular course, as occurs with many health-related programs.

These factors can distract from what matters most in a universal offer of tertiary education: valuable learning experiences for students. Tertiary education needs to be more than just a positional good that adjusts one's access to rewards relative to another. As the need for a universal tertiary education offer becomes more apparent, there is a need for a universal guarantee, that all students will experience tertiary education that meets their unique needs. This reflects both providers' and governments' accountability to the broader public good.

This section focuses on how policy-makers and providers in the higher education and VET sectors can rethink all components of the student experience, to meet the challenge of providing a comprehensive universal tertiary education offering to all students.

1. Reforming the AQF

The current tertiary education environment is characterised by uncertainty about the value of different courses and qualifications, which is especially undermining confidence in VET as a vital contributor to the tertiary sector. It is important that students and industry can recognise and evaluate the learning that has occurred in tertiary education, regardless of where it has occurred. This would be an important first step in a Commonwealth–State commitment to work together to rethink the way that tertiary qualifications are designed, described and delivered.

One policy lever open to policy makers to assist in this aim is reform of the Australian

Qualifications Framework (AQF). The AQF establishes the shape of the formal education system and is currently under review. While it is not possible to pre-empt outcomes at this stage, some of the reform proposals advanced in the AQF Review Discussion Paper (Commonwealth DET, 2018b) include:

- more effective mechanisms for recognising shorter form and micro-credentials within the structure of the AQF
- revising the AQF levels to simplify them and to remove inappropriate hierarchies in the description of VET and higher education
- revising the AQF pathways policy so that pathways can operate more effectively across the VET and higher education sectors
- recognising the broad role of senior secondary school certificates in providing a range of pathways into VET and higher education including through direct entry (including with credit) as well as through the ATAR system
- considering the potential benefits of a credit points system within the AQF for voluntary adoption by providers.

These proposals may help to enhance the expansion of pathways between the VET and higher education systems. If operating effectively, a revised AQF has the potential to enable the VET and higher education sectors to address complementary skills and knowledge needs more efficiently. This in turn helps all students derive greater benefits from their tertiary qualifications.

2. Reforming the tertiary curriculum

Education providers need to be more than just providers of qualifications. They must transmit knowledge and skills that are valuable to students and industry in a rapidly-changing world. This means providing all students with access to specialised bodies of knowledge, along with teaching skills and capabilities that will enable them to succeed after they finish their course.

Recently this debate has coalesced around teaching skills for the “21st century” (Lamb, Maire, & Doecke, 2017). In tertiary education, this means taking a holistic point of view to teaching and learning, so that tertiary education helps equip people with the tools they need to become engaged thinkers, resilient and resourceful learners, creative problem solvers and active members of their communities.

Both university and VET have an obligation to prepare students for the world of work, not only to transmit prescribed academic or technical content. This challenge is currently felt most strongly in the VET sector, where a focus on competency-based training has squeezed broader-based skills and capabilities to the margins of the curriculum. This contributes to the current gap between what the VET sector is providing, and the skills needs expressed by Australian employers (Bartlett et al., 2019).

The outcome-based competency model of the VET sector also creates challenges in enabling students to move seamlessly through the tertiary sector, and convert their learning in VET to opportunities to progress into higher education. There is a need for policy responses that help uphold the value of the different types of learning that occur in each sector, while enabling the recognition of different education experiences in a seamless and consistent manner.

Across the tertiary education sector, pedagogical approaches also require reform, to enable students to get the most out of their course. One way to do this is through scaffolded learning where the teacher assesses the individual student's need, provides targeted support and then gradually winds back the support so that students can learn more independently. This type of approach will become increasingly necessary, to cater to the increasing student diversity.

While there have been great advances in education delivery over the past thirty years, current curriculum and teaching approaches in many tertiary education providers fail to take into account the increasing diversity of backgrounds and abilities in our tertiary education sector. Traditional modes of delivery in the higher education sector, such as large lectures and passive learning, can be challenging for many students, particularly those who need more assistance.

Some tertiary providers are engaging with the challenge of delivering curriculum and pedagogy in more seamless, student-centred ways (see case study below). Policy settings that encourage such innovation across the sector will increase the efficiency and impact of tertiary education by ensuring that all students — regardless of their backgrounds — gain greatest possible benefit.

Case study: The VU Way

Victoria University has met the challenge of diverse student objectives and abilities by redesigning the student experience. VU has a culturally diverse population of students and staff from a wide range of backgrounds and, consequently, has a powerful moral purpose to provide vocational and higher education that transforms the lives of students and the communities VU serves. Recently VU has announced a new approach to teaching and learning called the VU Way. The VU Way sees students study intensively in four-week blocks, rather than doing several subjects at once. Small groups engaged in block mode learning replace large, impersonal lectures and passive learning in semester-long units of study.

This approach has already had results. Overall pass rates have increased by 7.9 percentage points. Pass rates and marks have also increased across certain equity groups such as those from lower socioeconomic backgrounds, Aboriginal and Torres Strait Islanders, and those from non-English speaking backgrounds.

3. Reforming the system of tertiary entry

The student experience of tertiary education begins from before the point of enrolment, when the student is considering which pathway will lead to their goals. At present, the focus on ATAR valorises university pathways, meaning that the perceived desirability of one particular choice often drives student choices, rather than meaningful consideration of all possible options. The focus on the ATAR also limits providers' choices in student selection, mitigating against a more well-rounded assessment of students' potential to succeed.

Many tertiary education providers already use entry pathways that do not focus on the ATAR, such as portfolio or experienced-based criteria. Previous Mitchell Institute analysis has found that admission to 60% of undergraduate courses were made on a basis other than the ATAR (Pilcher & Torii, 2018). The effectiveness of these pathways warrants further examination, in how well they differentiate between students at the point of entry, as well as their potential flow-on effects in supporting a broader focus in the senior years of schooling.

The Mitchell Institute report canvassed the costs and benefits of the ATAR and concluded that we need a serious national conversation about relying less on the ATAR and reducing its impact on secondary education (Pilcher & Torii, 2018). This conversation still needs to occur.

This relates to the reform imperatives for rethinking tertiary curriculum and pedagogy identified above. Effective tertiary education institutions are those that can provide educational opportunities to all students; including students who, for all sorts of reasons, did not achieve high ATARs in school. When universities simply continue the trajectory set by the ATAR, they fail to alleviate the impact of inequity, and miss the opportunity to help lift people out of the circumstances into which they were born.

Successful reform of entry requirements into tertiary courses must also include a more comprehensive approach to working with young people to identify a diversity of pathways and opportunities. These transitions between education sectors are crucial, and are becoming more dynamic and complex. In particular, the transition from adolescence to adult life and independence is longer and more difficult, and it is taking longer for graduates to find stable employment in a tough labour market with fewer entry-level positions (Wilkins, 2017). There is a danger of young people "falling through the cracks" at this time (Lamb & Huo, 2017).

Providing information is one part of this approach. This includes information that makes it easier to compare admission requirements into courses, and publishing information that makes the admission process more transparent.

Innovative entry pathways into tertiary education are also needed because it is now more likely that people will need to return to the tertiary education sector at different periods throughout their working lives. To meet future workforce needs, it is estimated that by 2040 the average Australian will spend an additional three hours per week in education and training, and will need to increase the proportion of formal learning they do after the age of 21 from 19% to 41% (AlphaBeta, 2018).

Our tertiary education sector will need to respond by providing more ways to refresh existing skills and more avenues to add new skills throughout an individual's career. Students need policy reform in order to pursue lifelong learning. The Productivity Commission (2017) has highlighted the need to introduce measures that reduce the barriers to upskilling and retraining. Better and more accessible entry pathways are part of a broader rethinking of the relationship between tertiary education and work, which prioritises flexibility and fitness-for-purpose over traditional linear pathways.

4. Extending work-based learning and industry partnerships

On the job training and lifelong learning will be a big part of how the tertiary education sector interacts with the new world of work. One way to do this is by promoting tailored training delivery in the workplace. This approach enables an integrated student experience where the student applies learning in practical settings. Such an approach is more traditionally associated with the VET sector, particularly with apprenticeships. There is a strong case to extend some of these practices to the university sector, to encourage better links between the workplace and student learning.

Work-based learning and industry partnerships also support the curriculum reform required across the sector. Most of the broader skills and capabilities needed for successful participation in the future workforce require meaningful and sustained exposure to workplace environments.

The apprenticeship model — which integrates paid work-based learning with formal training — has potential benefits in areas beyond the traditional trades it has served well over many years.

The Vice-Chancellors of Australia's dual sector universities have also noted that it is possible to offer apprenticeships across all AQF levels, including at undergraduate and postgraduate levels, and that apprenticeships need not be limited to the VET system (Bartlett et al., 2019; Loveder, 2017). They argued a strong case to extend apprenticeships to higher qualification levels and across the VET and higher education systems, to meet the deepening and intensifying skills needs of Australian industry.

It is possible to recognise and expand current provision of apprenticeships through:

- the extension of Commonwealth employer incentives into new industries and occupations in both VET and higher education, and
- encouraging partnerships between firms and industries with VET and higher education providers.

5. Promoting local solutions

Tertiary institutions are not isolated places where learning only occurs when a student is on campus. They are engines for prosperity that bring a raft of benefits to the students and communities they serve. However, official policy too often views higher education through a market lens, which has narrowed the purpose of tertiary education to the enhancement of personal earnings and employability (Marginson, 2016). In addition to a tertiary institution's

unique role within communities, it is also important to recognise the role of the community in providing an engaging student experience.

Vibrant, locally engaged education institutions are an important part of the student experience. As with pedagogical innovation, these partnerships are already occurring throughout the tertiary education sector, but would benefit from greater policy support. Policy-makers can encourage local solutions and connections between tertiary institutions and communities by:

- recognising the role that tertiary education institutions play in their local communities
- rewarding institutions that create and maintain effective connections
- directing extra resources to where they may be needed, for instance in rural areas or areas of social disadvantage, in order to engage effectively with local communities.

Revitalising tertiary education

These policy directions for *rethinking* the tertiary education sector must occur within a policy environment that also enables *revitalisation* of participation in all forms of tertiary education.

1. A more comprehensive system of income contingent loans

Cost is one of the biggest barriers that students face in accessing the learning that they need in tertiary education. Given the growing diversity in the sector, students' ability to invest in tertiary education is increasingly variable. This increases the need for funding models, at a student and provider level, to ensure that student background is not a barrier to participation and success.

While education is subsidised, there is unequal application of these subsidies, and students may end up paying large upfront costs depending on their course and their situation. This acts as the biggest deterrent for students from lower socioeconomic backgrounds, students from non-metropolitan areas, or those who are unable to take time out of the workforce.

For instance, access to income contingent loans are available to undergraduate students in the higher education sector, but not to students studying at Certificate IV level or below. The result is that hundreds of thousands of students each year are required to pay some form of upfront fees for their education.

Improving consistency of financial support to students should be a policy priority. One cost-effective way to achieve this is the progressive phasing in of a common and consistent income contingent loans scheme across higher education and VET, so that no student in tertiary education has to pay upfront fees. This includes extending access of income contingent loans and SA-HELP to all areas of tertiary education, including VET at Certificate III–IV level.

2. VET provision growing faster than higher education

As Figure 4 shows, VET delivery has been declining since 2012. While the reasons for this decline vary, it is likely attributable to a tightening of the policy settings so that it is now more

difficult for private providers to deliver VET courses with income contingent loans. Recently, some states have introduced free TAFE courses as a way to arrest the decline and encourage activity in the VET sector.

When seeking to increase participation, it is important to simultaneously focus on the quality of the delivery in the VET sector. We need to make VET a better value proposition so that students, industry and government invest in the VET sector. Reversing the decline in VET by removing barriers to access is only half the solution to the problem. Taking full advantage of our VET sector also means enhancing what the VET sector has to offer.

One way to do this is to focus on curriculum reform in the VET sector. As discussed above, changes to the current narrow and task-based competency-based training model in VET are long overdue. There is a need to define and develop competencies more broadly, and support the development of standards with a stronger focus on quality teaching, learning and assessment. A stronger focus on underpinning skills, knowledge and capabilities will ensure that VET learners are prepared for the future workforce, and enable VET to play a greater role in complementing the delivery that occurs in the higher education sector.

3. Increased proportion of education received by higher education graduates being in the form of VET courses.

An increased proportion of the education received by higher education graduates being through VET pathways would be made possible made by qualifications and curriculum reform, as outlined above, as well as improved credit and articulation arrangements.

In particular, it is possible for VET to provide a greater proportion of the initial stages of higher education delivery. Articulation and pathway arrangements can offer the clear benefits of higher education (Daly, Lewis, Corliss, & Heaslip, 2015) in a cost-effective manner.

The reasons why this is a cost-effective approach is because, overall, the VET sector provides more affordable education and training. A recent review by the Australian Government found that on a per-place basis, government funding for VET is around \$12,500 per Full-Time Equivalent (FTE) in 2016–17, while higher education was nearly \$22,000 per FTE (DPC, 2019). Education delivery through the VET sector, therefore, can be an affordable option to meet the skills, knowledge and capabilities that Australia needs.

An obstacle to achieving a greater proportion of education delivery in the VET sector is the continued fragmentation between VET and higher education. The AQF places all higher education and VET qualifications on a single framework, but there is a separation of responsibility for quality assurance and delivery of qualifications across the systems, and across different levels of government. While the AQF provides policy guidance on pathways between VET and higher education, in practice the two systems and individual institutions largely determine their own approaches to credit and pathways.

The lack of cohesion across the tertiary education sector results in inefficiencies. It also compromises the ability of the tertiary education sector to provide fit-for-purpose education and

training that responds to industry and student needs.

It is possible to increase the proportion of higher education delivery in the VET sector through an overarching policy framework for the provision of post-secondary education in Australia agreed through the Council of Australian Governments (COAG) and underpinned by a set of policy principles to guide the individual and collective development of the systems. The aim should be to better connect the VET and higher education systems through a determined focus on student pathways, and carefully redressing distortions created by anomalies and inconsistencies in funding.

4. Increase in “micro learning” (that provides credit toward AQF qualifications)

Micro-learning is an approach to education and training that delivers content in a smaller, more focused manner. Micro-learning usually occurs outside of traditional classroom settings; is tailored to student needs; and is accessible by the student in a range of environments, especially the workplace. Micro-learning has the potential to be a valuable and cost-effective education and training experience. In addition to this, micro-learning can increase the currency of skills and knowledge by refreshing and updating previous learning.

Micro-learning already exists in some forms within the tertiary education sector. For instance, some states invest in specific skill sets in the VET sector, and many universities are beginning to offer micro-credentials (Commonwealth DET, 2018b).

To ensure the quality of micro-learning, it is important that delivery occurs within existing structures such as qualification frameworks and quality assurance regimes. By doing this, it is possible to maintain trust in micro-learning courses, which opens the possibility of incorporating micro-learning into existing funding and subsidies regimes. Moreover, students need a way with which to reliably communicate the value of their learning experiences, and it is through formal education structures, like the AQF, that this will occur.

5. Increased investment by industry

Employers are among the biggest beneficiaries from the skills, knowledge and capabilities that our tertiary education systems produces. Indeed, employers rely to a large extent on the tertiary education system to produce a workforce that meets their future skills needs.

Industry can play a vital role in rethinking and revitalising tertiary education, by investing in the tertiary education of the future. As a recent OECD (2015, p. 3) report on the future of productivity observes, “investment in education and skills is particularly important to ensure that workers have the capacity to learn new skills, to make the most of digitisation and to adapt to changing technologies and working conditions”.

There are different ways that industry can invest in tertiary education. These can include participation in education delivery, through internships and work-based learning. They can also include providing greater financial support to our tertiary sector. By following the reform agenda

outlined above, this investment will be one that is in the interests of industry. This is because it will deliver the type of workforce that will drive business growth and increased productivity.

6. A Commonwealth–State commitment, through COAG, to revitalising tertiary education through a coordinated approach to funding

Given the challenges identified in this paper, it would be very timely for there to be a Commonwealth–State Commitment to rethinking and revitalising tertiary education.

Commissioning the AQF review was a great start. This should be followed by a review of federal and state government funding of the VET and higher education (that results in the AQF qualifications), as well as student fees and industry contributions to the funding of VET and higher education. The purpose of the review would be to find a cost-effective way of achieving the higher investment in tertiary education needed to achieve the revitalisation and increased tertiary participation that is required to ensure a strong, sustainable skills base.

This recommendation reflects the need for both rethinking and revitalising to occur in parallel, with support from all levels of government. Once the AQF is reformed in an important rethink of tertiary education, we need to be confident that the new universal tertiary model can be delivered within the financing arrangements that operate at the state and federal level.

A Commonwealth and State Commitment to Rethink and Revitalise Tertiary Education

The benefits of rethinking and revitalising Australian tertiary education can only be achieved through collaboration, and a shared commitment to making the tertiary sector work for all.

Many of the policy recommendations raised above will require Commonwealth–State cooperation, to ensure that reform is implemented in a way that increases coherence across the tertiary education sector. A coordinated approach to funding is a key component of this commitment.

At the policy level, collaboration between different levels of government is a priority, to develop fair, sustainable approaches to funding. We have seen resource allocation play a prominent part in policy debates concerning the school sector, and there are lessons we can learn for this experience. The focus of school funding models is honouring the policy commitment to universal school education by attempting to maximise the learning of all students. This involves collaboration between different levels of government to ensure the fair distribution of funding where it is most needed. Yet in tertiary education, Australia’s funding model remains piecemeal, inequitable, and geared towards rewarding other aspects of provider performance, besides quality of learning.

The aim should be national collaboration to ensure that resources are equitably distributed, and are not a barrier to continuous learning, for students or providers. Funding reform should also aim to remove any possible incentives to shifting costs between levels of government.

In the VET sector, it is recommended that a VET funding agreement is established between the Commonwealth and the states. A Commonwealth–State VET funding agreement could include:

- a commitment to co-finance growth in VET enrolments
- a shared commitment to the revitalisation of TAFE through recognition of, and funding for, TAFE’s role as a public provider
- co-financing model (as proposed in Noonan (2016a)) on a new tertiary financing system — an agreed price per course agreed public and private contributions and an income contingent loan, at the national level — allowing for State and Territory governments to provide additional support to meet local needs where required
- the Commonwealth assuming responsibility for funding all AQF level 5 and 6 courses (which are offered in both VET and higher education) or courses where credit-based learning pathways are negotiated between VET and higher education providers
- expanding eligibility criteria for funding of VET students, and confirming that learners can

enrol in both ensuring that learners can co-enrol in both higher education and VET without financial penalties and disincentives (to contain costs, this may require some overall global constraints on the total extent to which an individual can be supported in their learning, perhaps in the form of lifelong learning account).

Implications for higher education funding

Funding arrangements for higher education are, of course, the responsibility of the Commonwealth. But it will be important for them to take into account the interaction of Commonwealth–State arrangements for VET on their higher education policies.

This will include an understanding of whether the projected growth in funding for Commonwealth Supported Places (CSP) in higher education will be sufficient to raise participation rates (especially in areas of rapid population growth). This should be considered alongside the reforms to VET funding proposed above. This consideration may result in possible adjustments to the Commonwealth’s forward estimates for CSP funding.

This process will need to happen with a significant degree of urgency. Otherwise, the current decline in the tertiary education participation rate can be expected to continue well into the 2020s. This would represent a significant threat to the future prosperity of Australian industry, the career chances of many thousands of school leavers, and the ongoing employability of large numbers of people in the workforce.

The Return to Public and Private Investment in Tertiary Education

The reforms proposed in this paper respond to the current fiscal climate, to achieve maximum benefit for learners at minimum cost. In this climate, any increased investment in tertiary education overall must be justified by a clear economic return.

Returns on investment in tertiary education are both financial and social. As the reforms proposed in this paper improve the efficiency and effectiveness of the tertiary education sector, the benefits of further investment will become self-evident, as their costs are outweighed by benefits to the Australian economy and society.

In terms of financial benefits, there is substantial research that quantifies the returns on investment in tertiary education. All students make an investment in their education, which from an economic perspective means they forgo earnings in order to receive higher earnings when they graduate. Daly et al. (2015) calculate that the private return on investment in higher education in Australia is between 8% and 15%.

There has been a slight decline reported in the wage premium for higher education graduates (Norton et al., 2018; QILT, 2017). Despite this, labour market outcomes for tertiary education, and university education in particular, have not deteriorated when compared to the alternatives (Wilkins, 2017). Those individuals with tertiary qualifications still have an advantage over those who do not possess a tertiary qualification when searching for jobs.

There is also evidence that higher earnings extend to people with vocational qualifications (Daly, 2011). In particular, there is an association with certain apprenticeship level qualifications and a range of productivity benefits (Noonan & Pilcher, 2017). This shows that when VET is done well, it is a cost-effective way to deliver the skills, knowledge and capabilities that contribute to productivity and the wider Australian economy.

The return on investment in education is not restricted to financial returns. There are wider social benefits that come with higher rates of tertiary educational attainment. There is substantial evidence that associates high levels of educational attainment with more active citizenship (Milligan, Moretti, & Oreopoulos, 2003), lower crime rates (Lochner & Moretti, 2004), and better health outcomes (Vila, 2000).

Education is an investment that delivers both private and public benefits. Those who are tertiary educated pay more taxes and have higher productivity than does who are not. Moreover, higher tertiary educational attainment can enhance the workforce and promote economic growth.

The converse argument arises from the economic and social costs of *not* investing in tertiary

education. As the Productivity Commission (2017, p. 2) writes:

If the education system, and those in or entering the workforce, are not responsive to changing skill needs, there is a risk of higher unemployment, underemployment and lower earning prospects, which in turn are likely to reduce engagement in the labour market.

If Australia's tertiary education sector is not revitalised, those who do not participate are at greater risk of social and economic exclusion, and may incur significant costs to the country, in potential dependence on financial support.

The importance of a vital, responsive sector in reducing the costs of social exclusion can be seen in recent trends in students excluded from participation in tertiary education and employment. Mitchell Analysis of ABS Labour Force Survey data (2019) has found that in 2008, before the global financial crisis, 9.4% of 15–24-year-olds were not in full-time education and training, or any kind of employment. Overall unemployment at that time was just above 4%. Now that employment has returned to a similar level, the proportion of 15–24-year-olds in this group is 10.6%; signalling that little progress has been made in reducing the proportion of young people whose opportunities are limited, despite a decade of tertiary education reform.

We would argue that the range of reforms proposed in this paper should have the effect of increasing public and private returns to education and training by encouraging greater participation in tertiary education, enhancing the workforce, and promoting economic growth, while reducing the social costs of unemployment and underemployment. This in turn would generate more tax revenue for government and reduce its expenditure in dealing with unemployment and underemployment. This would justify an increased investment in tertiary education and training by governments, without imposing a fiscal burden.

Conclusion: The Need to Rethink and Revitalise Tertiary Education

As the 2014 Mitchell Institute Policy Lecture *Reconceptualising Tertiary Education* (Dawkins, 2014) outlined, the future success of young people and lifelong learners in Australia will depend upon the development of their skills and capabilities in tertiary education.

We are now in a world in which we need high-quality VET and higher education to be available to all young people after they leave school, and for the vast majority to take advantage of it.

With the skills and capability requirements of jobs changing more rapidly now than ever before, it will also be increasingly important for high quality tertiary education to be available to all working age adults, so that they can up-skill and re-skill.

We need to rethink the divide between VET and higher education, through qualifications reform; curriculum, pedagogy and assessment; and through making the VET and higher education systems better connected.

As we have seen, there has been long-term growth in the proportion of the working age population who have tertiary qualifications. However, disjointed policies have threatened this growth. While there has been an increase in higher education participation over the past five years, this has been offset by a greater reduction in the numbers participating in VET.

The reasons for these recent movements in participation are to be found in the policy reforms that began ten years ago. These policy reforms had mixed results and there were aspects that caused significant problems, particularly in the VET sector. While there has been a reversal of some of the worst elements of previous policy reforms, there is much more to be done to create the strong tertiary sector that supports Australia's future prosperity.

There is ample evidence that Australia will need more of the skills, knowledge and capabilities that our tertiary education sector produces. Consequently, it is important that there is a reversal in the downward trend in tertiary education participation. In reversing the trend, a vital policy imperative is to present students with the range of choices and opportunities that they need. This also means taking an approach to government subsidies and loan support that ensures financial factors do not end up distorting the student selection of courses.

The benefits for students and the future workforce

A policy agenda of the kind outlined in this paper would be a great thing for the next generation of tertiary education students and for the workforce of the future. As we have emphasised in

this paper, tertiary students of the twenty-first century come from vastly diverse backgrounds and have diverse skill needs. We need a tertiary system that can cater for this diversity. Instead of a dichotomy between a higher education system in the tradition of catering for the academic elite, and a VET system catering for those who want to develop practical skills, both systems need to cater for a greater diversity of students who need a tailored combination of skills, knowledge and capabilities. A reformed approach to tertiary education will enable students to choose the education and training opportunities that they need, in a manner that suits them.

Rethinking and revitalising tertiary education means providing the students of the future with the greatest possible opportunity to develop their abilities, and the opportunity to pursue their aspirations for their own benefit, as well as ensure that we develop the workforce of the future.

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Mitchell Institute at Victoria University

300 Queen Street, Melbourne, Victoria 3000

+61 3 9919 1820

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info@mitchellinstitute.org.au
mitchellinstitute.org.au