About the author

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Mitchell Professorial Fellow, Peter Noonan 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, higher education providers and TAFE institutes. 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. 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 Professor of Tertiary Education Policy at Victoria University and an Honorary Senior Fellow at the Graduate School of Education at the University of Melbourne.

Alec Webb (ACIL Allen Consulting) undertook the data analysis for the scenarios and Jon Chew (NOUS Consulting) provided expert comment on the scenarios and the report content. Their assistance is appreciated.

About the Mitchell Institute

The Mitchell Institute works to improve the connection between evidence and policy reform. We actively promote the principle that education is fundamental to individual wellbeing and to a prosperous and successful society. The Mitchell Institute was established in 2013 by Victoria University, Melbourne, with foundational investment from the Harold Mitchell Foundation.

The participation imperative

Tertiary education has clear benefits

In 2016, over 300,000 Australian children commenced school. As they progress through school these children will be encouraged to complete a full secondary education and undertake further study. This is sound advice.

The OECD has found that through a comprehensive analysis across its member countries:

*On average, over 80% of tertiary-educated adults are employed, compared with over 70% of people with upper secondary or post-secondary non-tertiary education, and less than 60% of adults without upper secondary education. Tertiary-educated adults also earn about 60% more, on average, than adults with upper secondary as their highest level of educational attainment. In general, employment rates and earnings increase as an adult’s level of education and skills increases; but the labour market still regards a diploma or degree as the primary indication of a worker’s skills*.1

In Australia, people without senior secondary and post school qualifications have lower and shorter levels of workforce participation, have more limited career options and are not able to gain access to the most rewarding occupations. People with higher levels of educational attainment are better equipped to deal with job loss and disruption in the labour market2.

Completing a senior secondary school qualification is a pre-requisite for entry to most tertiary courses. Tertiary education provides school leavers with the deep knowledge and the specialised skills relevant to specific disciplines, professions and careers. Tertiary qualifications also send general signals to employers about young people’s background and capabilities, they often act as a system for initial screening of applicants for job interviews.

Participation in education helps with the ongoing process of socialisation of young people, helps them to build networks and to assess and use information instantly available from increasingly diverse sources and to make judgements about increasingly complex choices.

Children commencing school now will be entering a dramatically different labour market even to that facing the current cohort of school leavers. Industries and occupations will continue to be transformed by new technology, by growth in the importance of personal services, through innovation in products and services, by demographic change and from restless pressure from the internationalised economy, including for jobs either here, in Australia, and overseas.

A tertiary qualification is therefore both a general pre-requisite for successful entry to the labour market, a specific pre-requisite for many jobs, and an important source of new skills for the future workforce.

Many young people will aspire to eventually own and run their own businesses. There is a strong focus in the Commonwealth Government’s National Innovation and Science Agenda on the importance of business start-ups as their contribution to economic and employment growth.
However, people with only basic and often inadequate levels of initial education, who struggle to find work and who experience unemployment and under employment will have little capacity to generate sufficient income to save or to borrow in order to start their own business.

There are also important intergenerational benefits from completing school and tertiary education. Children from families with higher levels of educational attainment are also more likely to perform better at school, gain tertiary qualifications and secure better labour market outcomes than those from families with lower levels of educational attainment.

**Links between education and the labour market are complex**

Despite the general benefits of completing school and obtaining a tertiary qualification we should not over promise on these benefits and outcomes for young people. The links between educational attainment and workforce participation are not straight forward. We can’t and shouldn’t promise automatic access to high skill jobs or suggest simplistic links between courses and careers.

There are both supply and demand factors at work; employers are drawing from a more highly qualified population, particularly of young people, for jobs that may or may not require higher skill levels than in the past. Experience in work is often a pre-requisite for many jobs, simply having a qualification is not sufficient.

Labour market growth is also slowing and there is strong competition for available jobs, particularly the most rewarding jobs. Graduates may not fully employ their knowledge and skills in the labour market and may not find work immediately relevant to their qualification. Unless economic growth picks up, graduates on average will take longer to find a job than when labour market demand was stronger and there were persistent skills shortages for many occupations.

Most importantly it is the quality and relevance of Australian tertiary education that will underpin outcomes for individual students, the economy and society more generally. Courses which entrench outdated practices and habits of mind will disadvantage rather than empower graduates in the workforce of the future.

However, one thing is clear – young people without high quality and relevant post school qualifications will be seriously disadvantaged in the labour market and even more so as the labour market becomes more competitive and the skills requirements for the most rewarding jobs intensify.

So what we need to continually reinforce is that the labour market of the future will be tough, competitive and challenging as well as exciting, and that skills, capabilities, persistence with and appetite for further learning will determine their success, not just in work but in life generally.

**Other social and economic imperatives**

There are broader national economic and social interests at stake as well.

Australia cannot afford to have large numbers of future generations of young people not effectively participating in the workforce. The number of children supported by the working age population is stabilising – having declined over the past twenty years – and the number of people aged over 65 compared to the working age population (15-64) will increase.

As a consequence the dependency ratio will increase. Put simply, a smaller number of people of working age will have to support a higher number of people not of working age. Even if some older people work for longer the overall challenge remains.
As the Foundation for Young Australians has observed:

----- Australia’s 4.3 million young people are our greatest resource. It is the next generation who will inherit the outcomes of the decisions we make today and will have to navigate a future we can’t yet even describe. As our population ages, the ability of our growing youth population to participate in, contribute to and shape our economy will be crucial in delivering quality of life for all of us.

If they complete a full secondary education, most children commencing school in 2016 will leave school in 2027 and some in the years after that. Some will leave school before 2027 for options such as apprenticeships and others will subsequently want to return to learning.

There will be half a million more 15-24 year olds in Australia by 2030 than in 2016. As a consequence, unless enrolments in tertiary education grow, participation rates in tertiary education will fall.

The overall capacity of Australia’s tertiary education system to even sustain let alone improve participation levels is therefore an important public policy question. For children and their families in school now and commencing school in the years to come it is a question of fairness, reciprocity and mutual obligation: will the Australian community fulfil its end of the implicit bargain it has entered into with young people by ensuring that if they work hard and successfully complete a full secondary education that they will be able to transition into an affordable and high quality tertiary education?

For those many young people who have struggled and may not have completed school, will we as a community also ensure that there is capacity for students to re-engage in learning and to also access affordable and high quality tertiary education.
The participation challenge

Participation levels have grown since 2008

To better understand and assess the future capacity of the tertiary education system generally and the HE (HE) and Vocational Education and Training (VET) sectors specifically, the Mitchell Institute has commissioned analysis of the current capacity of the VET and HE systems in terms of enrolment and age participation levels, and how that capacity has grown in recent years. We have then projected capacity through to 2030\(^1\) based on 4 different scenarios which are described below.

As a starting point it is important to recognise that Australia is emerging from a period of sustained growth in enrolments and participation by young people in tertiary education\(^2\). However, that growth has been far more evident in HE than VET and in VET participation varies significantly between the states and territories.

In 2014, an additional 111,000 15-24-year-old students participated in HE than if 2008 participation levels had been maintained with further growth occurring since 2014 (the last year in which full data is available).

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\(^1\) The data analysis in this paper was undertaken by ACIL Allen Consulting. For the purposes of the analysis in this paper tertiary education encompasses publicly funded qualifications and FEE HELP supported qualifications in the higher education sector up to degree levels and publicly funded VET qualifications from Certificate III to Advanced Diploma level. VET FEE HELP supported qualifications in private RTOs are not captured in the data. It is recognised that for some professions post graduate qualifications may also be directly linked to entry to professions and may also be publicly subsidised. However, the focus of this paper is on initial qualifications taken by young people in the 15-19 age cohorts and the 20-24 age cohorts. Note: AQF 3-7 students. Population projections are based off a low NOM, medium fertility and medium mortality assumptions. Low NOM projections are used to minimise the effect of international students and other visa holders on population projections.

An additional 77,500 students participated in VET in 2014 relative to 2008 participation levels although enrolments amongst 15-19 year olds in VET declined from 2012\(^3\).

\(^3\) It is recognised that HE and VET enrolments are not strictly comparable as VET enrolments include many enrolments in relatively short courses, may include multiple enrolments by individual students and also include enrolments by school and HE students undertaking VET subjects.
These increases in enrolments and participation reflect policy decisions:

- by the then Commonwealth Government to expand HE provision through the introduction of demand driven funding in HE; and
- between the Commonwealth and State Governments through National Partnership Agreements to increase workforce qualification levels to at least Certificate level III through the introduction of a demand driven VET student entitlement.

**Policy uncertainties**

Each of these funding models is now under pressure exacerbated by significant policy differences between the major political parties particularly in relation to HE funding.

In HE, the Government has released an options paper on a range of issues related to HE funding following the failure of the reforms announced in the 2014 budget to pass the Senate. These reforms included a reduction in per student course subsidies, fee deregulation and the extension of the demand driven system to non-university HE providers and to sub degree HE courses.

The 2016 budget deferred the reductions in course subsidies for a year and ruled out fee deregulation (except potentially for some flagship courses).

The Commonwealth Government’s higher education options paper indicates that:

> Since student contributions and HECS student loans were introduced, the annual number of domestic students enrolled has grown by 144 per cent from 420,000 in 1989 to just over 1 million in 2014. In comparison, the overall Australian population has grown by about 40 per cent over that period.

The paper highlights the budgetary pressures faced by governments in meeting the costs of increased outlays for HE and raises options to reduce direct costs to government through reduced course subsidies, a shift in the balance between public and student contributions, and measures to improve the affordability of Australia’s income contingent loans scheme.

The Government has built into its budget forward estimates the reduced course subsidies announced in the 2014 budget (although these could be adjusted in future estimates once decisions on the options paper are taken).

The most likely outcome from this process will be an adjustment between student and public contributions with universities able to charge additional fees up to the level of the subsidy reduction.

The Opposition has committed to maintaining Government subsidies at current levels and to not adjusting the balance between public and private contributions but with stronger accountability measures in place in terms of aligning student choice with provision in areas of assessed labour market need and improved completion rates.

However, the options paper and the broader debate about HE funding are largely focussed on the means by which HE is financed. There has been little attention paid to the medium to longer term challenge of maintaining or improving participation levels in HE as the population and educational aspiration grow, or the consequences of slowed enrolment growth by moving away from the demand driven system as some commentators have advocated.

The situation in VET is more serious. A previous Mitchell Institute paper highlighted the weaknesses in the current shared funding framework for VET funding between the Commonwealth and State Governments with public
investment by the states falling, and investment by the Commonwealth scheduled to fall in 2017-18. Enrolment and participation levels in VET are now in decline and are likely to fall further in 2016.

Abuse of the VET FEE HELP scheme by some providers has led to massive increases in outlays under that scheme through excessive pricing and inappropriate enrolments and with very poor outcomes. The Commonwealth also has also released an options paper for the reform of VET FEE HELP, however most VET students and providers are not covered by the VET FEE HELP system.

The Opposition has indicated that it will cap VET FEE HELP loans but has identified the savings from this measure as revenue to fund initiatives in other areas rather than being redirected back into mainstream VET funding.

Initial discussions at COAG, including consideration of the option of the Commonwealth taking full responsibility for funding VET, have not progressed even to the point of formal consideration at COAG, and decisions on VET funding by the Commonwealth and state governments are now being taken in isolation and in the absence of a long term plan for the VET sector.

The higher education options paper asserts that:

We need to ensure that all Australians with the ability and the motivation to succeed in tertiary education are supported to do so – there should be no perverse incentives for students to choose a VET course over a higher education course or vice-versa.

However, declining levels of public funding for VET, increasing student fees without access to income contingent loans, and the significant reputational damage to the sector from the VET FEE HELP scandals are likely to create incentives for students to choose HE over VET where they are able to do so.

Without a new and sustainable funding model and measures to improve quality and confidence in VET, the VET sector is not well placed to underpin growth in participation in tertiary education into the next decade.

**Participation scenarios**

Against this background the Mitchell Institute has prepared four scenarios that help to illustrate the overall challenge we face in even maintaining let alone increasing participation levels in tertiary education and the respective roles of the HE and VET sectors.

As 2014 is the latest year for which published data is available, that year is used as the base for the scenarios noting HE enrolments will be higher than 2014 levels and VET enrolments may be lower. 2030 is used as the end year for the projections to reflect the point at which most children commencing school in 2016 will have entered tertiary education.

The scenarios are:

- **Enrolment levels in both sectors are held at 2014 levels.** This scenario does not reflect a current policy option but reflects the effects on participation rates of capping the demand driven HE system (as some commentators have advocated) and the effect of not redressing the downturn in VET enrolments for each sector and tertiary education as a whole.
- **Participation rates are held at 2014 levels.** This scenario reflects the level of enrolment growth required just to maintain current participation rates in HE and VET at their current levels and for tertiary education as a whole.
• **Participation rates increase by 2 percent per annum to 2020 and by 1 percent thereafter in each sector**. This scenario reflects a continuation of the growth in participation in HE from 2008-2014 and the same trend in VET but includes slowing of rises in participation levels as demand is absorbed. However, it is important to note that enrolment increases in HE have already begun to slow.

• **Participation rates in VET increase at a faster rate than HE**. This scenario reflects half the level of growth in participation in HE (1 percent to 2020 and 0.5 percent to 2030) and the reallocation of the HE enrolments to VET while retaining the same overall level of tertiary participation. This reflects a policy choice to adjust the mix between VET and HE.

The scenarios are largely illustrative in nature with the following caveats:

• The scenarios do not represent actual demand which is driven by both economic and social factors as well as population growth.

• The scenarios only include publicly funded provision and there may be substitution between public and private provision.

• Participation by 15-19 year olds could increase if participation by older age cohorts declined.

• Participation levels are influenced by the pattern of full and part-time study and course length.

• VET enrolments include many part-time students undertaking relatively short courses and may include school and HE students undertaking VET studies.

• VET and HE enrolments are not necessarily substitutable as students’ course choices are influenced by career intentions and perceptions of each sector. Many VET providers are also not well placed to accommodate younger full time learners in terms of an on campus experience with a range of student services and facilities, although most TAFE institutes and some larger private providers are well placed in this regard.

• Some students may also commence in VET and progress to HE (with or without credit) and some HE students may opt for VET after completing an undergraduate qualification.

The scenarios can be adjusted to reflect different assumptions including overall participation levels and the mix between VET and HE. A full set of scenario outcomes are at Attachment One but key outcomes are highlighted in Figure three.

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4 This is not the same as a 2 percent increase in participation rates for the whole age cohort.
**Figure three: student scenarios across tertiary education as whole**

Figure three shows the effect of the scenarios outlined above across tertiary education as whole (note that the scenarios 3 and 4 have the same effect in terms of overall enrolment numbers). It shows the consequences of static enrolments in tertiary education (scenario 1), that over 176,000 additional enrolments are required by 2030 just to maintain current participation rates (scenario 2) and that over 450,000 enrolments are required to raise participation rates by the levels contained in scenarios 3 and 4.

**Figure four: higher education student scenarios**

Figure four illustrates that HE enrolments will need to grow by 93,000 by 2030 just to maintain current levels of participation scenario two (in this regard it is relevant to note that participation levels in HE in Australia fell in the decade before 2004 as enrolment increases did not keep pace with population growth\(^\text{\textsuperscript{vii}}\)). To achieve the participation growth in scenario 3 HE enrolments would need to increase by 242,000. Even the lower participation growth for HE relative to VET under scenario four would require HE enrolments to increase by over 160,000 by 2030.
Figure five: VET student scenarios

Figure five illustrates that VET enrolments will need to grow by 82,500 by 2030 just to maintain current participation levels of 15-24 year olds (scenario 2), by 212,000 under scenario 3 and 291,00 if participation in VET was to grow at a faster rate than HE (scenario 4). These scenarios highlight both the importance of the role of VET in increasing young people participation in tertiary education, particularly as increased participation is most likely to come from students less likely to go to HE and the challenge of that task given the current decline in VET enrolments and participation.
Conclusion

Future policy decisions on how tertiary education is financed in Australia must be set against the long term social and economic challenges Australia faces. Young Australians need to be well equipped to participate in the workforce of the future as the Australian population both grows and ages, a workforce in which tertiary education in some form will be a pre-requisite for successful participation and where demands for new skills and knowledge will be all pervasive and unrelenting.

Governments must take a longer term view about the level of investment required to sustain and improve participation in tertiary education, including the balance between public and private investment and the balance between VET and HE.

While we must be careful not to overstate the economic benefits of investing in education it is clear that increased public and private investment will be required to ensure that our tertiary education system has the capacity to meet the needs and aspirations of children and young people already at school and the hundreds of thousands who will follow them.

The magnitude of the challenge is even greater when we recognise that thousands of older Australians will also be turning to the tertiary education system to refresh their skills and to gain new skills to also participate in the workforce of the future.
References

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iv Foundation for Young Australians (2016) *The New Basics: Big data reveals the skills young people need for the New Work Order*  

v Department of Education and Training (2016) *Driving Innovation, Fairness and Excellence in Australian Higher Education*

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