



**Response to the 5 year
Productivity Commission Inquiry:
*From learning to growth
interim report***

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The impact of increasing education levels on productivity

The link between education and overall labour productivity is not straightforward. The calculations by the Australian Bureau of Statistics (reference in Figure 1.1 of the interim report) are based on a growth accounting methodology which implies that part of economic growth can be attributed to increasing numbers of people with higher qualifications who get paid more than average and tend to work more hours (see Karmel 2013, 2014). However, this source of growth will become less important as higher proportions of the workforce are qualified. In the extreme, if the whole population had a degree then there could be no further growth from this component. In this regard, we have already seen a decline in the ratio of wages of those with degrees and average wages. We have also seen evidence of credentialism, in which higher levels of qualifications have become necessary for employment in particular occupations, and conversely individuals with degrees are becoming increasingly employed in lower level occupations (see Karmel 2015).

An alternative approach is that of endogenous growth theory, in which it is hypothesised that there are increasing returns to scale in respect of education. The idea is that increasing levels of education make it easier to adopt new and improved methods of production. Empirically this is difficult to substantiate, and it is pertinent that multi-factor productivity has been very flat over the last twenty years, as shown in Figure 1.1. This suggests that there may be limits to the contribution of increasing level of education to economic growth.

How should post-school education be funded?

Currently, we have an incoherent approach to funding education. At the school level there is an expectation that education will be fully government funded (at least if you attend a government school). Post-school we have a mix of fee based courses and fully funded courses in Vocational Education and Training (VET), and Commonwealth Supported Places with a student contribution in higher education. In higher education the student contribution is covered by an income contingent loan (such loans are also available for some diplomas courses in VET).

Over time, increasing levels of education have changed community expectations about the support for post-school education. It would be a great help if a set of principles could be developed to guide which parts of education should be fully government funded. For the remainder, it would be helpful to have some principles which would guide the extent of government subsidy.

One suggestion I would make is to provide an entitlement to a level of general education equivalent to the successful completion of school at a level which would make it possible to enter a degree program. Under such a principle, completion of year 12 in itself would not exhaust the entitlement – we know that many students who have attended school to year 12 have not achieved a satisfactory

level of education. For these students, I suggest that the VET or the higher education sector offer a fully funded 'diploma in general education' the successful completion of which would enable the individual to enter a degree level program. The VET sector's coverage of disadvantaged groups suggests that it would be well placed to offer such courses.

A more radical suggestion acknowledging that post-secondary education is becoming close to universal (and therefore sensibly funded through general taxation - an education levy akin to the Medicare levy?) would be to fully fund an element of post-secondary education (we take diploma level qualifications as the first level of qualifications that are clearly higher than the senior secondary certificate). A modest step in this direction would be to fund the first year of the post-secondary qualification (noting that diplomas and undergraduate degrees range in length from one to 4-5 years). Funding for the remaining years would then revert to the current mix of subsidy and student contribution, accompanied by income contingent loans to assist those who are financially constrained. The mix acknowledges that there may be some externalities that justify government funding, but that it is the private return that justifies most individuals undertaking further education.

It would be prudent to draw boundaries around courses to be publicly subsidised in order to prevent 'orting' or unsustainable budgetary pressures: the rise of demand led government funding in 2008 and its subsequent decline explains the bulge in government funded diplomas between 2008 and 2014, while the VET FEE-HELP scheme - replaced in 2017 by VET Student Loans - spiralled out of control from 5,000 students in 2009 to 270,000 students in 2015 (Australian Government 2016, 2020). We should also acknowledge that there are parts of the training system which have worked perfectly well in the absence of government intervention.

My overall point, though, is that we should establish some principles to underpin the way that the government subsidises courses.

The actual level of subsidy is inherently a political judgment. It may be attractive to have subsidy levels inversely related to the private return. However, this would mean that we more highly subsidise those courses which the labour market values less - so we would subsidise creative arts more heavily than, say, teaching. It does not seem sensible, though, to encourage students into courses with low returns.

It should also be noted that the absence of a real interest rate on income contingent loans automatically implies that those individuals who obtain a high private return receive a lower subsidy because they pay the loan back relatively quickly.

Should subsidy levels be related to the cost of delivery? This is problematic because there is no objective cost of a course (how big should classes be? Does there have to be a practicum component? Is the course being delivered in a regional area?) and there are myriad ways of delivery (reading courses are cheap, small class teaching is expensive). That said, there is little doubt that law is cheaper to teach than veterinary science. Mathematics is relatively cheap to teach but should it be subsidised less than science? Or should it be subsidised at the same rate as other courses which are cheap to teach such as arts or law?

I would also argue that it is futile to try to establish an objective cost of a course. If the cost of delivery is to be a factor in the funding model then it would be more sensible to obtain a general

consensus on what would be a reasonable cost of delivery. That is, leave it as a matter of judgment rather than seek some elusive ‘objective truth’.

Education markets

Competitive markets are often seen as a way of efficiently distributing resources, and achieving an equilibrium of supply and demand. However, market mechanisms are unlikely to be sensible in education for the simple reason that education markets are not normal markets. The main difficulty with education markets is that there is a wedge between the cost of supply and the price paid by consumers because of the substantial subsidies provided by government. When consumers don’t pay the full cost of the item then there will be a tendency to over consume. In this regard, what happened with demand led systems and the VET fee loans debacle is instructive. As noted by the Productivity Commission (page 47 of the Interim Report) the Victorian Training Guarantee for VET qualifications significantly expanded the number of places but was associated with major budget and quality concerns. The large number of private VET providers exacerbates the issues around the exploitation of government subsidies. The Grattan Institute put it very nicely:

“...taxpayer funding of for-profit entities to provide services at the behest of individual citizens inherently creates opportunities for poor outcomes, or even fraud that must be carefully managed”. Grattan Institute (2016).

I would also add that not-for-profit-providers-with-executives-on-very-large-salaries may also be vulnerable to the temptations offered by government subsidies.

A further issue with education markets is that it is not possible to ‘try before you buy’ or to inspect the product before consumption. It is only by undertaking a course is it possible to know what is being purchased. In addition, the returns from education are inherently risky, even if there is information on average historical returns. In this regard, the whole concept of income contingent loans arises because it is difficult to borrow commercially when returns are uncertain, and borrowers cannot use their human capital as collateral.

A further complication is that in areas such as nursing and teaching there is a link between education markets and the labour markets, with large scale government intervention in both markets. For example, we can make nursing more attractive by having no fees (although choice of field of study is very inelastic in regard to fees charged to students, especially with income contingent loans) or by paying nurses more. The former has implications for the education budget, while the latter impinges on the health budget.

For these reasons, we need to be very careful in adopting ‘market like’ mechanisms to promote efficiency in the delivery of education. We also need to think carefully about the role of the TAFEs as public institutions. Their role must go beyond that of being just a competitor in a quasi-market. TAFEs deserve to be thought of in a similar way to the public universities, as a core part of the tertiary education sector.

Choice between VET and higher education

There seems to be a general presumption that VET loses out to higher education because of its lower status and because VET does not have income contingent loans (apart from some diplomas). In this context, I would point out that higher education has a very large component of vocational education in any case; medicine, health, accounting, law, engineering and so on are all essentially vocational in nature.

One of the key points in Chapter 3 of the Interim Report is ‘expanding loan access for vocational education and training (VET) students at the Certificate III and IV levels would reduce barriers to participation and reduce distortions for students choosing between VET and higher education’. The idea that students choose between undertaking a Certificate III/IV and an undergraduate degree is very questionable. They are not substitutes and lead to very different career paths. The main issue with the low status of VET is not that the community thinks it is inferior but more that VET, especially at the certificate level, leads to lower status occupations. Income contingent loans for Certificates III/IV will not address the disadvantages that VET has in competing with higher education. Rather than focus on income contingent loans for VET, perhaps the commission should focus on the nature of VET itself.

In an uncertain world, with a pressing need for an adaptable workforce, we have a VET system that prepares people for narrowly based specific jobs with an emphasis on immediate job tasks. Surely it would be preferable to have a broad based curriculum underpinned by core skills that would prepare individuals for the vagaries of the future. Perhaps it is timely to question the concept of training packages with their narrow occupational specificity and weak assessment strategies. Reform in this area is more likely to promote VET as an alternative to higher education than any fiddling around with income contingent loans,

The main area where it makes sense to think of VET and higher education as alternatives is at the diploma and advanced diploma level, and only in certain areas. Overall, it is clear the degrees are supplanting VET diplomas, especially in the natural and physical sciences, information technology, engineering and related technologies, agriculture, environmental and related studies, health, society and culture and the creative arts. These are fields where the higher education sector over a period of time has expanded at the same time VET has contracted, and fields where governments have contracted VET diploma provision (see Karmel 2022). Two areas worth particular discussion are education and health. In the former VET diplomas have grown very substantially since 2013 and this is associated with changes to childcare and early education. Essentially it is the regulations that have been the force behind the growth. In the future it is not hard to envisage a degree becoming the desired qualification, and this would impact immediately on the demand for VET diplomas. In respect of health there has been modest growth in VET diplomas, associated with enrolled nursing and some non-mainstream health therapies, including massage. However, VET provision in health is very much at the margin with government undergraduate provision six times that of government funded VET diplomas (see Karmel 2022, Figure 3.6). We also note that the ATAR scores needed to enter higher education have been declining over the last 20 years suggesting that policy settings have been favouring higher education over VET. The provision of diplomas and advanced diplomas is one area where governments should ensure that policy settings do not favour one sector over the

other - we are talking here about level of subsidy, the distribution of government supported places and the provision of income contingent loans.

We should be wary, though, of flirting with the idea that government support for tertiary education should be universal. There are parts of the education market that work very effectively without government support. A good example is the provision of management and commerce diplomas in VET where the numbers of diploma commencements with no government funding are double the number with government funding (2020 data, see Karmel 2022 page 31).

Promoting competition – boosting learning outcomes for tertiary students

The Interim Report raises the issue of performance based funding or the provision of public information about course quality, with the aim of promoting competition in teaching.

I would warn that this is an area where great care is needed. There are two main issues. The first is the salience of metrics. For example, employment outcomes will depend on labour market conditions which impact on different institutions differentially. Similarly, high retention rates may indicate high levels of student support, high quality students or low standards. The issue is whether the metrics can bear what is expected from them. Indicators are useful devices but rarely constitute a firm foundation for the allocation of resources.

The second issue is a statistical one. We know that student characteristics play a very important part in determining outcomes. However, controlling for them is not straightforward and difficult to explain. Sample sizes are an issue even in large universities once we disaggregate by field of study. In VET almost all providers are too small for robust analysis. In addition, it will be the case that the differences between institutions will be small, once student characteristics are accounted for, and the majority of differences will be statistically insignificant. Such differences tend to be skated over when league tables are created (for example, there may be no real difference between the performance of the 10th best university and the 30th) or when performance based formulas are applied.

It should also be pointed out that in an uncapped system universities face an inherent incentive to promote high retention rates, because courses are generally 3 to 4 years long. No funding is received when students drop out. That said, this incentive largely disappears if university places are capped – in which case universities, from a financial point of view at least, are indifferent between a retained student or a new student. If caps were placed on recruiting new students rather than on total students then there would be a very direct incentive to promote completion of courses.

The one area which is worthy of attention is the creation of competition by promoting alternative providers. The Productivity Commission (page 79 of the Interim Report) - notes that 'recent regulatory changes allowing teaching-only 'university colleges' have opened the door to higher education providers that distinguish themselves on the basis of teaching excellence'. It remains to be seen what happens in this space but this provides an opportunity for some radical thinking on regulatory frameworks and funding structures. In particular, it could allow VET to reinvent itself, and offer a genuine alternative to the current set of universities.

Bruce Mackenzie and I have argued for a high level vocational approach as a genuine alternative to the more academic approach (with its emphasis on research) of universities (Karmel and Mackenzie 2022). If current trends continue, VET will be left as a provider of lower level training to meet short term industry needs. University education, with its emphasis on research and theory, will be the only game in town in the delivery of training for professional occupations.

This is in contrast with international practice where there is diversity in terms of the delivery of higher level education, with many examples of specialised, professional or practice orientated institutions which complement the research based universities. The grandes ecole in France, university colleges in Scandinavia, colleges of higher education in the UK and polytechnic universities in Italy and Spain come to mind.

If we wish to emulate these models, and to address the decline in Australia of practice based education, we need a new type of tertiary education institution which straddles the VET and higher education worlds. We are envisaging a tertiary institution, focused on teaching and practice, delivering VET certificates, diplomas and bachelor degrees. Ideally, there would be pathways from certificates to diplomas to degrees.

However, current structures are very unhelpful. The main problem is that Australia's tertiary education space is a dog's breakfast. It's as if VET comes from Mars and higher education from Venus. We have a fundamental confusion between qualifications and the institutions which deliver them. We have a qualification classification that separates VET and higher education. We have two regulatory bodies, with quite different ways of operating. We have funding arrangements which reflect history rather than logic. We have fee and loan arrangements which are all over the place.

So, when we argue a new type of tertiary institution, we are really arguing for coherence in the system to provide foundations for a variety of tertiary institutions. Reforms needed include:

- changes to the AQF so that it is agnostic in respect to whether a bachelors degree is VET or higher education;
- an amalgamation of TEQSA and ASQA so that accreditation and regulatory oversight of a tertiary provider is the responsibility of one body;
- a rebalancing of government funding such that the Commonwealth is responsible for supporting tertiary education at levels five and above (that is, diplomas and above) with States being responsible for Certificates I-IV;
- an emphasis within VET on general education so that a student had multiple options to both acquire technical skills and leave open the possibility of higher level study;
- a consolidation of statistical data such that we would have a complete picture of the activity of each provider.

Thus it would need a fundamental shift in philosophy and serious institutional reform to create an environment in which there is a genuine alternative to university education.

There are a number of reasons why this is worth arguing for.

The first is an educational one; there are numerous fields where a practice based training philosophy (as distinct from a theory based approach) is a good one and, arguably, will meet the needs of the labour market more effectively.

The second is a diversity argument. The so-called unified system in which colleges of advanced education morphed into universities, has led to a system where all universities aspire to become comprehensive research universities. Surely, some diversity, with strong institutions with a different focus, would be of benefit to the nation – and it would bring Australia in line with the practice in many countries.

The third is an efficiency argument. Teaching only institutions do not have the option of cross subsidising research with funds notionally allocated to teaching.

The fourth is an equity argument. While there is much rhetoric from the universities concerning equity, it is unarguable that VET has a broader reach than universities in terms of students' age, educational background, social and cultural backgrounds. And it would be VET, with its emphasis on training for the labour market, which would underpin the new type of tertiary institution.

Thus, there are very good reasons for VET to embrace bachelor degrees as a key element of vocational education, so that we can create a genuine competitor for universities. We need to rejuvenate vocational education so that there is a direct pathway into higher education. We need applied universities that offer qualifications from lower level VET qualifications to bachelors and applied masters degrees. The most obvious way forward is to assist some of the TAFEs – the largest and most comprehensive providers – to make the transition from VET provider to applied university.

But this can only happen if there is real political support for the concept of an applied university and the will to reform regulatory and funding arrangements.

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