

**Submission
No 40**

**INQUIRY INTO FUTURE DEVELOPMENT OF THE NSW
TERTIARY EDUCATION SECTOR**

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**NSW Legislative Council Inquiry into the future
development of the NSW tertiary education sector**

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(Based heavily on a document prepared for

Productivity Commission – Interim Report –

**National Agreement on Skills and Workforce Development
Review)**

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The nature and overview of this submission

On 17 July 2020 I met with the two Productivity Commissioners and their research team by zoom. I shared with them my insights on key issues they raised in their Interim Report on the National Skills and Workforce Development Agreement. Prior to the meeting I tabled an initial statement to help guide discussions. At the end of the session I was asked if I would be interested in submitting a more detailed submission. This document has been prepared in response to that query.

I would have liked to have produced an extended response to the interim report. Due to time and resource constraints I have only been able to produce a short document. The aim has been to highlight what the Commission neglected in its Interim report: the problem of quality in the current vocational education system.

In this submission I provide a guide to relevant material and outline some specific suggestions as to the kind of changes it could propose to improve the situation. As matters stand, the Commission's report not only neglects many of the key problems in the Vocational Education system, it neglects key developments in modern economics (and related scholarship) and especially as they concern vocational education. Consideration of this literature highlights the need to re-prioritise the significance of some reforms proposed by the Commission. In particular: the concerns with increasing consistency in pricing and incentives are second order issues when the system lacks an effective anchor for quality; the vocational teaching workforce is of highly variable quality; and the relevance and rigour of the curriculum in the system need to be dramatically improved.

In the last section I provide brief answers to a number of the specific questions raised by the Commission.

I have also forwarded a copy of this submission to the NSW Legislative council Inquiry. . I'm sorry I've not had time to produce a custom made submission for that inquiry. That said, the bulk of what I've prepared is highly relevant to that inquiry. There can be no effective policy on the future of tertiary education in NSW without doing something effective to solve key design problems as the heart of vocational education and training in Australia today. Unless these problems are solved even more pressure will be placed on a university sector already struggling with a host of problems. My great concern is that if the problems identified in this submission are not addressed along the lines I propose we will see the eventual withering away of vocational education as we know it, and universities expanding to try to make up for the gap in our system of education and workforce development. This is will not be good for either employers currently relying on the vocational education system or for universities. It will be particularly bad for citizens who are curious about the world and want to learn more – but who are not academically inclined.

Do not hesitate in contacting me if you require more information.

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2 September 2020

Executive summary and recommendations

Getting the questions right: learn from Australia's response to COVID 19 (Section 1)

If Australia's health system had been reformed along the lines outlined by the Commission in the years leading up to COVID 19 crisis, Australia would look much like the contemporary USA: uncontrolled infections growth and a system incapable of meeting the challenge. A so-called 'industry led', fragmented system would have run down deep expertise needed to handle the challenge and prioritised the interests of business (ie resisting of shutdowns). In thinking about how best to improve the design and operation of our system of vocational education and training we have much to learn from the health system. This concerns both how it has worked well and how it has failed in the current crisis. Problems in outsourcing key functions like quarantine security and aged care to 'for profit providers' sends a very clear warning concerning how not to organise critical social services. (Section 1 provides more details)

Understanding the key problems: quality and employer disengagement (Section 2)

Problems in Australia's vocational education system have been systemic and longstanding. Most of these problems date from the 1990s with the shift to the so-called training market model. The central problem has been the declining quality and standing of the system. The VET-FEE Help debacle was merely the starkest example. It is surprising the Commission devotes so little attention to examining the nature of this critical incident and the evidence it generated of systemic flaws in the system. The other key issue neglected by the Commission has been the collapse of employers' contribution to vocational education and training in the last 15 years. ABS data reveal that in 2005 35.9 percent of workers received work related training provided by their employers in the previous 12 months. By 2016/17 the proportion had fallen to 21.5 percent. While the Commission does note imperfections in current arrangements it has missed these two issues. (Section 2 provides more details).

Priorities for reform: better anchors for quality are needed, pricing reform must support (and cannot drive) this process. (Section 3)

The Commission devotes considerable time to the issue of pricing and incentive reform. This is a second order issue. Modern economic analysis has drawn attention to the need to take seriously matters such as the importance of developing human capability, complexities associated with information as an economic variable and social opportunity costs in designing institutional arrangements. Little of this thinking appears to have informed the Commission's analysis. If it had, the concern with pricing reform would be relegated to a second order initiative designed to support, not drive, change. Instead, more attention needs to be devoted to the following matters critical to improving quality

- *Establishing an anchor for quality.* That is, reconstruct public and not-for-profit vocational education and training institutions so they become strong and respected fly wheels of quality for the system
- *Raising standards for vocational education teachers.* Any system of education is only as strong as its teachers. There is a need to reconstruct teaching as a profession. And that does not just mean full time career teachers. Important work remains to be done on how to harness the expertise of many skilled workers interested in passing on their knowledge – systematically – to others.
- *Deepening adaptive capacity in the workforce.* The content of vocational education is backward looking, based as it is on competencies of current and past jobs. Curriculum

reform needs to be directed at nurturing domains of expertise relevant to equipping people with the capacity to adapt to an uncertain future. (Section 3 provides more details on these matters.)

- *The need for realism when designing reforms.* Effective, enduring change takes time. For example, the health system took over 5 years to devise effective pricing arrangements for training in hospitals. The challenges for vocational education and training are larger in scale and more complex. We need to be mindful of the need for adequate time to work through and implement effective reforms.

Additional matters (Section 4)

- ***Moving to a unified tertiary system under Commonwealth government control has many, many risks.*** Although it is a fashionable idea in some circles, the Commission should be sceptical. The Commonwealth government could not even run a student loan scheme competently – why is it assumed they could do any better if they took over the whole system? Moreover, the underlying quality of vocational education and training needs to be improved before any close integration with the universities can be contemplated.
- ***Nurturing system coherence and innovation requires creative power sharing.*** Skills have important social and political – as well as technical dimensions. Any effective system needs to effectively manage these complex social, political and technical forces. Power sharing amongst a wide range of employers, unions and educators – facilitated by competent government agencies - is needed to achieve this. The experience of Skills Australia offers useful lessons to reflect on – as does the experience of countries recognised as having vocational education systems that are effective and respected (eg Germany, Denmark, Norway, Switzerland and Austria).
- ***Skills planning requires building adaptability – not more forecasts.*** The key issue here is not so much planning the workforce of the future – but rather planning for workforce development. That is, nurturing adaptive capacity. We can never be certain about what specific skills are needed – but we have a choice in how well we prepare people to be adaptable. This capability is best built in mastering particular domains of expertise. The challenge is to define these domains and educate people in them in ways that allow them to draw out the more transferable qualities (like problem solving and collaboration) that can be applied in other settings.
- ***Engaging employers – the training guarantee of the 1990s showed us how to reward good practice and make laggards pay.*** Not every hospital is a teaching hospital. Equally, not every workplace is a teaching workplace. If we want to see a quantum leap in the scale and quality of vocational education we will need to build up a network of such workplaces. And they need to be supported by a training levy. Useful lesson can be gained from Australia's highly successful experiment with the Training Guarantee of the early 1990s. Those that did not provide structured on-the-job training paid an extra 2.5 percent tax.

Conclusion

In recent public statements the Prime Minister and the Treasurer have indicated that they wish to take lessons from Australia's health system to guide reforms in vocational education. Most commonly this refers to the successful work concerning uniform pricing associated with activity-based funding (ABF). Great care needs to be exercised when referring to this precedent. ABF only works well in health because it operates in an elaborate system of quality control. An overview of that system is summarised in Section 1. Uniform pricing works within – and does not define – the health system. Pricing and subsidy reform need to play the same role in vocational education. We

need first to establish the pre-conditions for quality before getting too preoccupied with issues of pricing. And central to quality is a revitalised TAFE, a strong vocational education profession (of full timers and practice-based adjuncts) and a future focused curriculum, not one constrained by the backward looking competencies of yesterday. Finally, the complexity of effective pricing needs to be recognised. Pricing reform for teaching and training in the hospital system took the Independent Hospital Pricing Authority over five years to complete. Action directed at improving quality in the vocational education system can commence immediately and arrest the decline in quality. Proper pricing reform in vocational education cannot provide a short cut to achieving rapid, necessary change. If it is to be treated in this way this needs to be openly acknowledged to ensure full transparency as to what is being done to this sector.

Recommendation are provided on the next page.

Recommendations for priority work

1. Devising nationally consistent uniform prices and incentives for vocational education should be regarded as a supportive, not defining reform

Work on devising nationally consistent prices for vocational education qualifications and services should continue but must be regarded as supporting – not defining – reform.

The pricing arrangements should support reform in the following three areas.

2. Threshold reform reforms

2.1 : Reconstructing institutional capacity – especially TAFE - as an anchor for the system.

Adopt the principle of TAFE as anchor for quality in the system. Specific recommendations

- 70% public funds to TAFE
- Remainder only to be open to non-profit educators
- Clear infrastructure pre-conditions– physical and organisational – will need to be met before any non-government provider is funded.

2.2 Reconstructing vocational education teaching capacity

Raise the standards expected of, and support provided to, vocational education teachers.

Financial support to be provided to ensure that a strong contingent of expert practitioners in the trades and professions is properly trained and supported to become adjunct educators to work within the TAFE and non-profit vocational education sector.

2.3 Threshold Reform 3: reconstructing the curriculum for vocational education

Rationalise Training packages, especially their domains of coverage:

- Change needs to be evidence based – analysis of job clusters and inter-occupational labour flows should inform training package coverage
- Text analytics can be used to cluster-related competencies currently shared across various training packages. In this way commonalities in skills clusters currently not recognised in structure of qualifications can be identified.
- Identify relevant underpinning knowledge
- Work with Fair Work Commission and build on the award rationalisation process to achieve an inclusive, but effective, rationalisation process.

3 The need for realism about achieving effective change: uniform pricing and payments reform is likely to take longer to finalise than implementing Threshold reforms 1 – 3 above

Finalising uniform pricing arrangements for teaching and training arrangements in the hospital system took five years to complete.

In advising on processes for pricing models for vocational education the Commission should express strong concern about the arbitrary nature of price setting policy in the higher education sector and note that proper pricing policies take time to devise and implement. The IHPA experience with Training and Teaching in hospitals provides an excellent model to follow.

Section 1

Revitalising vocational education and post-pandemic reconstruction: lessons from Australia's response to the COVID 19 crisis.

The Productivity Commission has outlined its initial findings on how to improve vocational education and training. Their ideas have been echoed by the Prime Minister and the Treasurer in recent press club speeches. The prescriptions are essentially the same as those pursued actively since the early 1990s – more competition, in this case nurtured by better 'national consistent pricing for vocational education and training (VET) courses.' (Morrison 2020) It is time we recognised the 30 year experiment with markets in VET has failed. Instead, we should engage with reality and build on the best of practical approaches to vocational education that actually work. Practical proposals on how this can be done are provided by the experiences of our health system and how it has enabled us to manage the COVID 19 crisis well so far.

The road not taken: business led, market based response to the COVID 19 crisis

It worth starting our analysis with a simple vision: what the world would be like today if the Productivity Commission's recommendation for VET had been the basis of 'reforming' our health system in recent decades? In the years leading up the crisis critical masses of expertise would have been 'defunded' and the money put out to 'competitive tender' to the cheapest bidder with qualifications in educating health workers. Such workers would have been 'credentialled competent' on the basis of qualifications acquired in as little time as a weekend. In defining priorities, 'industry needs' would have prevailed and the economy 'opened up for business' quickly. Based on US, UK and Swedish experience, thousands, most likely tens of thousands, of Australians would have died. And the end result would have been prolonging the extended public health crisis. Thankfully in Australia health considerations drove the strategy. This was not blind adherence to the health fraternity. Serious account was given to managing our market economy appropriately. This is as it should be in vocational education too. Issues of education and skills quality required for longer term development and flourishing should provide the framework for then taking account of how best to manage the economy appropriately to sustain this. As William Beveridge noted early last century: the market is a good servant but poor master. Australia has not forgotten that insight when it comes to health. We need to rediscover it when it comes to vocational education.

The PCs interim report: tired analysis, dangerous prescriptions

The PC's interim report represents an extraordinary example of a missed opportunity. In its work on disability and on health it has shown an ability to grapple with complex social and economic issues and come up with creative ideas on how to move forward. These qualities are all but absent in this Interim Report. There are some useful elements. Suggestions for improving information provision are always welcome. Raising questions about the potential for industry levies is also long overdue. Most disappointing, however, has been the Commission's failure to reflect on key critical incidents – especially those associated with the VET Fee Help debacle. There is no sustained analysis of this in the report. Bland assertions that it reflected problems in implementation of a sound policy miss these key points:

- The reports were only finally addressed after journalists (lead by those in the Australian Financial Review) over many many months pursued the issue
- The capital markets intervened, and the share price of several private providers collapsed. ASIC, in following up on these matters, could not believe what it found.

Given the Commission's interest in regulatory reform I am surprised they have not sought insight from the regulator of capital markets and what they think of the VET market and its regulators. I will provide a brief assessment of the PC report in two simple sections. Most of this submission refers to what should be done to turn the situation around.

(a) The analysis – getting the questions wrong

Most of the PC report is essentially an analysis conducted along the lines of answering two questions: How is the VET market working? And how can this market be improved? These are the wrong questions. The terms of reference (especially the first one) invites consideration of the 'ongoing suitability' of current objectives. This issue receives no serious consideration.

Anyone with any knowledge of the sector in Australia knows the key issue requiring analysis is quality. Devoting four pages out of 13 to recommendations on pricing and incentives – and making this the centre-piece for 'reform' - completely misses the point: what is the use of having 'correct prices' if the 'product' is flawed? It is very unfortunate the Prime Minister and the Treasurer appear to be pursuing this priority in VET as well.

(b) The prescriptions – 'make the market work'.

Given the highly partial and narrowly focused analysis it is no surprise the suggestions for reform are so predictable. Putting more faith in centralised, deficient agencies like the Australian Skills Quality Agency represents the triumph of hope over experience. And expecting more credible flexibility in qualifications development by devolving this responsibility to the Industry Skills Councils is naïve in the extreme. How many industry players in Australia actually respect the ISC? Indeed, how many actually know they exist? Some evidence on this point would be useful.

If we want a better system of vocational education we need to get the fundamentals right. And the most fundamental thing is quality. Quality Assurance (QA) is not a dot point on a 'to do' list. The issue of quality is a precondition to engaging with current realities. Without engaging with this the PC report will represent another tired effort by advocates for the training market to try yet again to implement a system with inherent design flaws – from inception to execution. It is time to make a call. The experiment with the training market has failed. We need instead to engage with reality and build a vocational education system worth having.

What could be done?

Getting to a better place: lessons from our health system and the response to COVID 19.

The saddest aspect of the PC's analysis is its total inability to learn from relevant Australian experience. To the extent the current VET system works at all it is because of the legacies of the pre-training market era institutions, especially the integrated network of trade training and TAFEs. Lessons on how pre-existing legacies such as these could be revitalised are provided by reflecting on the success of Australia's world class health system.

- (a) **Getting the questions right.** The key question is not how do we get a 'training market' to work better to deliver 'employment outcomes'. Rather, the key question is how to create educated citizens who flourish as individuals and have the capacity to adapt rapidly to changing economic circumstances? In the COVID 19 crisis the question concerned putting concerns of life above those of immediate economic achievement. Markets have been disciplined. This has been difficult – but vital. The same will be necessary for the revival of vocational education.

(b) **Getting lessons from appropriate experiences.** The PC's reference point is a highly stylised vision of market efficiency. This is an unhelpful starting point. Education – especially vocational education – is a complex matter. It is much like health. It is a domain of services where the quality of service can be highly variable. Quality control in health is not delivered by 'the market'. It is assured by an array of inter-locking institutions:

- **At the core of these are professions.** They define and develop expertise. This expertise is reproduced and evolves over time – often very rapidly – through the interaction of practitioners in the field and education institutions. Arrangements similar to this also exist in the trades- like those training carpenters, electricians, chefs, butchers and hairdressers. This needs to be recognised and supported in vocational education.
- **The anchor for quality control and the development of the deepest expertise is a network of public teaching hospitals.** These provide the flywheel for coherent quality as sites where research, education and service provision are integrated for the mutual development of each domain. Historically, TAFE played an equivalent role in vocational education.
- **Hospitals are supported by an extensive network of general practices** – at their best multi-disciplinary sites of doctors, nurses, psychologists, social workers and the like. Most of these are publicly funded but privately operated. A network of quality work sites could play the same role in revitalising vocational education.
- **Public health at large is nurtured by deep epidemiological expertise.** These professionals provide analytical capacity to track, anticipate and help guide responses to public health challenges. They are as concerned with adaptive and redundant capacity as with immediate need. This capability is totally absent in our skills system.
- **Finally there is the tradition of power sharing in coordinating the system.** In the recent pandemic we've witnessed the revival of an earlier tradition of active national level collaboration. This was the hallmark of Australia's world class response to AIDS in the 1980s. At that time there was the bi-partisan, multi-stakeholder Australian National Council on AIDS. This time around with COVID 19 we've seen the emergence of the National Cabinet. The federal government hasn't led us through the current crisis – it has been pluralist, inclusive leadership – again – that has succeeded. No such arrangements oversee our system of vocational education.

Yes, there are markets and market forces in health - but they play a secondary role. As noted above, William Beveridge made the simple but profound observation: markets are good servants but poor masters. To the extent markets work in health it is because they are servants supporting a wider system of accountability. The high costs and poor outcomes of a health system in which markets rule have been evident for decades in the USA – and their highly inferior functioning coupled with no effective power sharing has resulted in the mass carnage unfolding in the US pandemic today.

When thinking about vocational reform we should, as the Prime Minister noted in his Press Club speech on 25 May, be taking the experiences of health as our reference point. He mentioned matters like activity based funding and the national hospitals and health

agreement as models. These initiatives, to the extent they've worked, have only succeeded because of the broader interlocking network of institutions in which they are embedded.

What does this mean for improving vocational education in Australia today?

Revitalising Australian vocational education: some practical suggestions

It is very clear that the last thing we need is to be preoccupied with having yet another go at making the sector operate on market principles. Focusing on the issue of national consistent pricing is, frankly, a secondorder issue. There is a role for markets – but as servants not masters of our skills system. If they are to help, priority attention needs to be devoted to revitalising and augmenting an interlocking set of institutions to put quality at the core of the system. Taking the lead from the example of health, the following are the crucial matters requiring attention:

- ***Clarifying domains of expertise and associated communities of trust.*** The professions in the health system have emerged and matured over many decades. The nucleus of a similar set of arrangements exists in the system of trades training. It has many strengths – but needs augmentation and extending. Most trades are traditional male occupations. Historically they have been narrowly defined. Research I and others have done has highlighted the importance of identifying and supporting skills development for clusters of jobs – what we call vocational streams. For example, people rarely work just as care workers all their lives. They often flow between care, clerical and customer service work. Building expertise in these three areas would ensure modern intermediate level service workers have the capacity to adapt rapidly as demand for different types of service work change. We've identified similar vocational streams in rural and urban operations work. This is work that covers many strands of intermediate blue-collar occupations.
- ***Quality control for skills needs an anchor: TAFE.*** In health the anchor of quality is public hospitals. Vocational education covers all realms of economic life. The anchor should be TAFE. This is a national network and encompasses critical masses of expertise. To date it has been progressively run down and not adequately funded to do its job properly.
- ***The quality of workplaces as sites of learning needs to be dramatically lifted.*** TAFE alone cannot provide the anchor for skills quality. It also needs to be supported by a network of associated 'teaching workplaces'. Just as every hospital is not a teaching hospital – neither is every workplace ever likely to be a teaching workplace. Building such a network of work sites – supported by a properly funded VET system - would be a game changer in vocational education
- ***We need planning for workforce development – not 'skills planning'.*** Every year public officials and employer organisations complain there is no proper skills planning and that VET does not deliver the skills 'industry needs'. If skills planning was as easy as commentators regularly lament the so-called skills planning problem would have been solved long ago. Health planners think about the problem very differently. They look at underlying challenges and build adaptive and redundant capacity into their systems. These are ideas that need to inform vocational education. What are the underlying domains of capability we should be developing that nurture adaptive capacity? Asking,

let alone answering, this question is simply not possible in our current competency based, training market-based VET system. This is because it is a system based around backward looking competencies and pre-occupation with meeting short run 'industry' needs.

- ***The crucial role of power sharing and collaboration for an effective skills system.*** This paper started with the image of what Australia's response to COVID 19 would have been like if it was 'industry led'. The same applies in vocational education. Yes businesses are entitled to have their views heard. But they are not the only show in town. Employers tend to be very short-term focused. Workers have a longer-term interest in occupational mobility. This requirement is often different to the immediate requirements of employers. And educators have an additional perspective again. The challenges of defining course content (ie curriculum) and practices of imparting new capabilities (ie pedagogy) are serious and require professional (ie teaching) skills. We need arrangements to harness each of these interests. From 2009 – 2014 Skills Australia provided a promising model of how this could be done. We need to learn from this experience.

We hear a lot about the need for more industry leadership and a more market responsive system in vocational education. These have been the defining principles for VET reform since the 1990s. They have not worked in Australia – and they have not worked anywhere else. Any serious policy researcher interested in understanding how to build a quality vocational education system only studies the US or the UK systems for marginal insight on – and understanding of - what not to do. The VET systems in those countries have been like their health systems: genuinely incapable of meeting the most pressing challenge of our times. We did not follow them in health (thankfully) – we should not try to follow them in vocational education.

In the late nineteenth century the world economy experienced a deep recession. Across the world different set of institutional arrangements emerged in response to the crisis across the various nations. In the USA the crisis and the subsequent model of economic development killed off what was left of its trades training system. Australia built a different path. At that time our trades training system was on the ropes too. But out of the crisis serious investments were made in what, at the time, was called 'Technical Education' to lift trade training quality and conciliation and arbitration was instituted in labour relations to lift job quality. Both underpinned the emergence of a trades skills regime that went on to become the envy of the English-speaking world for much of the twentieth century.

We have a similar choice today. We can follow US and UK 'market' inspired models or we can find our own way building and upgrading the best of local traditions. The experience of the COVID 19 crisis has shown what happens when industry concerns and systems preoccupied with issues of market design are in the ascendancy. To date Australia has done exceptionally well based on the deep traditions inscribed in its health system. It is now time for us to draw on these traditions when thinking through how to build a vocational education system appropriate for these and future times.

Section 2 – The two critical problems requiring attention – a guide to the evidence

2.1 Problems with quality and their roots in key design features of the current Australian system of vocational education and training.

In recent years there has been a growing recognition of problems with quality in the Australian vocational education and training system. The largest in scale was the VET FEE Help debacle. Transformation of funding models designed to open up competition in the provision of VET services (facilitated by competency-based training) resulted in financial scandals – with a third of government student “loans not delivering quality education outcomes” (Bitá, 2016). This was only the latest in a long and growing line of problems. (For further documentation of the scale and diversity of the problem see the following material: Wheelahan et al 2018: 12 – 14 and Wheelahan 2012, Australian Skills Quality Authority 2013a, 2013b, 2013c, 2015, 2016, Yu and Oliver 2015)

Are problems in Australia’s competency-based training regime: Legacies of poor implementation or design flaws?¹

It is now increasingly recognized that there are deep problems in vocational education systems built around the Anglo-Australasian model of performance-based work tasks or skills standards – more commonly referred to as competency-based training systems. The key problems in Australia arise from:

- Fragmentation and the seemingly endless growth in the number of vocational education and training (VET) qualifications (currently 1,472 in Australia alone).
- Poor connections between VET qualification and the labour market. (In Australian agriculture between 2005 and 2015, there were, on average, 330,000 workers employed at any one time,² average VET enrolments were 85,000 per annum but only 160,000 completions.³ Over this entire period, however, VET educational attainment hovered at about 30 per cent of the agricultural workforce.⁴ Flow data reveal there was no serious vertical promotion flows in the sector during this period.⁵ In short, there was a huge amount of training but little lasting improvement in the sector’s skills profile.)

Most important of all has been failure of the system on its own terms. Collectively, all Australian governments – state, territory and federal – have endeavoured to lift the levels of VET qualifications. Between 2003/04 and 2012/13, annual funding for the sector rose 15 per cent (or just less than AUS\$1billion) (Noonan et al., 2015).⁶ By 2015, however, the Council of Australian Governments noted that on its three chosen benchmarks for monitoring policy success, two were not on track to being reached and one was actually getting worse (table A1).

¹ The rest of section 2.1 has been taken from the Annex to Buchanan, J, Wheelahan, L and Yu, S (2018)

² See National Farmers Federation for the National Agribusiness Education, Skills and Labour Taskforce, National Agriculture Workforce Development Plan, www.nff.org.au/get/submissions/4624.pdf (accessed 1 Oct. 2017).

³ The average of annual enrolments and report on completions. Most Certificate III and below courses take two years or fewer to complete. It can be conservatively estimated that at least 300,000 students commenced agricultural-related qualifications during this period. See Agrifood Skills Australia, 2014, <http://www.fas.org.au/wp-content/uploads/2016/04/ESCAN2014.pdf> (accessed 1 Oct. 2017).

⁴ The top figure in each cell is the proportion of employees in the industry with diplomas, advanced diplomas and Certificates I–IV. The figure in brackets in each cell includes employees whose highest qualification is either a bachelor’s, graduate diploma/certificate or a post-graduate degree (see <http://www.abs.gov.au/ausstats/abs@.nsf/mf/6227.0/> (accessed 1 Oct. 2017)).

⁵ See Yu et al., 2012.

⁶ With the incoming coalition government federally in 2013, annual funding increases for VET declined. Between 2003/04 and 2013/14, it only increased by 5 per cent (Noonan et al., 2015).

Table A1. Summary of national vocational education and training performance against national agreement benchmarks of the Council of Australian Governments, 2016

| | | | |
|---|-------------------------------------|-------------------------------------|------------------------|
| Benchmark: Halve the proportion of Australians nationally aged 20–64 without qualifications at Certificate III level and above between 2009 and 2020 | 47.1% (2009) | 42.5% (2014) | Not on track |
| Benchmark: Double the number of higher-level qualification completions (diploma and advanced diploma) nationally between 2009 and 2020 | 53 974 completions (2009) | 74 091 completions (2014) | Not on track |
| Indicator: Proportion of VET graduates with improved employment status after training | 67.6% (2008) | 59.7% (2014) | Negative change |

Source: Council of Australian Governments, 2016, p 7. See also pp. 14–18.

Among some custodians of current arrangements in places like Australia it is commonly asserted the problems merely concern implementation – they are not the legacy of inherent design flaws. This sentiment is understandable but wrong. It is a habit of thought common among those unwilling to engage with reality. One of the most extreme examples of the destructive consequences of such a sentiment comes from China in the mid-twentieth century. In the second half of the 1950s, China was subjected to the radical Great Leap Forward experiment in economic and social reform. As a result, the Chinese Communist Party now admits, 17 million people died of famine. Undeterred by manifest failure, the policy's chief architect, Communist Party Secretary Mao Zedong, diagnosed the problem as poor implementation of an essentially sound initiative. He then unleashed the Cultural Revolution to break the power of bureaucrats who stood, he alleged, in the way of success.⁷ While the costs have not been as severe, in Australia we are at a similar stage in the VET policy reform as China was in the early 1960s in policy more generally. We can either recognize that, after 30 years of ongoing reform, the Australian VET model has serious systemic flaws. Or, like Chairman Mao in the early 1960s, we can arrogantly assert that it is just a problem of implementation.

For more than three decades, a number of Australian researchers have been carefully analysing the unfolding situation concerning vocational education in Australia. These researchers have noted that the dominant VET narrative has its roots in a simple-minded version of human capital theory, a narrow and instrumental view of education and a formal notion of how wider social agents (especially employers) are involved in vocational development at the workplace and beyond (Oliver, Yu and Buchanan, 2019). The emerging alternative draws on Sen's and Nussbaum's capabilities approach to public policy in general and education and working life in particular (Wheelahan and Moodie, 2011a; Nussbaum, 2000; Sen, 1999). The analysis of the labour markets builds on the neoclassical realist (Kaufman, 1988), institutionalist, labour market segmentation and societal effects traditions in analysing work (Marsden, 1999; Botwinick, 1994; Maurice et al., 1986) and approaches to education, which recognize the importance of engaging with the complexities and subtleties of transmitting skills and knowledge (especially associated with the psychology, philosophy and sociology of education (Buchanan et al., 2018; Wheelahan, 2010)). The implications of these different approaches for designing a system of vocational education are summarized in table A2.

⁷ A concise overview of recent Chinese history on this point is provided in Mitter, 2008, pp. 55–65. A more extended account is provided in Spence, 1999, pp. 544–587. A summary of the costs of the Great Leap Forward and the Communist Party's admission of 17 million death are provided in McGregor, 2010, pp. 229–263. A detailed account of the actual processes involved and the costs in terms of human lives is provided in Yang Jisheng, 2012. The latter estimates the costs in lives to approximately twice as large as those admitted by the Chinese Communist Party.

Table A2. Different approaches to understanding and reforming systems of vocational education: Implications for system design

| Aspect of system | Different approaches to understanding and reforming vocational education and development. | |
|--|--|---|
| | VET model based on competency-based training | Capabilities approach based around notions of coherent underpinning knowledge |
| Objectives | High-functioning labour. | Productive, flourishing citizens. |
| Reference point for the defining categories of skill | Current jobs. | Capabilities to adapt to changing circumstances. |
| Basis of quality control | Low trust, centrally controlled outcome standards. | High trust arrangements with high barriers to entry based on demonstrated ability to deliver high-quality education. |
| Understanding of “industry” and its role in education | Assumed symmetry between workplace and classroom learning. | Need carefully crafted connections between underpinning knowledge (usually learned away from the place of work) and practice in the workplace. |
| | Assume peak employer bodies = industry will define the education content of the system. | Workplace and local employer experts and leaders as well as officials of employer organizations have a crucial role – along with unions and educators – in defining “industry-relevant” education content. |
| The role of institutions and funding arrangements | Education is assumed to be a commodity for sale. | Education quality is dependent on having institutions that enjoy respect and credibility among all relevant stakeholders. As the quintessential public good, public funds are needed for their provision. This support should go to a limited number of quality institutions that provide an anchor for standards in both the education (especially curriculum and pedagogy) and the labour market. |
| | Funding models designed to support any provider who meets centrally determined standards for output quality. | |

The problems arising from the training market based on the competency-based training model of system design summarized above have not arisen because of poor implementation of an essentially sound system. Rather, they have arisen from a system that has narrow objectives (instrumental training for current jobs), a low trust system of strict but ineffectual quality control directed at outcomes alone that is based on engagement with industry that is more stylized than substantive. Most importantly, there is no substantive institutional basis for education and skills quality. This system is anchored around formal compliance with fragmented units of competence – not coherent ensembles of skill that define people’s substantive capacity to adapt to changing circumstances. These design weaknesses need to be recognized and not glossed over in the name of better implementation. As the Chinese found in the 1960s and 1970s, going faster down the wrong road did not solve problems – it merely intensified them.

2.2 Declining employer contribution to education and training

Vocational education, by definition, is of central interest to employers – and its success depends on their engagement with the system. A key fact that the Commission should pay significant attention to is employers' contribution to workforce development. The table below summarises data from the ABS. While employer bodies constantly complain of skills shortages and lament the alleged poor 'job readiness' of new graduates, it is clear they themselves have been walking away from contributing to the nation's education and training effort. ABS data reveal that in 2005 35.9 percent of workers received work related training provided by their employers in the previous 12 months. By 2016/17 the proportion had fallen to 21.5 percent.

Formal and/or non-formal learning, Australia, 2005, 2013, 2016/17

| | 2005 (%) | 2013 (%) | 2016/17 (%) | Change 2005 – 2016/17 (%) |
|--|-------------|-------------|----------------|------------------------------|
| Formal learning | 18.5 | 21.6 | 21.0 | -0.6* |
| Non-formal learning | 37.9 | 32.1 | 25.5 | -12.4 |
| Work related training (employer provided) | 35.9 | 26.9 | 21.5 | -14.4 |
| Personal interest learning | Na | 8.4 | 6.1 | |
| | | | | |
| Total (ie any formal or informal learning) | 48.9 | 46.4 | 40.9 | -8.0 |

Source: ABS, *Work-Related Training and Adult Learning, Australia, 2016/17* Cat No 4234.0

While the Commission does note imperfections in current arrangements it has missed these two issues.

Part 3

Improving vocational education in Australia today: where do we start?

Section 1 provide an outline of the key issues at stake, and in particular noted the importance of grasping what elements of a quality system of vocational education in contemporary Australia would look like. Section 2 provided some very basic, but powerful, evidence of the key issues needing to be addressed and which have, to date, been overlooked by the Productivity Commission. In this section I outline the matters that require priority attention.

How are priority matters to be determined? Policy ideas combine a concern with values (ie. what do we want as an ethical preference?) and appreciation of what is possible (ie. insight gained by analysis). The Commission's report is relatively silent on the question of values, noting briefly the preference of Australian governments for a vocational education that supports employment and output growth. It asserts that, 'this general link is not, per se, a sufficient argument for government interventions to increase vocational skill formation.' (PC 2020: 112) It then asserts that 'Private parties, such as students and employers, have strong incentives to invest in education so public investment many not always be necessary.' (PC 2020:112). On the following pages it then sets up a list of very specific potential rationales for government intervention and notes that an array of instruments can used to address different issues. The instruments range from subsidies, to information provision, tax arrangements, labour market regulation and 'development of a competitive market to put downward pressure on prices.' (PC 113). Most of the rest of the report then deals with course funding (Chapter 4), subsidies (Chapter 5) and loans (Chapter 6).

In conducting its analysis, the Commission has demonstrated a very disappointing lack of engagement with most of the key economic literature relative to this topic. This includes the now vast international comparative literature on the political economy of skills and skill formation undertaken by both scholarly (eg Oliver et al 2019 for an overview) and policy researchers (eg OECD 2020, especially Chapter 5). The neglect of a concern with quality is clearly evident in the Commission's total failure to engage with the modern economics of information (see for example Stiglitz's classic of 1987 and summary in Stiglitz 2001). Sen's work on human capability is also highly relevant to this domain – as work by Leesa Wheelahan and myself for over a decade now has established (see for example Wheelahan et al 2015 building on Sen 1999). Most striking of all has been the Commission's neglect of that strand of economics dealing with social opportunity costs (eg Quiggin 2019). The key issue about all these literatures is that they take a domain like vocational education and engage with the specificity of its complexities. Those complexities involve very intricate problems of information asymmetries, deep inequalities in initial endowments and the complexity of the service of interest, namely acculturation and transmission of skills at the level of whole populations and sub-populations – as well as for 'private parties, such as students and employers.'

Time does not permit to me to highlight what all these literatures can contribute to evaluating the National Agreement on Skills and Workforce Development. Most of the references cited in the previous paragraph are accessible enough for the interested reader to draw that out for themselves. I will, however, devote special attention to highlighting the relevance of recent work on the economics of social opportunity costs – especially the work of Professor John Quiggin. I do this because he addresses head-on the inadequacy of focusing prime attention on the price dimension of social relations as the hallmark to understanding and designing policy to shape the domain of education.

(a) Reforming prices and incentives: a second order issue

The Productivity Commission devotes considerable attention to the issue of improving consistency in the pricing for VET products and incentives (see, for example, pages 40 – 44 of recommendations). What is the role of price and incentive reform in any program directed at the improvement of vocational education?

There is no doubt there are anomalies in how vocational education and training qualifications are priced and how incentives associated with things like apprenticeship are designed. Given the other issues characterising the sector – especially the fundamental problems of quality - one is tempted to ask: so what? Quiggin has reflected on this matter as part of broader analysis of how to design effective policies in a mixed economy. His insights are worth considering at length.

His commences his analysis of education by noting that it is

... in many respects similar to other industries. Prices send signals about the cost of providing particular courses of study in particular ways, and of the rewards of one kind of employment or another. Institutions and educators respond to those signals. Students try to weigh the costs and the likely monetary benefits of continuing education, or of seeking employment, along with the less tangible costs and benefits, and decide accordingly. (Quiggin 2016)

Prices, however, are only one part of the education system. They cannot be ignored – but equally they cannot be taken as the defining feature or focal point of system design. This is because it is erroneous to

... describe education as a market transaction. ... Education is characterised by market failure⁸, by potentially inequitable initial allocations and , most importantly, by the fact that the relationship between the education ‘industry’ and its ‘consumers’, that is between educational institutions and teachers on the one hand and students on the other, cannot be reduced to a market transaction.

The critical problem with this simple [market] model is that students, by definition, cannot know in advance what they are going to learn, or make an informed judgement about what they are learning. They have to rely, to a substantial extent, on their teachers to select the right topics of study and to teach them appropriately.

Moreover, any specific course of education is a once-only experience in most cases. Students may judge, in retrospect, that particular teachers, courses or institutions were good or bad, but in either case they are unlikely to return, so that there is no direct market return to high quality performance.

The result is that education does not rely on market competition to any significant extent to sort good teachers and institutions from bad ones. Rather, ***education depends on a***

⁸ For Quiggin ‘ “market failure” problems include unemployment, monopoly, environmental pollution, and inadequate provision of public good.’ This is because ‘Market prices do not reflect all the opportunity costs we face as a society.’ Quiggin 2019: 8 -9, 8. Education has long been recognised as a public good requiring public support of some kind because there will be under-supply of it if reliance is placed on the market for provision. This is because individual calculation usually does not take into account the wider benefit of having an educated population.

combination of sustained institutional standards and individual professional ethics to maintain their performance. (Quiggin 2016 emphasis added)

Quiggin notes successful educational systems are generally publicly run (or in the case of successful private schools these are essentially publicly funded and run on a not-for-profit basis). (Quiggin 2019: 324) He lists examples of where ‘for profit’ providers at the higher, vocational and school education levels have endeavoured to provide an alternative model. As he notes, these ventures have all had the same trajectory:

... an initial burst of enthusiasm and high profits, followed by the exposure of poor practices and outcomes, and finally collapse, with government being left to pick up the pieces.
(Quiggin 2016)⁹

Given these realities of education as a domain it is clear that while the issue of pricing is important – it is very much a second order issue. Quality education systems are not founded on appropriate pricing models, rather, as Quiggin notes, they are based ‘on a combination of sustained institutional standards and individual professional ethics to maintain their performance.’

If pricing reform needs to be supportive and not define reform initiative, what should be the guiding concern for reform? In particular, what needs to be done about institutional standards and professionalism in the sector today?

(b) Threshold issue: improving quality

As noted at several points in this submission, the key issue the Commission must address is the problem of quality associated with the sector as it currently operates. At its best the current system works very well. But this is primarily the legacy of pre-training market arrangements. My colleagues and I have studied these in depth in parts of the apprenticeship system (Buchanan et al 2016) and where the system engages with disadvantaged groups, such people with disability (Buchanan et al 2020). Quality apprenticeships have been maintained with the support of dedicated trades-based employers loyal to the trade and committed to the thoughtful modernisation of the craft. Most effective support for the disadvantaged – and remember 40% of publicly funded VET students fall into this category – comes from what remains of the old Kangan structures of expertise established to support high need groups. Most trades employers do not fall into the ‘high quality’ segment (Bardon 2010, Dickie et al 2011). And for disadvantaged students the tendency is for them to fall into compliance – as opposed to best practice – driven pathways from school, through vocational education and training to work (Buchanan et al 2020). If the quality problems noted in Section 2 are to be overcome action needs to occur on three fronts: educational institutions, vocational education teachers and the curriculum.

⁹ The examples he cites include: EdisonSchool and its evolution into EdisonLearning and the University of Phoenix in the USA, the ultimately failed experiments with mass private schooling in Chile and Sweden, and the VET-FEE help debacle in Australia. Basing systems on public ownership or organisations operating on not-for-profit basis means those responsible for running such system ‘can provide a variety of options for dealing with various forms of market failure ... thereby taking the full range of opportunity costs into account.’ Quiggin 2019: 321 and also 2016 for more detail on the case studies of for-profit, private provider failure in education around the world.

(i) Establishing an anchor for quality: Reconstructing public and not-for-profit vocational education and training institutions

Closely linked to the Commission's policy pre-occupation with devising a rational 'uniform national price' for VET products is the allied commitment to the 'quantity theory of competition' in VET provision. A concern for policy for several decades has been to nurture a plethora of 'private providers' who (it is assumed), through competition, will increase student choice, restrain prices for government funders and nurture quality to maintain market share.

The reality, as noted in Section 2 has been a large increase in the number of providers of often dubious quality. Given Quiggin's insights about how markets work – or rather do not work – in education this outcome was entirely predictable. Just as the issue about price reform was not to ignore but rather accord it appropriate (ie second order) policy status, so on the question of institutional design the issue is to put competition in its place. Quiggin, like many researchers of education, has noted that quality education arrangements are embedded in quality institutional arrangements governed by concerns relevant to the domain. And this is not so much about 'standards' for individual 'providers' but rather about a system of sites that provide a coherent network of educational expertise. Such networks require a critical mass of capability to function effectively, especially to fully reap economies of scale and ensure quality of provision spatially.

Traditionally the TAFE networks in Australia have played this role. This is a feature of countries with successful vocational education systems (eg OECD 2020: Chapter 5).

What does this mean for contemporary Australia vocational education. The defining features of effective institutional arrangements would be:

- 70% of funds to TAFE
- Resources for adequate building and facilities
- Resources for student support, especially for enrolments, course choice, remedial/study assistance support
- Support for curriculum development
- Support for the development of innovative and appropriate pedagogies.

The funds not allocated to TAFE should only go to not-for-profit providers who can also provide these services. Those interested in providing training for profit should seek markets that build on the requirements of workers who have gained foundational education capabilities and well-rounded vocational qualifications delivered by the TAFE and not-for-profit sectors.

(ii) Reconstructing professional vocational educators

Appropriately structured and resourced institutions on their own cannot guarantee quality vocational education. Teacher quality is also vital. The current entry-level qualification (Certificate IV in Training and Assessment) is not widely respected. The key requirements for improving the quality of vocational educators were identified by Wheelahan and Moodie (2011). In particular it requires having an approach to vocational teacher education with the following elements:

- Entry level qualification at Diploma or Bachelors level in education, with a speciality related to their prime domain of vocational expertise. This qualification would require mastering expertise in knowledge of pedagogy, classroom/ workplace learning management, understanding learners, student diversity, student engagement
- Principles for cross-sectoral teachers to ensure they are appropriately qualified to work in vocational education

- Systematic data collection on the vocational education teaching workforce – and scrutiny of it to track its scale and quality
- National vocational education and training awards for teachers/trainers
- Support for new teachers and trainers
- Continuing teacher education qualification
- Continuing professional development
- External validation of assessment of vocational education and training qualifications
- Clear role for industry bodies and professional associations in quality assurance of vocational education educators
- A national vocational professional body
- Effective standards for vocational teaching and training
- Upgraded system for accrediting vocational teaching qualifications
- Registration of vocational teachers
- Regular evaluations of the quality of vocational teaching
- Research on vocational education pedagogy and models of teaching. (Wheelahan and Moodie 2011)

It is important to emphasise that the proposal to upgrade vocational educator quality is not designed to support a cadre of full-time professional educators. A key part of the vocational education teaching workforce has always been – and should always be – skilled practitioners of particular trades and professions. Just because someone is highly skilled in their domain of expertise does not necessarily make them a skilled teacher of the trade or profession. Hence the interest of having that wider array of supports and requirements. These would be there to help adjunct as well as full-time vocational teachers.

(iii) Reconstructing the vocational education and training curriculum: training package rationalisation as prelude to nurturing new domains of expertise (and foundations for adaptive capacity).

At various points in his analysis Quiggin notes that some of his reasoning may not apply to narrowly defined vocational education that bequeaths workers highly specific skills (eg Quiggin 2019: 324). The implicit reasoning here is that specific skills benefit a narrowly defined range of parties: the worker with, and the particular firm in the need of, those skills.

Arguably the root cause of many current problems in Australia's system of vocational education is an unhelpful conception of skills. On the one hand there is a highly fragmented notion of technical skill and on the other a highly abstract notion of employability or 21st century skills. At the core of our plethora of specific vocational qualifications are highly atomised units of competence. The assumption is that they can be acquired independently of any underpinning knowledge. Qualifications are essentially 'aggregations' from units of competence. There is increasing ill ease with this system. It is based on a backward view of jobs as competencies which are defined by reference to a current job. The plethora of highly specific qualifications does not lend itself to easy transferability and, despite their highly specific nature, most workers with these qualifications are not working in the field of the qualification. On the other hand, employability or 21st century skills are pitched at an overly general level. Concerns with 'problem solving', 'collaboration' and 'creativity' are discussed as if they can be acquired in the abstract, devoid of context. As has been noted from a number of sources, such capabilities are not learnt in the abstract but in the context of mastering particular domains of expertise. As Wheelahan et al 2015 have noted: an excellent problem solving childcare centre coordinator will be of little use on an oil rig when a fire breaks out.

Equally, a mining engineer will be of little use in managing a breakdown in order in a childcare centre with 35 infants playing up. (Wheelahan et al 2016. See also Buchanan et al 2018).

The way forward is to nurture the orderly rationalisation of training packages so that coherent domains of expertise are identified. Initial work on identifying these domains has been undertaken by a project run jointly by researchers from the University of Sydney and the NSW Department of Education (Buchanan et al 2019). At the core of this study was identifying common inter-occupational flows of labour. This revealed, for example, many people did not just work as care, customer service or clerical workers. Rather they flowed between these types of work. Qualifications could be rationalised to ensure expertise in one of these domains was complemented by gaining a working knowledge in adjacent occupational domains. Such qualifications could also be provided as sites for master problem solving, collaborative and other so-called employability skills.

Initial work on moving in this direction can be done by using text analytics to group related competencies across training packages. An example of how this can work to potentially reduce over 197 qualification to potentially eight in the agricultural sector is shown in Table 2.

In advising on processes for pricing models for vocational education the Commission should express strong concern about the arbitrary nature of price setting policy in higher education and note what is required to devise and implement proper pricing policies based on the IHPA experience with Training and Teaching in hospitals.

Table 2: Potential basis for rationalising qualifications in the Agricultural sector (potentially 190 qualifications reduced to 8)

| Elements of capability/ domains of expertise | Qualifications | | | | |
|--|---|---|---|---|---|
| | Common Core | Certificates II, III + IV | | Diploma | |
| | Foundations knowledge + skills at intermediate level | General Agriculture | Rural Operations | Agriculture | Business Management (Agriculture) |
| Agribusiness (eg financing, marketing, economics) | Structure of ag sector + basic clerical + HR skills | Common core | Common core | Common core | More advanced (to articulate into Business/management degree) |
| Sustainability practices (eg water, land, carbon management) | Basic principles + standard operating procedures | Common core | Common core | More advanced core | More advanced |
| Operations of machinery + technology | Advanced operational + routine maintenance principles | Common core | <ul style="list-style-type: none"> - Operation, transport + maintenance of mobile plant + specialist machinery - operation + recovery of 4 wheel drives - cleaning machinery of plant, animal + soils - welding using manual + gas metal arc welding - traffic controls | Common core | Common core |
| Production systems (eg irrigation + fertiliser use) | Understanding farm production systems | Common + specialism relevant to chosen area | Common + specialist knowledge re chemical application, transport + storage | More advanced | More advanced |
| Animal science + husbandry | Animal performance nutrition + breeding | Common + specialism of either: <ul style="list-style-type: none"> - intensive animal production - extensive animal production | Basic/common – ie working knowledge to help with how deploy equipment | More advanced (to articulate into an Ag Science degree) | More advanced – but not necessarily to articulation level with HE |
| Land, plant + crop science | Land, plant + crop production/ management | Common + specialism of either: <ul style="list-style-type: none"> - intensive production of horticulture for food - amenity horticulture - conservation land management | Basic/common – ie working knowledge to help with how to deploy equipment. | More advanced (to articulate into an Ag Science degree) | More advanced – but not necessarily to articulation level with HE |

Defining domains of expertise is a political as well as technical exercise. Wheelahan et al 2015 talk about the need to nurture communities of trust to facilitate qualifications definition and rationalisation. In Australia a ready-made institution that could help with this process is the Fair Work Commission. It reduced the number of federal industrial awards down from over 2,000 to under 150 in a two year process. There are lessons from this process that could inform the rationalisation of vocational and training domain qualifications. (Bray 2011)

c. The need for realism about achieving effective change: uniform pricing and payments for Teaching and Training arrangements in the hospital system took over five years to complete

In the health system, where there are well established quality control arrangements, development of uniform national prices for teaching and training has proved to be a complex and laborious task. Detailed development of uniform national pricing and allocation associated subsidies for teaching and training in hospitals was undertaken under the auspices of the Independent Hospital Pricing Authority (IHPA). The relevant applied research started in 2013 (Paxton Partners 2013, 2014a, 2014b) and the final report with comprehensive recommendations was completed in 2016. Further validation and consultation occurred after that, with the final determination being issued by the IHPA in 2018 (See IHPA 2017, 2018a, 2018b). And, of considerable relevance to the Productivity Commission's current brief, the recommendation was for block grants to the States and Territories, not a course-by-course itemisation of how the money should be spent (IHPA 2020).

In the recent past the Commonwealth Government has not shown similar attention to detail when dealing with pricing and subsidies to universities. The recent work on funding for Higher Education has been made on an extraordinarily thin empirical base and with limited time for reflection or validation (Massaro 2020).

Ironically, action on threshold reform matters 1, 2 and 3 outlined above will result in faster change in vocational education if pricing reform is done properly. If it is not done properly, why one has to ask? What are the motives at work here? Is the vision of pricing reform more akin to that currently occurring in higher education than has been followed in health? Clarity about this matter is important if the Commission is to be transparent what the potential use and misuse of its recommendations. In advising on processes for pricing models for vocational education the Commission should express strong concern about the arbitrary nature of price setting policy in higher education and note that proper pricing policies actually take considerable time to devise and implement based on the IHPA experience with Training and Teaching in hospitals.

d. Recommendations for priority work

1. Devising nationally consistent uniform prices and incentives for vocational education should be regarded as a supportive, not defining reform

Work on devising national consistent prices for vocational education qualifications and services should continue but must be regarded as a supporting – not defining – reform.

The pricing arrangements should support reform in the following three areas.

2. Threshold reform reforms

2.1 : Reconstructing institutional capacity – especially TAFE - as an anchor for the system.

Adopt the principle of TAFE as anchor for quality in the system. Specific recommendations

- 70% public funds to TAFE
- Remainder only to be open to non-profit educators
- Clear infrastructure pre-conditions – physical and organisational – will need to be met before any non-government provider is funded.

2.2 Reconstructing vocational education teaching capacity

Raise the standards expected of, and support provided to, vocational education teachers.

Financial support to be provided to ensure a strong contingent of expert practitioners in the trades and professions is properly trained and supported to become adjunct educators to work within the TAFE and non-profit vocational education sector.

2.3 Threshold Reform 3: reconstructing the curriculum for vocational education

Rationalise Training packages, especially their domains of coverage:

- Change needs to be evidence based – analysis of job clusters and inter-occupational labour flows should inform training package coverage
- Text analytics can be used to cluster-related competencies currently shared across various training packages. In this way commonalities in skills clusters currently not recognised in the structure of qualifications can be identified.
- Identify relevant underpinning knowledge
- Work with Fair Work Commission and build on the award rationalisation process to achieve an inclusive, but effective, rationalisation process.

3. The need for realism about achieving effective change: uniform pricing and payments reform is likely to take longer to finalise than implementing threshold reforms 1 – 3 above

Finalising uniform pricing arrangements for teaching and training arrangements in the hospital system took five years to complete.

In advising on processes for pricing models for vocational education the Commission should express strong concern about the arbitrary nature of price-setting policy in higher education sector and note that proper pricing policies take time to devise and implement. The IHPA experience with Training and Teaching in hospitals provides an excellent model to follow.

4. Short observation to some key questions raised by the Commission

The Commission's report touches on many issues. This submission has focused what I regard as the key ones: recognising and doing something about the problem of quality and getting the Commission to reconsider the priority is it giving to issues of pricing, incentives and investment. I am not arguing that these latter matters be ignored. Rather I'm arguing the Commission must ask: pricing and financing concerning what and for what? Getting improved price signals and/or funding levels for vocational education will mean little if the underlying flaws in the system are not addressed. That said, the Commission asks for observations on a number of other matters. I provide material relevant to just a few of these. I am happy to provide more information on any them if requested by the Commission.

a. Moving to a unified tertiary education system under Commonwealth control: key issues

Within some elite policy circles there is a narrative emerging that it time VET was taken over by the Commonwealth and incorporated into a national tertiary education system. How this narrative survives given the Commonwealth government's complete incompetence in this domain as evident by the VET FEE Help debacle highlights how impervious issues of ideology and power can be to reality.

The fact that anything decent in our VET system remains is attributable to the commitment, expertise and funding by the States and Territories. If you remove them from the system, prepare for a collapse in standards.

The associated issue is the integration of vocational education with higher education. Who could be opposed to closer integration of the two? The issue is how would it be done? Do people really believe there is an equivalence in standards of teaching and curriculum between higher education and vocational education? As someone who works in a university I know the higher education sector is far from perfect. But at least issues of pedagogy and curriculum are taken seriously. And there is extensive peer review. Throughout most of the VET sector concerns with these matters have been marginalised as a matter of system design. When Australia moved to competency-based training in the 1980s and early 1990's levels of articulation between higher education and VET regressed. Engineers International (the global standards body for the engineering profession), for example, was troubled by the removal of concerns with underpinning knowledge in the engineering domain. This was not an artefact of inter-sectoral elitism. It was an act of practical reality: they could only recognise what student had, and the VET reforms resulted in VET engineering students having fewer (not more) transferable skills to recognise.

I strongly recommend that the Commission tread warily on this topic. The dangers are real:

- (i) From experience I remain to be convinced the Commonwealth has the organisational capability of running a system worth having (eg VET FEE-Help and their pathetically slow response to that crisis. Remember journalists and capital markets moved on the problem long before anyone at Commonwealth level moved to acted.)
- (ii) If we move to a rushed integration of VET and higher education one of two bad outcomes is likely to prevail:

A Universities will just take over the space, finally wiping out that part of our education system that takes work seriously as site for learning below the level of the degree based professions; or

B University standard themselves will be undermined as the ‘anything goes’ approach to standards that can flourish in VET finds its way into the university sector, especially its lower reaches.

Neither outcome is desirable. A precondition for a unified tertiary sector is the emergence of a quality and respected vocational sector. As noted in this submission, we are long way from having such a sector.

b. Nurturing system coherence and innovation: a new role for pluralism, power sharing and trust

Another widespread lament is the need for better coordination between all levels of the VET system. A very good model was in the process of being pioneered by Skills Australia (subsequently renamed the Australian Workforce and Productivity Agency). The guiding ethos that underpinned its promising start was power sharing and the sharing of information – and the effort to build consensus about understandings of the future by systematic, shared scenario development and planning. There are good lessons to learn from here. The Commission is strongly counselled not to go back to the ANTA model. Many of the problems of our current system can be traced to the content and style of operation of the ANTA era (Hampson 2002).

c. The need for better skills planning

A particularly irritating aspect of the current skills debate are the interminable calls for ‘better skills planning’ - as if no one has ever thought about this before. It is good to see the Commission has referred to the important work of Sue Richardson on this point. The issue is not about how to project skills demand into the future – rather the key challenge is to plan for ongoing workforce development that prepares workplaces and individuals for a future that will be different to the past. Or put another way: the priority issue is to build adaptive capacity. My colleagues and I have written on this at length. For recent examples please see (Wheelahan et al 2015, Buchanan et al 2019 Buchanan 2019b).

d. Engaging employers – lesson from the Training Guarantee 1990 – 1994

Employers have a critical role to play in vocational education. At their best they develop not only skills but the whole person (see for example Buchanan at all 2016). Quality on-the-job training is a vital part of the vocational education system. As the ABS data on work-related training and adult learning reveals, this is in serious decline. Australia has had a successful experiment with boosting workplace training. This was the Training Guarantee of 1990 – 1993 (see for example Hall, Buchanan and Considine 2002). There was an extensive evaluation of this intervention, based on large scale, specially commissioned surveys undertaken by the ABS. The evaluation concluded the intervention made a very big, positive difference to the level and quality of workplace training. (DEETYA 1996). Unfortunately, the Keating government, under pressure from peak employer groups, ended the intervention before the evaluation was complete. Many of the peak employer organisations which clamoured for ending the Training Guarantee are now at the forefront of calls for patching up the training market they and their federal government colleagues have been endeavouring to build for three decades. The Commission should note the significance of this fact. Those organisations which have a track record in dismantling effective vocational education reforms are pursuing policies which, over time, have created larger and larger problems for vocational education, the VET FEE Help debacle being the clearest example. In the 1960s and 1970s the Industries Assistance Commission did not take employers preferences as authoritative when it came determining industry

policy. They should maintain a similar scepticism now on the issue of vocational education. Evidence and analysis, as outlined above, provide a far more relevant basis for both understanding current problems in vocational education and clarifying what to do about them.

Conclusion

In recent public statements the Prime Minister and the Treasurer have indicated that they wish to take lessons from Australia's health system to guide reforms in vocational education. Most commonly this refers to the successful work concerning uniform pricing associated with activity-based funding (ABF). Great care needs to be exercised when referring to this precedent. ABF only works well in health because it operates in an elaborate system of quality control. An overview of that system is summarised in Section 1. Uniform pricing works within – and does not define – the health system. Pricing and subsidy reform needs to play the same role in vocational education. We need first to establish the pre-conditions for quality before getting too preoccupied with issues of pricing. And central to quality is a revitalised TAFE, a strong vocational education profession (of full timers and practice-based adjuncts) and a future focused curriculum, not one constrained by the backward looking competencies of yesterday. Finally, the complexity of effective pricing needs to be recognised. Pricing reform for teaching and training in the hospital system took the Independent Hospital Pricing Authority over five years to complete. Action directed at improving the quality of the vocational education system can commence immediately and arrest the decline in quality. Proper pricing reform in vocational education cannot provide a short cut to achieving rapid, desirable change. If it is to be treated in this way this needs to be openly acknowledged to ensure full transparency as to what is being done to this sector.

References

- Australian Bureau of Statistics (ABS), *Work-Related Training and Adult Learning*, Australia, 2016/17 Cat No 4234.0
- Australian Skills Quality Authority. (2013a). Marketing and advertising practices of Australia's registered training organisations. Retrieved from Melbourne: < http://www.asqa.gov.au/verve/_resources/Strategic_Reviews_2013_Marketing_and_Advertising_Report.pdf > viewed 24 March 2014
- Australian Skills Quality Authority. (2013b). Training for aged and community care in Australia. Retrieved from Melbourne: < http://www.asqa.gov.au/verve/_resources/Strategic_Reviews_2013_Aged_Care_Report.pdf > viewed 24 March 2014
- Australian Skills Quality Authority. (2013c). Training for the White Card for Australia's Construction Industry. Retrieved from Melbourne: < http://www.asqa.gov.au/verve/_resources/Strategic_Reviews_2013_White_Card_Report.pdf > viewed 24 March 2014
- Australian Skills Quality Authority. (2015). Training for early childhood education and care in Australia. Retrieved from Melbourne: < http://www.asqa.gov.au/verve/_resources/Strategic_Review_2015_Early_Childhood_Education_Report.pdf > viewed 30 August 2015
- Australian Skills Quality Authority (2016) Training in Security Programs in Australia. Retrieved from https://www.asqa.gov.au/sites/default/files/Strategic_Review_Report_2016_Training_in_security_programs_in_Australia.pdf
- Australian Workforce and Productivity Agency [AWPA] (2013) *Future Focus- National Workforce Development Strategy*, AWPA, Sydney https://www.google.com/search?rlz=1C1CHBD_en-GBAU767AU767&ei=-RcqX-inPO-G4-EP-Muc4AU&q=australian+workforce+and+productivity+agency+future+focus&oq=australian+workforce+and+productivity+agency+future+focus&gs_lcp=CgZwc3ktYWlQAzIFCAAQzQlyBQgAEM0COgglABCwAxDNAjoLCAAQsAMQzQIQiwM6BggAEBYQHjoFCCEQoAE6BwghEAoQoAE6BAghEBVQ1o4BWJCFawDuoAFoAXAAeACAAY0CiAGpE5IBBjAuMTAuM5gBAKABAaoBB2d3cy13aXq4AQLAAQE&scient=psy-ab&ved=0ahUKewioiOnigIPrAhVvwzGfHfglB1wQ4dUDCAw&uact=5
- Bardon, B 2010, 'Trade apprenticeship completion analysis', unpublished report to NSW Board of Vocational Education and Training (BVET), Sydney.
- Bitá, N. 2016. "Training colleges banned from speaking of student loan scheme", *The Australian* (4 October). Available at: <http://www.theaustralian.com.au/national-affairs/education/training-colleges-banned-from-speaking-of-student-loans-scheme/news-story/9fef9aacc6cf8d6fc91b90c3b331549?sv=20a18f4714a09ceb2cf054876cd8b0cb> [1 Oct. 2017].
- Botwinick, H. 1994. *Persistent inequalities: Wage disparity under capitalist competition* (Princeton, NJ, Princeton University Press).
- Bray, M (2011) 'The distinctiveness of Modern Awards' in Baird, M, Hancock, K and Isaac, J (eds) *Work and Employment Relations: An Era of change*, Federation Press
- Buchanan, J, Smith-Merry, J, Yen, I, Drinkwater, A and Smith, B (2020) *Disadvantage, Disability and Vocational Education and Training*, [Forthcoming] NSW Department of Education, Sydney

- Buchanan, J and Tierney, S (2019) *Meeting changing skill requirements in NSW in the 2020s: Understanding and working with non-linear, lateral and upward inter-occupational labour flows*, Report prepared for the NSW Department of Education, Sydney (October)
- Buchanan, J (2019), 'Skills Planning for South Africa: getting the questions right' in Kruss, G, Wildschunt, A and Petersen, I (eds) *Skilling for the future: new research perspectives on education, work and development in South Africa*, Human Sciences Research Council Press, Cape Town
- Buchanan, J, Leesa Wheelahan and Serena Yu (2018), 'Increasing young people's adaptability and mobility: from competency approach and twenty-first-century skills to capabilities and vocational streams' in Akiko Sakamoto and Johnny Sung, *Skills and the Future of Work: Strategies for Inclusive Growth in Asia and the Pacific*, Geneva, 2018: 125 – 160 available at: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-bangkok/documents/publication/wcms_650239.pdf
- Buchanan, J, Ryan, R.; Anderson, M.; Calvo, R.; Glozier, N.; Peter, S. (2018). *Preparing for the best and worst of times*. A report for the NSW Department of Education on the key implications for school education of artificial intelligence and other emerging transformations (Sydney, Australia, Policy Lab, University of Sydney). Available at: https://education.nsw.gov.au/our-priorities/innovate-for-the-future/education-for-a-changing-world/research-findings/future-frontiers-analytical-report-preparing-for-the-best-and-worst-of-times/Future-Frontiers_University-of-Sydney-exec-summary.pdf [3 Aug. 2018].
- Buchanan, J., Anderson, P. and Power, G. (2017) 'Skill Ecosystems' in Chris Warhurst, Ken Mayhew, David Finegold and John Buchanan (eds), *The Oxford Handbook of Skills and Training*, Oxford University Press, Oxford, United Kingdom, pp. 444-65.
- Buchanan, J, Finegold, D, Mayhew, K and Warhurst, C (2017), 'Introduction – Skills and Training: Multiple Targets, Shifting Terrain' in Chris Warhurst, Ken Mayhew, David Finegold and John Buchanan (eds), *The Oxford Handbook of Skills and Training*, Oxford University Press, Oxford, United Kingdom, pp. 1 – 14
- Buchanan, J, Raffaele, C, Glozier, N and Kanagaratnam, A (2016) *Beyond mentoring: social support structures for young Australian carpentry apprentices*, NCVET, Adelaide
- Council of Australian Governments (2016) *Report on Performance 2016*, Department of Prime Minister and Cabinet, Canberra
- DEETYA [Dept of Employment, Education, Training and Youth Affairs] (1996) *The Training Guarantee: Its impact and legacy, 1990 – 1994*, Main Report, AGPS, Canberra
- Dickie, M, McDonald, R & Pedic, F 2011, *A fair deal: apprentices and their employers in NSW, integrated research report*, NSW Board of Vocational Education and Training (BVET), viewed 26 September 2014, <<http://www.skillsboard.nsw.gov.au/sites/default/files/afairdealfinalreport.pdf>>.
- Hall, R, Buchanan, J and Considine, J(2002) You value what you pay for. Enhancing Employers' contributions to skill formation and use, Dusseldorp Skills Forum Discussion Paper, <https://www.voced.edu.au/content/ngv%3A7777#>
- Hampson, I (2002) 'Training reform in a weakened state: Australia 1987 – 2000' in C Warhurst, E Keep and I Grugulis (eds) *The skills that matter*, Palgrave MacMillan, Houndsmill

- Independent Hospital Pricing Authority (2017) Development of the Australian Teaching and Training Classification, Public consultation [paper] 0.1 August
- Independent Hospital Pricing Authority (IHPA), 2018a Australian Teaching, training Classification <https://www.iHPA.gov.au/what-we-do/teaching-training-and-research>
- Independent Hospital Pricing Authority (IHPA), 2018b Hospital Teaching, Training and Research Activities. National Best Endeavours Data Set 2019 -20 Technical Specifications for Reporting, https://www.iHPA.gov.au/sites/default/files/htra_nbeds_2019-20_technical_specifications_for_reporting.pdf
- Independent Hospital Pricing Authority 2020 National Efficient Cost Determination March https://www.iHPA.gov.au/sites/default/files/Documents/national_efficient_cost_determination_2020-21.pdf
- Kaufman, B. (ed.). 1988. *How labor markets work. reflections on theory and practice* by John Dunlop, Clark Kerr, Richard Lester and Lloyd Reynolds (Lexington, MA, Lexington Books).
- Marsden, D. 1999. *A theory of employment systems. Micro-foundations of societal diversity* (Oxford, UK, Oxford University Press).
- Maurice, M.; Sellier, F.; Silvestre, J. 1986. *The social foundations of industrial power: A comparison of France and Germany* (Cambridge, MA, MIT Press).
- Massaro, V (2020) 'Funding model inadequate on teaching quality and standards' Campus Morning Mail, 15 July <https://campusmorningmail.com.au/news/funding-model-inadequate-on-teaching-quality-and-standards/>
- Mitter, R (2008) *Modern China: A very short introduction*, Oxford, Oxford University Press
- McGregor, R (2010) *The Party. The Secret World of China's Communist Rulers*, (London, Allen Lane).
- Morrison, S (2020), Address – National Press Club 26 May <https://www.pm.gov.au/media/address-national-press-club-260520>
- OECD (2020) Employment Outlook: Work security and the covid-19 crisis, Paris
- Oliver, D, Yu, S and Buchanan, J (2019), 'The Political Economy of Skills' in L Unwin et al *The Handbook on Vocational Education and Training*, Wiley, London
- Nussbaum, M.C. 2000. *Women and human development: The capabilities approach* (Cambridge, UK, Cambridge University Press).
- Noonan, P. 2016. *VET funding in Australia: Background, trends and future directions* (Melbourne, Australia, Mitchell Institute, Victoria University). Available at: <http://www.mitchellinstitute.org.au/reports/vet-funding-in-australia-background-trends-and-future-options/> [15 Sep. 2017].
- Paxton Partners (2013) Define Teaching, Training and Research and Identify Associated Cost Drivers for ABF Purposes – Literature Review, July

https://www.ihsa.gov.au/sites/default/files/publications/ttr-literature-review.pdf?acsf_files_redirect

- Paxton Partner (2014a) Define teaching, training and research and identify associated cost drivers for ABF [Activity Based Funding] Purposes, Environmental Scan, Report to the Independent Hospital Pricing Authority,
- Paxton Partners (2014b) Define teaching, training and research and identify associated cost drivers for ABF [Activity Based Funding] Purposes, Final Report, Report to the Independent Hospital Pricing Authority, May https://www.ihsa.gov.au/sites/default/files/publications/ttr-final-report.pdf?acsf_files_redirect
- Paxton Partners (2016) Teaching, Training and Research Costing Study, Project Report, July https://www.ihsa.gov.au/sites/default/files/publications/ttr_costing_study_final_report_for_publication.pdf
- Productivity Commission (PC) (2020) *National Agreement for Skills and Workforce Development Review*, Interim Report, Canberra
- Quiggin, John (2016) Education: Excerpt from Economics in Two Lessons, 29 December <https://johnquiggin.com/2016/12/29/education-excerpt-from-economics-in-two-lessons/>
- Quiggin, John (2019) *Economics in two lessons. Why market work so well, and why they can fail so badly*, Princeton University Press, Princeton
- Sen, A. 1999. *Development as freedom* (Oxford, UK, Oxford University Press).
- Spence, J D 1999 *The Search for Modern China*, (New York, Norton)(2nd Ed).
- Stiglitz, JE (1987) 'The Causes and Consequences of The Dependence of Quality on Price' *Journal of Economic Literature*, Vol 25 No 1: 1 - 48
- Stiglitz, JE (2001) 'Information and the change in the paradigm in Economics', *American Economic Review*, Vol 92 No 4 : 460 – 501
- Wheelahan, Leesa, Moodie, G, Lavigne, E and Sanji, F 2018, *Case Study of TAFE and public vocational education in Australia*, Preliminary Report, Education International. https://issuu.com/educationinternational/docs/2018_eiresearch_tvet_australia_pre
- Wheelahan, Leesa, Buchanan, J and Yu, S (2015) *Linking qualifications and the labour market through capabilities and vocational streams*, National Centre for Vocational Education Research, Adelaide <https://www.ncver.edu.au/wps/portal/vetdataportal/restricted/publicationContent>
- Wheelahan and Moodie (2011) *The quality of teaching in VET: final report and recommendations*, LH Martin Institute, University of Melbourne, Australian College of Educators and RMIT University, https://melbourne-cshe.unimelb.edu.au/_data/assets/pdf_file/0008/2554973/quality_vetteaching_final_report1.pdf
- Wheelahan, L.; Moodie, G. 2011. *Rethinking skills in vocational education and training: From competencies to capabilities* (Sydney, Australia, NSW Skills Board). Available at: https://www.skillsboard.nsw.gov.au/sites/default/files/rethinking_skills.pdf [15 Oct. 2017].

Yu, S.; Bretherton, T.; Schutz, J. 2012. *Vocational trajectories within the Australian labour market* (Adelaide, Australia, National Centre for Vocational Education Research). Available at: https://www.ncver.edu.au/_data/assets/file/0023/8717/vocational-trajectories-2557.pdf [1 Oct. 2017].

Yu, S.; Oliver, D. 2015. *The capture of public wealth by the for-profit VET sector: A report prepared for the Australian Education Union* (Sydney, Australia, Workplace Research Centre, University of Sydney). Available at: <http://www.aefederal.org.au/Tafe/WRCAEU2015.pdf> [1 Oct. 2017].