



**National Australian
Apprenticeship Association**

Improving the apprenticeship construct

Response to the Productivity Commission Interim Report

on

National Agreement for Skills and Workforce Development

16th July 2020

Background

The Productivity Commission has released its Interim Report into the National Agreement for Skills and Workforce Development. The interim report canvasses a wide range of issues and potential solutions that the VET system should consider. This paper focuses on the observations in the interim report that relate to apprentices and their employers – the heart of the VET system.

In formulating our response to the interim report, the National Australian Apprenticeship Association (NAAA) has developed a number of principles that should guide the Productivity Commission's final recommendations to the Commonwealth.

In the context of apprenticeships, they are:

- **Fair** – The arrangement must be fairly constructed for both employers and their apprentices.
- **Comparable** – The proposed policy settings should be equally able to be applied to the school education and higher education system
- **Sufficient** – The proposed measures should account for all cost drivers and the quantum of funding required to ensure a stable and quality apprenticeship system
- **Efficient** – The proposed measures should leverage new technology to achieve workflow efficiencies rather than just unit price benchmarking

To help put these principles into effect the Association has developed an Apprenticeship Value Creation model to exemplify the components employers evaluate when they are considering employing an apprentice as well as those factors which achieve apprentice engagement. This provides insights for how commencement and completion rates can be improved.

The model demonstrates how the various factors interact and change over the duration of a 4-year trade apprenticeship. It can also be used for shorter duration Traineeship qualifications.

The Association has also been collecting data on the impact of the Covid 19 pandemic on the apprenticeship market. We have formed a Covid 19 Steering group that collects weekly data from the front-end system that all Apprenticeship Network Providers use. This is provided to the Commonwealth each week.

We have also conducted a survey of 30,611 employers of apprentices to gauge utilisation of the JobKeeper allowance and to anticipate the effects once it is wound back.

A second smaller survey of employers that used to participate in the apprenticeship system but don't currently do so. This has also informed the key insights we have gleaned about the operation of the apprenticeship market and how it can be more fairly constructed to improve commencement and completion rates.

A paradigm shift is required

If you live in a house or apartment, drive a car, use public transport, access the NBN, use electricity, rely on products that depend on extractive industries, have a relative in aged care or using the NDIS, want solar panels for your roof or are reassured by the deep clean of the school your kids go to, you are the beneficiary of some of the skills the 4.5 million Australians have gained through the apprenticeship and traineeship system this century.

But the system is currently facing two major challenges. Front of mind is the existential threat posed by the Covid 19 pandemic and the recession it has brought. This has seen a 33% reduction in commencements, which left unaddressed will see in-training levels dip to below 200,000 for the first time this century. From an average of 2.5% of the workforce to less than 1.5%.

The second is a longer-term trend that has seen the diminution of the value proposition for employers to be engaged in apprenticeships combined with policy settings that weaken the engagement of young people to seek this pathway.

Our research shows that taking into account an employers' supervisory and coaching role it costs around the same to train a trade apprentice as an undergraduate. But there are marked differences in the way we view and fund the arrangements.

A newly qualified bachelor's degree graduate arrives at their first employer fully qualified but inexperienced at zero cost to their employer.

By comparison, employers of apprentices must dedicate at least \$27,000 in supervisory time over the apprenticeship to coach, supervise and train their apprentice on the job for which they receive zero recompense.¹

This paper calls for a new construct for apprenticeships that better reflects the role employers play, better integrates and updates the model of integrated work-based learning, and better supports the apprentice or trainee with a contemporary employment experience that builds the skills they need.

This will have the effect of drawing more employers back into the system and expanding apprenticeship job opportunities, it will also improve completion rates by reducing the issues apprentices encounter that lead them to quit their apprenticeship or traineeship job.

The apprenticeship system endures despite policy misfires because it delivers the skills employers need, in the way they want the jobs performed, keeping abreast of changing technology and workflows. But the dual crises faced by the system place it at a generational crossroads.

We currently use the language of skill shortages to build the case for investment to patch the system up. But actually, what is needed is a mindset of smooth supply of future focused skills. It's the interruptions and disruptions to the smooth supply of work based learning that create skill deficiencies in the economy.

It's vital that a new construct for apprenticeships is developed that reinvigorates and revitalizes apprenticeships – the heart of the VET system.

This paper makes 15 key recommendations for how this can be achieved.

¹ Plus meet all the other employment and training costs, and bear the production and non-completion risks

Key research insights

- The value propositions for employers to participate in the apprenticeship system have been significantly eroded over the last decade. Currently around 116,300 employers participate in the system.
- An improved value proposition needs to be constructed to lift employer participation to around 152,650 businesses if apprenticeships and traineeships are to return to the historical rate of 2.5% of the workforce.²
- Covid 19 has reduced commencements by 33% in April and May and 15% in June. 154,000 (of the 260,000 apprentices in-training at the end of June) are currently on JobKeeper support payments. This is 2.48 times the average workforce utilisation rate.
- Our employer survey indicates that the winding back of JobKeeper payments could see up to 33,000 cancellations in October 2020, over and above normal exits and completions.
- This means that without additional measures to support apprentice commencements in-training levels will drop below 200,000 by December 2020. Their lowest level since traineeships were introduced last century.
- One consequence of the pandemic and ensuing recession is that current apprentices are less likely to separate voluntarily from their employer. Apprentice initiated cancellations seem to account for about half of all exits in normal periods.³
- This is because the wage discount to undertake an apprenticeship job is high. A first-year hairdresser for example earns 63% of the National Minimum Wage. Switching to any other entry level role provides them with a 37% pay rise.
- Apprentices accept that low wages are part of the deal. But this rapidly breaks down if their on-the-job training and work environment do not meet the terms of their Training Contract. Apprenticeships only work when all sides abide by the deal set out in the Training Contract.
- Over the last decade the engagement level of apprentices and trainees has fallen as a consequence of a weaker overall value proposition. Allowances have been replaced with loans, school leaving age has risen often delaying the start and therefore completion of an apprenticeship. Higher education opportunities have been more easily accessed, despite not always suiting the learning style of this cohort⁴
- Policy measures to improve the value propositions for employers and their apprentices have often run interference with each other. Higher wages under Modern Awards reduced the number of employers willing to employ an apprentice. Employers needing to meet higher RTO enrolment fees had the same effect.

² At the same average number of 2.36 apprentices per employer as now. Currently apprentices are 1.9% of the workforce.

³ The same transitory effect was observed during the Global Financial Crisis, it may persist longer during the Covid recession

⁴ Non-completion rates for students with an ATAR below 75 are double those with ATARs above that level.

- Effective policy measures are those which account for both employers return on investment needs and apprentices engagement factors. These are measures such as the Additional Identified Skills Shortage program that provides double the incentive level for employers and a progress and completion incentive for apprentices.
- Another successful measure has been the refinement of the Australian Apprenticeship Support Network (AASN) to include the “targeted services” of Gateway (recruitment) services and In-Training Support (mentoring) services. They have eased the recruitment burden for employers and provided additional mentoring to address work environment and on the job training issues.
- Whilst employers do not employ apprentices *because* of the modest apprenticeship incentive (it’s a far more complex decision-making process than that), it does represent around 20% of their anticipated return on investment. So, if it is removed it will reduce the value proposition to participate in the apprenticeship system still further.
- Employers are required to contribute around \$27,000 of staff time to adequately discharge their supervision and on the job training role. There is currently no payment for this service.
- Taking the employers’ supervision requirements and the apprentices’ wage discount into account a 4-year apprenticeship costs about the same as a cluster 4 band 3 qualification under the new “Jobready Graduates” Higher Education funding model. That is around \$38,300 in employer staff time and apprentice minimum wages foregone.
- At the same time apprentices are expected to be productive members of staff, our model shows how their productivity rises over time and delivers maximum return in the final 18 months of the arrangement.
- One key policy blunder in some jurisdictions was to unilaterally shorten the term of the apprenticeship to 3 years once an apprentice had completed their “formal” training. This fundamentally misunderstands the value proposition for trade-based employers that the 4th year is the “pay back” year. Many employers exited the system after this decision.
- A fundamental realignment of the apprenticeship construct should be developed around a fresh look at the value propositions for involvement. It should concentrate on integrating the supervisory and coaching role of the employers into the formal learning delivery. As a consequence, the work environment for apprentices and the acquisition of their skills will be improved. This will enhance the overall deal for both parties.
- The interim Productivity Commission report identified training levies as a mechanism to fund apprenticeship training. These taxes further reduce the value proposition for employers and should be avoided at all costs especially during the current pandemic and recession.

- The interim report says:

“while claims of an apprenticeship crisis seem ill-founded, the numbers suggest that *if* governments want to increase the overall stock of trade apprentices, policy design should be aimed at increasing both commencements and completions”.

Unfortunately, Covid 19 has plunged Australia into an apprenticeship crisis. So, the italicised “*if*” has become an outdated question.

- The Association proposes that the new construct should focus on increasing commencements by drawing more employers back into the system through improved recognition and support of their role. In addition, completions can be raised by improving the on the job training and work environment of apprentices because it will lead to higher engagement and a fairer execution of the Training Contract.
- Larger employers that offer a contemporary and supportive work environment and pay above Award payments achieve the highest completion rates. The powerful combination of both aspects should be the template for the new construct.
- The predictive analytics tools that ANPs are using in Contract 7 have shown that 6% of apprentices that have recently commenced have no intention of completing their qualification and 34% are “wobbly” and in need of additional support.
- The effectiveness of these predictive and prescriptive analytics tools would be enhanced if they could be deployed in schools as part of the Gateway service, before a student chooses an apprenticeship pathway – not just after they have commenced.
- The payment of JobKeeper allowances through the ATO is proof of concept that a more streamlined payment system for apprentice employers can be facilitated. The ability to triangulate supervision support payments with one touch payroll data would be a major step forward to identify employers who were not meeting Award obligations.

Recommendations

1. Re-price the apprenticeship training arrangement in a way that recognises the on-the-job training and supervisory responsibilities of the employer. Be clear about the volume of learning provided by the RTO and the amount provided by the workplace. Allocate resources accordingly.
2. Provide a supervision allowance to employers paid through the ATO using the same mechanism as JobKeeper payments. Pay the allowance monthly in arrears and triangulate it with the one touch payroll data. Initially allow employers the choice of the supervision allowance or the other apprenticeship incentives in the AAIP.
3. The supervision allowance should cover the employers' direct costs and be set at \$13,800 in the first year, \$9,000 in the second year and \$4,100 in the third year.⁵
4. After piloting the supervision allowance and refining the arrangement replace all existing incentive arrangements with the new support. Differential rates could apply for regional and remote areas or where an employer hires an apprentice from a disadvantaged group.
5. Update the data model for apprenticeships to ensure that all stakeholders are informed in real time about changes to the employment and training status of the apprentice. Have this as a priority in the replacement for the TYIMS system.
6. Formally recognise employers that have a high average completion rate as "apprentice champions". Create new national awards that celebrate their achievements.
7. Use apprentice champions to pilot a system of "completion enhancing" above award payments to apprentices equal to 85% of the National Minimum Wage for first years, 95% for second years and 105% for third years. The discounts reflect the time spent in off the job training.
8. Through agreement with the States and Territories implement a single national Training Contract and Training Plan that supports the implementation of the supervision allowance. Integrate the integrated work-based learning model.
9. Realign the services in the Australian Apprenticeship Support Network to have a greater emphasis on Targeted Services once the AAIP has been radically simplified through the supervision allowance. Support the expansion of predictive and prescriptive analytics tools for the Gateway service in schools through the AASN contract as a first priority.
10. Extend AASN contract 7 arrangements by 2.5 years to June 30th 2024 to provide stability of arrangements during the Covid 19 recession. Include the updated service mix in the contract extension.
11. The new AASN service mix should include advice about how to comply with Award obligations. Non-compliance is a major reason why apprentices drop out. The enhanced service could integrate Fair Work Ombudsman tools in the provision of In-

⁵ Fourth year apprentices are largely assumed to be able to work independently and less likely to require additional supervision over standard HR arrangements.

Training Support (ITS). ITS could also build out other supports and tools for workplace supervisors.

12. The Productivity Commission final report should provide advice about the total quantum of funding required to rebuild and reinvigorate the VET system after years of under investment by all governments. The initial quantum should be no lower than \$10b annually given that it was over \$8.032b in 2012-13⁶ and there are many areas of the system that need reinvestment.
13. The Productivity Commission final report should not to make any recommendations that would fail to pass the principles of fairness, comparability, sufficiency and efficiency. A levy on skilled migration visas is an example of a funding mechanism that is unlikely to ever be considered for School Education for example but was the basis for the Skilling Australians Fund.⁷
14. Expedite the redevelopment of the Training Youth Internet Management System (TYIMS) to achieve efficiencies in the administration of apprenticeships.
15. Fund the increase in upfront investment in supervision allowances through more efficient system outcomes – increased job opportunities and increased completions. Weigh up the opportunity cost of not providing apprenticeship pathways for the school leaver cohort and the transfer payments required to keep them on Youth Allowance or Jobseeker Allowance if we don't. Providing apprenticeship opportunities for school leavers during the Covid 19 recession should be a national priority.

⁶ Analysis of Government Expenditure ABS 5512 – Government Finance Statistics 2018

⁷ Until visa applications collapsed as a result.

Impact of Covid 19 on apprenticeships

In April 2020 the seven providers that comprise the Australian Apprenticeship Support Network (AASN) formed a Covid 19 Steering Group to provide weekly reports and advice to the Commonwealth about changes to the apprenticeship market. The Apprenticeship Network Providers (ANPs) organise and support all apprenticeships and traineeships in Australia.

The weekly reports are drawn from the JobReady Active system that ANPs use to organise their workflows and consolidate apprenticeship data before it is uploaded to the Commonwealth TYIMS system. The reports track actual activity and capture a number of lead indicators about how the market is changing.

In addition, ANPs conducted a survey of 30,611 employers of apprentices and trainees in June 2020 to explore the uptake of JobKeeper arrangements and the potential uptake of other measures to support new commencements. This information was used to update the Association's scenario modelling about projected in-training levels.

It's the combination of this research that provides the following insights.

Research findings

- 56% of businesses that employ apprentices and trainees currently receive JobKeeper payments.
- This means that around 154,000 apprentices and trainees are currently benefiting from the JobKeeper measure.
- This is 2.48 times higher than the rest of the working population.
- 3% of employers currently plan to cancel their apprentice or trainee when JobKeeper ends. This will potentially affect 7,780 apprentices and trainees.
- 18.5% of employers are undecided about whether to cancel their apprentice or trainee when JobKeeper ends, they currently employ around 50,615 apprentices and trainees.
- If half of the undecided employers subsequently choose to cancel their apprentice or trainee, the total cancellations in December quarter would be 33,088, many occurring in October when the Jobkeeper measure is due to end.
- With the current commencement and completion patterns this would mean 78,000 fewer apprentices and trainees in training by December 30th 2020 than in June. An in-training stock of only 196,930.
- 57% of businesses would employ an additional apprentice or trainee if they received a \$500 per week wage supplement for 12 months.
- 34% of businesses said they may consider employing an additional apprentice or trainee if they received a \$500 per week wage supplement.
- Between March 1st and July 1st 13,564 Apprentices and Trainees have been cancelled
- 6,218 Apprentices and Trainees have been suspended since 1st March
- An additional 5,256 apprentices and trainees have been either suspended or cancelled but are not yet reflected in TYIMS
- This means a total of 25,038 apprentices and trainees have been known to be stood down, suspended or cancelled since 1st March.
- This could be an under estimate because it does not capture those that are on JobKeeper and not actually working, or those employed by Group Training

Organisations (GTOs)⁸ that may be “out of trade” but still being paid, taking annual leave or in the process of being “handed back”.

Whilst at a first glance the cancellation levels seem high, they are actually lower than an average quarter where around 20,000 “exits” are recorded. The lower cancellation level probably reflects a reduction in “apprentice-initiated” separations as the prospect of work elsewhere diminishes. In addition, the level of suspended apprentices and trainees is much higher than a normal quarter reflecting the underlying uncertainty trade-based businesses have in the pipeline of future work.

The stabilising effects of Supporting Apprentice and Trainee (SAT) and JobKeeper is testament to the effectiveness of the Commonwealth Government’s stimulus measures. By the end of June 82,300 SAT claims had been successfully processed, with around a further 3,000 still awaiting the wage evidence required to trigger the 50% wage subsidy⁹.

In July the second round of SAT commenced and the Association expects that around 40,000 of these employers will have been in receipt of JobKeeper for the April to June quarter and a further 10,000 will have received JobKeeper payments for part of the quarter. An employer cannot claim a wage subsidy under both the JobKeeper and SAT measures.

In April and May ANPs recorded 7,650 and 7,771 sign ups respectively, 33% lower than the 12,639 and 11,591 from April and May 2019. There were 9,889 commencements in June 15% below the previous year and 22% below 2018 commencements. Since the lockdown measures have begun to ease in most jurisdictions weekly sign ups have increased from an average of 1450 in April and May to around 1925 in the second half of June. Still well down on the same period last year. Anecdotally commencements are falling again with the re-imposition of social distancing measures in Victoria.

The combination of lower commencements, cancellations and completions will see net in-training levels fall sharply in the next 6 months.

Response measures

The Commonwealth Governments stimulus measures have achieved their intent to stabilise the levels of apprentices and trainees currently employed. The measures were well targeted, quickly deployed and effective.

ANPs scaled up their claims teams to implement the SAT measure at a time where social distancing required the claims teams to relocate to work from home. Additional field staff were deployed to bolster the claims teams at the same time that their servicing requirements were shifted to online and remote servicing.

The expansion of SAT announced on 16th July as part of the JobTrainer initiatives is a welcome addition that will assist to stabilise current apprenticeships.

Similarly, the Department of Education Skills and Employment (DESE) that administer the AASN contract have moved swiftly to adapt the contract mix to the emerging environment. They have done this by:

- Extending In-Training (mentoring) support to suspended and cancelled apprentices
- Expanding the number of Gateway (career guidance and recruitment) places to support more of the school leaver cohort this year

⁸ GTOs employ up to 22,000 apprentices and trainees annually in a “noble intent” labour hire arrangement

⁹ Up to a maximum of \$7,000 per apprentice per month for businesses with 19 or fewer employees

- Supporting the ANP claims teams by extending fee for service payments for round 2 SAT claims
- Rapidly responding to new programmatic requirements despite many departmental staff needing to work from home
- Having continuous dialogue with the Covid 19 Steering Group and the Association to refine the effectiveness of the measures and respond to market changes.

Proposed additional measures

The Association has developed an “Apprenticeships and Recovery” paper that outlines the rationale for a \$500 per week wage supplement to stimulate commencements by supporting employers to commence an additional apprentice over the next 12 months.

The Australian Industry Group has called for a \$500 per week wage supplement for first year apprentices and a \$250 per week wage supplement for second years over the next 12 months in an initiative they call Supporting Apprentices and Trainees 2.0.

Similarly, the National Apprentice Employer Network (NAEN) that represents many GTOs have called for a \$500 per week wage supplement for all existing and new apprentices and trainees.¹⁰

The NSW Business Chamber has called for \$540 wage subsidy but with caps on the number of available places.

Despite the slightly differing design of each of these proposed measures there is consensus that a well targeted wage supplement will be required in the year ahead to support apprentice commencements.

The Association’s research shows that were a \$500 per week wage supplement introduced at least 86,000 additional commencements would result from current employers of apprentices and at least 14,000 would occur from employers that have used apprenticeships in the past but don’t currently do so.

A smaller survey of this group showed 61% would be attracted back into the apprenticeship system and 36% would consider coming back once the design of the wage supplement was known.

Without a wage supplement perhaps 100,000 young people will miss out on an apprenticeship, instead being supported through Jobseeker arrangements for around the same cost.

If we are to prevent a lost Covid 19 cohort of school leavers this year and next, and if we have an eye to the skills needs of the economy as we recover from the pandemic a \$500 per week wage supplement for apprentice employers is compelling.

¹⁰ GTOs will need to adapt their business model if a wage supplement is paid to host employers and if a supervision allowance is subsequently provided to employers. Both initiatives would be beneficial to GTOs.

A value creation model for how apprenticeships really work

The Association has developed an Apprenticeship Value Creation model to exemplify the components employers evaluate when they are considering employing an apprentice as well as those factors which achieve apprentice engagement. This provides insights for how commencement and completion rates can be improved.

The model demonstrates how the various factors interact and change over the duration of a 4-year trade apprenticeship. It can also be used for shorter duration Traineeship qualifications.

Employer value propositions

The value proposition can be simply described as this:

A profitable apprenticeship (P) equals the revenue generated by the apprentice (R) minus the sum of the wages and on-costs (W), supervision costs (SC), tuition costs (TC), production risks (PR) and completion risks (CR).

In mathematical terms it can be expressed as follows:

$$P = \sum_{i=1}^n (R_i - (W_i + SC_i + TC_i + PR_i + CR_i))$$

Apprentice value proposition and engagement

The model also assigns an apprentice engagement ratio. This is based on the value proposition that engagement (E) is determined by the level of wages earned (W) minus the sum of the wage discount (WD), tuition costs (TC), training experience (TE) and work environment (WE).¹¹

$$E = \sum_{i=1}^n (W_i - (WD_i + TC_i + TE_i + WE_i))$$

The model is an aggregation of all industries that employ trade apprentices, whereas in reality each industry will have slightly different drivers, be experiencing different economic conditions and have differing access to potential apprentice candidates.

It also provides insight into how apprentice engagement levels change as wages rise, work autonomy increases, and formal training is completed.¹²

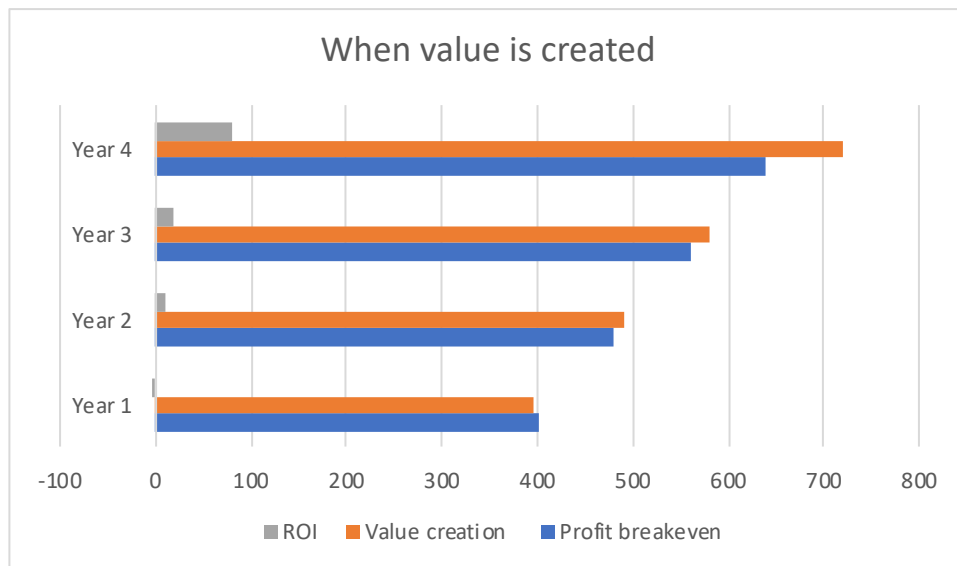
Combining both elements, the model is both illustrative at national level and can also be used at an industry level by entering the current industry assumptions that apply for the period to be modelled.

¹¹ This draws on the Fair Deal – Apprentices and their employers in NSW report, BVET, 2010

¹² A detailed explanation of the model with supporting mathematical calculations can be provided on request

Employers require a commercial return on the apprenticeship

The model illustrates when value is created in the apprenticeship arrangement. Here is an example of a base case for a carpentry apprentice.



Over the life of this apprenticeship an employer would pay the carpentry apprentice approximately \$188k in wages, allowances and on-costs. In return they would expect to generate \$290k in billable hours or productive work in order to achieve a return on investment of 7% per annum by the time the apprentice graduates.

The table below shows how the model plays out in dollar terms across the life of the apprenticeship.

The wages and on-costs are set by Award arrangements, the supervision costs are estimated from the Training Contract requirements and the tuition costs are known.

The model assigns a dollar value to the production risks and completion risks equal to about 22% of the costs in the first year falling to just 2% of costs in the fourth year. This reflects the reality that around 60% of apprentices who are going to drop out do so in the first 12 months. It's also the first year when apprentice inexperience can result in the greatest likelihood of negative production impacts.

Over each of the four years the breakeven point shifts upward as wages increase.

	Year 1	Year 2	Year 3	Year 4
Revenue generated				
Apprentice generated hours billed or work sold	50,000	60,000	80,000	100,000
Contribution to billable hours or revenue generated by the team	20,000	20,000	14,000	
Employer incentives in this period	1,500	0	0	2,500
	71500	80000	94000	102500
Wages and On-costs				
Indicative Ordinary time earnings	28,500	33,000	37,500	44,200
Overtime		2,500	3,500	6,000
Superannuation	2,800	3,500	4,100	5,000
Allowances	1,664	1,664	1,664	1,664
Holiday Leave Loading	1,000	1,200	1,500	1,800
Workers compensation	1,000	1,200	1,500	1,800
Supervision costs				
Tradesperson hours to supervise apprentice in line with Training Contract	10,000	7,000	3,000	0
Opportunity cost of Tradesperson completing other billable work	3,000	1,000	0	0
Time liaising with support agencies	300	200	200	200
Complex payroll processing	500	500	500	500
Tuition costs				
Time 'lost' for attendance at RTO for formal training	5700	6600	7500	0
Enrolment fees	1,000	1,000	1,000	0
Any rotation to fulfill Training Contract requirements			1,000	1,000
Production risks				
Potential damage to equipment during familiarisation	1,000	500	0	0
Time spent rectifying apprentice work	1,000	500	0	0
Work observation - the period before an apprentice can attempt new processes	4,000	1,000	500	0
Non compliance with safety requirements - refamiliarisation	500	500	300	200
Other costs of rework from "substandard" performance	1,000	500	200	0
Completion risk				
Time and resources invested in recruitment process	2,000	0	0	0
Not suitable -risk of non completion during probationary period	2,000	0	0	0
Apprentice initiated separation	2,000	3,000	1,500	500
Performance managed exit	2,000	2,000	1,000	500
Interruption to work continuity - Team downtime	500	500	500	500
	71464	67864	66964	63864
breakeven point relative to year 1	1.0	1.2	1.4	1.6

An apprenticeship is first and foremost a job

Most policy makers and economists have not undertaken an apprenticeship. But for the people who do, it's clear that the arrangement is first and foremost a job. If an apprentice drops out it's usually because they are leaving the job. They don't like the wages, they don't like the work practices of their colleagues, they don't enjoy the work, or they don't feel supported enough.

A Fair Deal – Apprentices and their employers in NSW report is a seminal investigation of these factors. It highlights how apprentices *get* the concept of a job where they learn skills as they go. They are initially prepared to put up with a significant wage discount as long as they are supervised correctly, in a safe and supportive work environment, paid accurately and on time, allowed to attend their formal off-the-job training and become more autonomous as their skills and experience grow. In short, they value the things guaranteed in their Training Contract.

Here is an example of how a carpentry apprentice's engagement levels build over time.

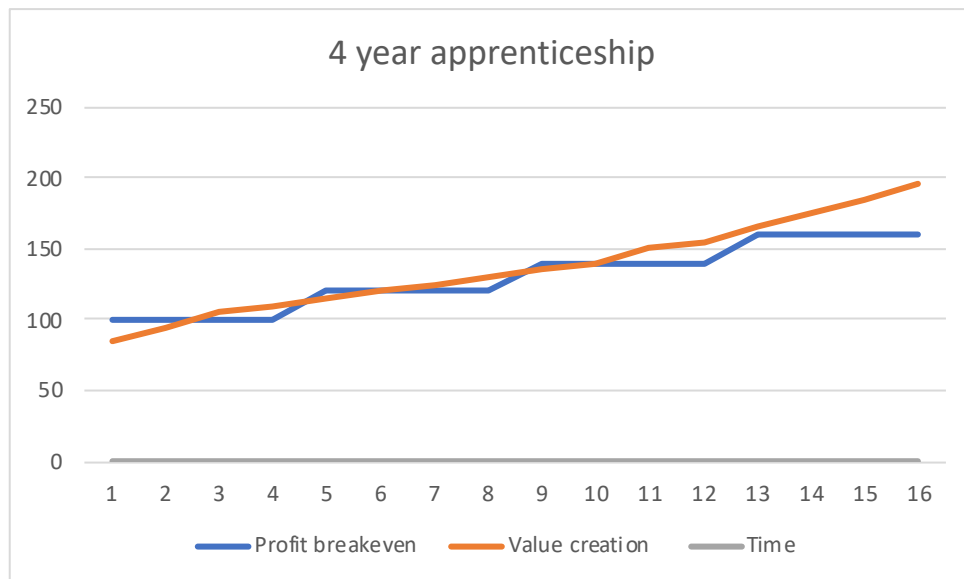
	Year 1	Year 2	Year 3	Year 4
Wages and loans				
Ordinary time earnings	28,500	33,000	37,500	44,200
overtime		3,300	3,700	4,500
Allowances	1664	1664	1664	1664
Superannuation	3016	3796	4286	5036
Youth allowance top up				
Trade support loan	8,617	6463	4,308	2,154
	30164	37964	42864	50364
Wage discount				
Percentage of National Minimum Wage	73%	84%	96%	113%
Opportunity cost - other entry level work	10,710	6,224	1,739	
Tuition costs				
Travel costs to attend RTO	1,080	1,080	1,080	0
Course material costs	500	500	500	0
Accommodation costs for "block release" training	1,000	1,000	1,000	
Training experience				
Supported to learn on the job	5,000	4,000	3,000	2,000
Time off work to study	2,000	2,000	2,000	0
Provided with help to overcome any study issues	5,000	3,000	3,000	0
Distance from RTO	1,000	1,000	1,000	
Satisfaction with RTO training	3,500	2,000	2,000	0
Work environment				
Paid accurately and on time	5,000	5,000	5,000	5,000
Good supervisor / boss	5,000	5,000	5,000	0
responsibilities grow as skills acquired	5,000	5,000	5,000	
Not bullied	5,000	5,000	2,500	
Safe work environment	5,000	5,000	5,000	5,000
Enjoy the work and have aptitude for it	5,000	5,000	5,000	10,000
	59790	50804	42819	22000
Apprentice engagement	0.50	0.75	1.00	2.29

The model assigns known amounts for wages and loans (where taken), the discount on the federal minimum wage (what could be earned in any other entry level job), and indicative tuition costs.

The model also assigns a dollar value to the other factors that go to the training experience and work environment. These will vary in each circumstance, but the total quantum remains largely similar. We know this because the engagement levels largely reflect the likelihood of dropping out in any given year of a carpentry apprenticeship used in the base case.

If something goes wrong with the training experience or in the work environment in the first year the apprentice has a high chance of not making it through. Whilst by the 4th year they are more than four times as likely to see the apprenticeship through. This is both because a 4th year is closer to the end but also because the risk factors are much diminished, and the pay levels have finally exceeded the federal minimum wage.

When everything goes well here is how an employer might expect an apprentice's productivity to increase over the life of the apprenticeship (orange line) mapped against the rising breakeven levels an employer must achieve as wages rise each year. Its striking that most of the return is achieved in final 18 months of the apprenticeship.



A key insight of this modelling is that both the employer and apprentice value propositions must be in balance for the apprenticeship arrangement to deliver a return for both.

So, for example if Award wages rise significantly that improves the value proposition and engagement for an apprentice but shifts the breakeven point higher for the employer. This results in higher productivity expectations by the employer if they are to achieve their modest 7% return on investment. Overall the arrangement is not improved by the wage rise.

Similarly, if Award wages do not keep pace with National Minimum Wage increases the wage discount may become too great and an apprentice will leave if work becomes problematic. In these circumstances an employer has lost the time they invested in recruiting, arranging and meeting the upfront tuition costs. So low wages can be a false economy.

For example, a first year Hairdressing apprentice earns just 63% of the national minimum wage, so if they choose to switch to any other entry-level job they earn 37% more.

The role of the workplace supervisor is key

Here is how NSW Training Services describes the role of the workplace supervisor

“...the minimum requirement under an apprenticeship or traineeship is that a person who can demonstrate the competencies relevant to the vocation the apprentice/trainee is employed in will supervise the apprentice/trainee in the workplace. For apprentices, this will usually be a person who is a qualified tradesperson in that trade.

The employer must ensure that each apprentice/trainee has the necessary support and an appropriate level and quality of supervision on the job. The level of supervision provided should be aimed at facilitating the successful achievement of the relevant competencies for each individual apprentice/trainee. It should be reassessed on a regular basis by taking into account the stage the apprenticeship/traineeship is at and the experience and training the apprentice/trainee has received in a particular task.”

The supervisors expected functions are set out in a 41-page handbook¹³ which contains the following diagrammatic representations of the role:

An effective workplace supervisor:



Provides a safe and supportive workplace



Integrates learning tasks into work activities based on the Training Plan



Manages safety and production risks while training



Acts as a role model



Meets with the RTO regularly to ensure effective training delivery and assessment practices and to review progress through the Training Plan



Promotes independence and self-direction in learning



Manages the apprentice's or trainee's training needs and motivation



Provides regular feedback and encouragement



Maintains records of progress




Helps the apprentice or trainee develop problem solving and general employability skills.

¹³ Supervising your apprentice or trainee – A guide for workplace supervisors. Oct 2018 NSW Govt

In terms of the workplace coaching role the supervisor is expected to:

 Explain your role to the apprentice or trainee	 Familiarise the apprentice or trainee with the workplace
 Liaise with the RTO about training	 Discuss the Training Plan with the apprentice or trainee
 Give clear instructions on work tasks	 Provide encouragement and feedback
 Monitor progress towards completion	 Provide on-the-job training and coaching to complete tasks
 Keep records	

				
Understanding assists learning	Clear communication	Demonstration	Practice makes perfect	Ask questions

-  Knowing how to do a job

-  Understanding workplace policies and procedures

-  Fitting in with others in the workplace

-  Dealing with everyday problems that may occur

Being competent means



- Understanding why it should be done that way 

- Being able to apply skills consistently 

- Being able to transfer skills to different situations 

- Being able to do different tasks at the same time 

The supervisor is also expected to solve workplace problems and is provided with the following advice:

Principles in dealing with workplace problems



Intervene early before a minor issue becomes a big problem.



Provide feedback to your apprentice or trainee, even if it's negative feedback, in a constructive way.



Always remain calm, and be clear about what you want. If necessary write down what you're unhappy about, and what improvement you're looking for.



Give people a second chance. There are not many behaviours that are so serious or dangerous that the person doesn't deserve an opportunity to set things right.



Make allowances for age and inexperience. Everyone makes mistakes and needs guidance from time to time. It's when people don't respond positively to advice or guidance that you may need to take a matter further.



Make sure you are fair in your dealings with the apprentice or trainee. Give them a chance to respond to any criticisms. If they are minors, encourage a parent or guardian to attend any counselling sessions or formal meetings.



Even if they are in the wrong, recognise the rights of the apprentice or trainee. If the position of the apprentice or trainee has become untenable, don't threaten to sack them—rather, tell them you will be applying to Training Services NSW for cancellation of the Training Contract.

The advice in the booklet is excellent.

The fee paid to employers for this service is zero.

The Association's modelling indicates that it costs an employer an average of \$26,900 to provide these supervision services. About 10% of the total cost of the apprenticeship arrangement over four years.

This is roughly double what the Registered Training Organisation is paid to undertake the formal training.

It means in reality that it costs about the same to teach an apprentice over four years as it does an under-graduate degree in Higher Education. The difference being that the training costs are fully reimbursed in the Higher Education arrangement but primarily borne by employers in the apprenticeship training system.

In apprenticeships employers must assume the risk of employment, supervision, external tuition costs, production and non-completion risks. The value proposition is complex and onerous.

By comparison if an employer hires a degree qualified graduate, they have borne none of the risks, had to fund none of the formal training or integrated work-based learning. If they participated in providing a "practical" placement they can use this as a recruitment tool. There is a fundamental comparability and fairness issue to be addressed here.

Getting the balance right

Since the Fair Deal research was undertaken in 2010 there has been a marked reduction in apprenticeship in-training levels.

The major reduction was associated with the removal of existing worker traineeship incentives - demonstrating the price sensitivity of employers to changes in incentive levels.

Between 2000 and 2015 trade apprenticeships and new entrant traineeships averaged 2.5% of the workforce. That level is now 1.9% and falling rapidly with the impact of Covid 19 on commencement levels.

When thinking about why, prior to Covid 19, we were 50,000 apprentices and trainees below historical levels its useful to examine the range of policy decisions that have impacted either directly or indirectly on the apprenticeship market and see how they affected value propositions.

Policy changes since 2010	Employer impact	Apprentice impact	Observations
Modern Award pay increases	↓	↑	Fewer places created by employers
Shorter nominal duration	↓	↑	Employer "pay back year" removed
Increase enrolment fees	↓	→	Increased cost to employers
Uncapped University places with lower ATAR	↓	→	Fewer candidates, lower HE completions
RTO funding below volume of learning minimum	←	↓	Lower formal training contact models
Rise in school leaving age	↓	↓	Reduced school certificate level cohort
Australian Apprenticeships Wage Subsidy pilot	↑	→	High value to employers
Replace Tools for your Trade allowance with Trade Support Loan	←	↓	Need to take a loan for the "priviledge" of doing a job
Expansion of targeted service in AASN contract	↑	↑	Candidates, employers and apprentices benefit
Additional Identified Skills Shortage program	↑	↑	Both employers and apprentices benefit

In the last decade only the Additional identified Skills Shortage program and the expansion of Targeted Services in the AASN contract have improved the value proposition for *both* employers and their apprentices.

All other initiatives had at best mixed impacts. Mainly though, the value propositions for employers to be involved in apprenticeships has been reduced with many employers exiting the system.

So, by June 2020 there were only 116,322 active employers of apprentices, with on average 2.36 apprentices in-training and commencing a further 1.3 apprentices on average per year.

Interim report observations about apprenticeships

The pertinent interim report comments about apprenticeships are “quoted” below along with the Association’s comments in response.

“There is little evidence that employer incentives for trade apprenticeships have been effective in increasing commencements.

- This is likely to reflect that these incentives typically comprise less than 2 per cent of the total costs of taking on a trade apprentice.”

The Association’s modelling confirms that where the full \$4,000 employer incentive is paid it is only 1.48% of the total indicative value proposition. But its 20% of the return on investment (measured by the revenue an apprentice will generate minus the costs of employing them).

Whilst employers hire apprentices for a range of licensing, skill development and altruistic reasons rather than just the employer incentive, there is ample evidence that removal of incentives has a rapid effect to reduce commencements.

This is because the employer value proposition is finely balanced, and incentives have been factored in. Removing them further diminishes the value proposition for employers to engage in the apprenticeship system.

This is best exemplified by the removal for incentives for Existing Worker Traineeships. Within 18 months this reduced these traineeships by 135,000 places.

This type of precipitous decline cannot be risked during or after the Covid recession.

“Given the apparently poor effectiveness of employer incentives, the Australian and State and Territory governments could consider:

- addressing barriers to hiring apprentices, including their foundational skills, work readiness and the minimum wages or other award conditions set by the Fair Work Commission
- reintroducing (better-designed) industry levies”.

The current incentive regime is complex and does not cover the costs associated with the supervision requirements employers must meet in the Training Contract. The Association argues that this is the case *for* better targeted incentives that improve the value proposition for the employer and their apprentices. This is best done through the creation of a supervision allowance.

The Association supports any further measures to address barriers to hiring apprentices including foundation skills, expansion of work readiness and pre-apprenticeship programs and a greater role for the integration of Fair Work Ombudsman tools for use by apprentice supervisors.

The Association is strongly opposed to the reintroduction of industry levies because they would act as a tax on business at a time when greater stimulus support for business is required. Employers are overwhelmingly net contributors to the apprenticeship system so additional taxes will further erode the value proposition to be involved at a time when we need to lift employer participation.

“Free-riding may result in underinvestment in training apprentices”

The free riding issue was not raised by participants in the initial consultations because it is a negligible issue between employers. There is a general sense of “what goes around comes around”. However, it could be argued that governments and taxpayers are free riding on the training effort that employers invest in their apprentices.

To overcome this issue employers need to know that they can recoup their investment during the life of the apprenticeship. The best way to achieve this and improve apprentice engagement is to pay a supervision allowance to employers in recognition of the public benefit they create when training an apprentice or trainee.

“One option to clarify employers’ eligibility for incentives offered by different levels of government is to task the AASN — which advises employers on eligibility for Commonwealth incentives — with assessing employers’ eligibility for State and Territory incentive payments. AASN providers are the first port of call for help on the apprenticeship system.”

The Association agrees with this observation.

“To better coordinate and streamline information on their multiple apprenticeship incentives, Australian, State and Territory governments could implement one or more of the following options:

- task the Australian Apprenticeship Support Network to assist employers in determining their eligibility for benefits offered by both the Australian and relevant State or Territory governments
- publish clearer information on all incentive payments that employers in each jurisdiction may be eligible for
- strictly delineate the roles and responsibilities for managing apprenticeship supports”

The Association agrees with these options.

“The new incentives program, Incentives for Australian Apprenticeships, will more than halve the number of payment types (from 31 to 14) and harmonise eligibility rules for full- and part-time apprentices, and apprentices studying Certificate III/IV and Diploma/Advanced Diploma qualifications”

The Association notes that these initiatives have been delayed until 2021. The Association agrees with the intent of simplifying the incentives but thinks the proposed IAA is not radical enough or targeted to achieve maximum effectiveness. The new approach is also more complex to administer with many additional pay points.

“While it is not clear how many employers will be affected by the proposed changes to the NSNL, if its current use is anything to go by, the updated NSNL is likely to be used to determine eligibility for only a small proportion of employers. As such, the Commission is unconvinced the costs associated with this process will be outweighed by the benefits of signalling areas of skills needs.

The Association broadly agrees with this observation. In our submission on the NSNL methodology we proposed an alternative may be to maintain a much smaller list of occupations experiencing no skills shortage. This may be a very small list as we emerge from the Covid recession with much lower apprentice commencements and in-training levels.

“In considering how to streamline trade apprenticeship incentives, the Australian Government could consider extending eligibility for trade apprenticeship incentives to all workers, regardless of their tenure with the employer.”

The Association agrees with this observation.

“Many stakeholders regard AASNs as a trusted intermediary, supporting users to navigate the apprenticeships system (DESE 2020f; Misko and Wibrow 2020a). This positive sentiment also came through in a recent performance evaluation of AASN providers conducted by Ithaca Group (2018a), although it found there remained some overlap between these and other support services. In particular, some STAs also play a role in delivering support services. They are also responsible for administering VET funding and regulating apprenticeships. This includes approving training contracts and plans and, in some jurisdictions, STAs also provide field officers who mentor and support apprentices, and handle complaints (DET 2018a)....

...nevertheless, while both levels of government provide support services, the delineation of roles is reasonably clear and the overall extent and impact of duplication is limited”

The Association agrees with these observations.

“The Australian Government could improve apprenticeship support services by:

- publishing more information on the scope of services that Australian Apprenticeship Support Network (AASN) providers are contracted to deliver
- evaluating the AASN contracts to assess how recently-revised arrangements have affected the efficiency of service provision and outcomes for users
- cooperating with State and Territory governments to jointly contract AASN providers to better align services with local needs, as is the practice in the Northern Territory”

The Association agrees with these observations, although we recommend that the model used in Queensland (where an additional contract is entered into between the successful ANPs and the STA) may be optimal. This allows for streamlined national procurement and the dovetailing of state requirements.

The Northern Territory arrangement has worked well but does require a separate tender process with the potential to delay the national procurement.

Finally, the interim report quotes the Joyce Report recommendation about the transfer of the AASN contract:

“Replace Australian Apprenticeship Support Network providers with industry bodies (called Skills Organisations) to increase industry’s role in promoting apprenticeships, designing apprenticeship support and developing training packages. The Review also recommended that Skills Organisations create a list of their preferred registered training organisations for employers to use when deciding where to train their apprentice or trainee. This list would also inform funding decisions by the Commonwealth and States and Territories.”

The co-design and consultation process for the implementation of the Joyce Review and the development of the VET Reform Roadmap found no appetite from stakeholders for this recommendation.

Replacing seven ANPs with potentially 30 Skills Organisations will add cost and complexity to an element of the system that has as the interim report notes has only “modest” potential for improvement.

The apprenticeship support system has operated when there were 420,000 apprentices and trainees in-training and has updated and adapted its service mix now there are 260,000. It's the value propositions for apprentices and their employers that need attention if we are to reinvigorate and refresh the apprenticeship construct.

Final remarks

The Association is running three scenarios to model the impact of Covid 19 on commencements, cancellations and in-training levels. These broadly align with the work of the Mitchell Institute and the NSW Business Chamber, that arrive at similar conclusions using different methodologies¹⁴. Our analysis uses the latest available NCVER commencement and exit data and combines these with the in-training data collected by ANPs.

Navigate the rapids - commencements decline by 23% across 2020 calendar year		Commenced	Cancelled & suspended	Completed	In-Training	Difference
Opening stock		274,905				
Dec-19	32,525	21,000	26,500	259,930		
Mar-20	55,000	20,000	20,000	274,930		
Jun-20	22,000	20,000	19,500	257,430		
Sep-20	20,000	20,500	20,500	236,430		
Dec-20	20,000	33,000	26,500	196,930	78,000	
		117,000				
Double trouble - commencements decline by 34% across the year, peak cancellations in June and Sept quarters		Commenced	Cancelled & suspended	Completed	New stock	Difference
Opening stock		274,905				
Dec-19	32,525	21,000	26,500	259,930		
Mar-20	55,000	20,000	20,000	274,930		
Jun-20	22,000	20,000	19,500	257,430		
Sep-20	12,000	20,500	20,500	228,430		
Dec-20	10,561	33,000	26,500	179,491	95,439	
		99,561				
Deep global recession - Commencements down 51% in 20/21		Commenced	Cancelled & suspended	Completed	New stock	Difference
Opening stock		274,905				
Dec-19	32,525	21,000	26,500	259,930		
Mar-20	55,000	20,000	20,000	274,930		
Jun-20	22,000	20,000	19,500	257,430		
Sep-20	12,000	20,500	20,500	228,430		
Dec-20	10,561	33,000	26,500	179,491		
Mar-21	31,500	20,000	23,000	167,991		
Jun-21	20,000	20,000	22,000	145,991	128,939	
		74,061				

If we do nothing to support commencements, apprenticeship levels will collapse as the value proposition to employ young people diminishes. The Association encourages the Productivity Commission to foreground this analysis as the recommendations for improving apprenticeship commencements and completions are finalised.

¹⁴ The Mitchell Institute uses an analysis of past recessions' impact on in-training levels, the NSW Business Chamber uses their data set that represents about 30% of the apprenticeship market nationally.