PAVING THE PATHWAY
ADDRESSING POST YEAR 10 EDUCATION

NSW Business Chamber

Thinking business

Businesses in NSW need a skilled, flexible and motivated workforce that contributes to productivity gains and drives economic development. The NSW Business Chamber (the Chamber) believes that ensuring the available workforce has the skills and knowledge required to meet the needs of business is a major issue for NSW.

Youth disengagement from education, training and employment has significant economic and social costs, including a reduced capacity to meet the labour and skill needs of business. It's clear that young people need to be provided with better opportunities to prepare for their adult life, including their life at work. We need to look at current school curriculum design which favours traditional academic subjects and pathways to university.

The current Higher School Certificate (HSC) is well suited to those students who end up going to university, but more needs to be done to cater for the majority of young people who follow alternative pathways. It has been almost 20 years since the HSC was last reviewed. A great deal has changed in this time, and incremental reforms to secondary schooling arrangements have not improved post-school outcomes for those who choose a vocational pathway or directly enter the workforce. Young people account for a disproportionate share of job seekers. Slowing economic activity reduces the rate of job creation, and young people are the ones most affected by the declining availability of jobs. While schools cannot ultimately be blamed for labour market conditions, the Chamber believes that delivering secondary schooling more effectively can improve post-school outcomes for young people who are facing an increasingly competitive labour market.

This **Paving the Pathway** report examines the transitions that young people in NSW make from school to further study and work. The report identifies key issues that impact on the success of post-school transitions.

The Chamber would like to acknowledge the team at the Melbourne Graduate School of Education, University of Melbourne, for the preparation of this paper. In particular, the Chamber would like to thank Professor John Polesel for leading this research. Overall responsibility for the recommendations listed below, however, rests with the Chamber.

To better support the transition of young people from school to further education and work opportunities the Chamber recommends the Government, schools, business, and the broader community work to:

Conduct a root and branch review of post-Year 10 education and training in NSW

Raise the bar on VET delivered to secondary students

Give young people robust "real world" careers advice

Provide more opportunities for learning in the workplace

Explore and implement mechanisms to boost school leavers' language, literacy and numeracy

Allocate resources on the basis of need with a focus on students in regional areas

Better help young people earn and learn

Commit to a longer term strategy to support young people transition from school to work

Stephen Cartwright
CEO, NSW Business Chamber

Recommendations

Conduct a root and branch review of post-Year 10 education and training in NSW

The Chamber believes that there should be no sacred cows when it comes to improving outcomes for school leavers. Accordingly, we renew our previous calls for a wide ranging, high level review into post-Year 10 education and training arrangements in NSW. Such a review should include consideration of the following:

- The expansion of the number and capacity of senior colleges, senior high schools and similar arrangements so that they are able to accommodate the great majority of students after Year 10
- The adequacy of the NSW Higher School Certificate in meeting the needs of students who do not enter university after leaving school, and options either for changing it to better meet their needs or for developing an alternative certificate
- Create clearer pathways from upper secondary-level vocational education to post-school VET courses
- The adequacy of funding arrangements across schools, TAFE and other VET providers after Year 10 in supporting pathways to employment and vocational training, and proposals for improving these arrangements

Raise the bar on VET delivered to secondary students

One strategy to improve the options available to a broader group of young people involves the delivery of VET to secondary students. This report argues that school-based programs including VET need to be more coherently aligned with core academic subjects; the resource implications for schools delivering VET to secondary students should be recognised; and that the status and effectiveness of school based vocational education can be improved if businesses and other key players take on a greater role.

It is imperative that schools prioritise VET in the allocation of staff and physical resources. Integrated vocational programs, not piecemeal approaches consisting of unconnected subjects.

Strategies to increase the number of school based apprenticeships need to be considered. This report shows that it is particularly important to improve access to apprenticeships for young women. The NSW Government should work in partnership with industry to identify opportunities for growth. This will involve addressing negative community perceptions about VET and gender stereotypes about certain occupations.

Increasing school based apprenticeships can only happen if there are new school models or at least flexible timetabling. School based apprenticeships will only be effective if the conditions for delivery are right.

To ensure that students can follow a meaningful vocational pathway that leads to the attainment of qualifications it's essential that principals and other decision makers are better informed about the courses they choose to make available for students and where those courses lead to.

New provider standards for VET agreed to by COAG require more industry engagement. This may present a challenge to some schools. Support for a structured approach for industry engagement with schools needs to be a priority.

Importantly, both the level of qualification and VET courses delivered to school students needs to ensure that the standard of competency can be achieved in the time available under the conditions of learning.

Give young people robust "real world" careers advice

High quality careers advice and guidance is vital to support young people make the best decisions about education and employment. The Chamber recommends that the NSW Government implement an external model of career advice and guidance that maintains strong links with relevant school curriculum. Under this approach, external providers would work in partnership with schools to:

- Provide career information, particularly information about the labour market and about vocational pathways; either on an individual or group basis, by arrangement or on demand
- Provide professional learning on the above for school based staff
- Encourage entrepreneurial thinking and ideas about starting businesses

- Explore career options, career suitability and align the interests of young people with potential occupations

This partnership model, in which schools are responsible for some areas of career development, but partner with external agencies for other elements of provision, has the capacity to deliver more optimal services for young people.

A more comprehensive approach to career development is needed. This approach should be systematic, start in the early years and promote a broad range of options including VET, entrepreneurial skills and students' capacities to develop their own business.

Provide more opportunities for learning in the workplace

One of the strengths of NSW VET in Schools arrangements is the compulsory structured workplace learning arrangements for students undertaking VET in Schools as part of their HSC. Research shows that in addition to building self-confidence in young people, work placements can promote pathways to employment and further study, improve work readiness of young people and have a positive effect on school completion.

Each year, approximately 30,000 employers demonstrate their goodwill in providing 60,000 young people the opportunity to contextualise their classroom learning in a workplace though Industry Curriculum Framework VET courses. Many of these employers provide multiple placements throughout the year. These employers provided approximately 2.2 million hours of work placement in 2014. This represents a significant investment from the business community.

The existing framework which utilises external contracted providers who coordinate work placement arrangements with employers has ensured that employers are not being overwhelmed by requests from individual students or schools, and help ensure the provision of quality structured work placements that benefit students.

The Department of Education and Communities has identified funding for 2015 but the future of the program is uncertain. Government needs to commit to this important program with additional funding for further promotional activities to engage more employers to participate, and some form of recognition for those employers who make a commitment to host students a priority.

In the longer term, the coordination of structured work placements could be incorporated into the responsibilities of external careers advice providers, as outlined in the previous section. This model has been used successfully overseas.

Explore and implement mechanisms to boost school leavers language, literacy and numeracy

Successful transitions into sustainable employment are almost impossible for young people with very poor literacy and numeracy skills. Mandating minimum exit standards has been proposed as a way of raising literacy and numeracy achievement levels by concentrating school resources on the teaching of these skills, particularly for those at highest risk.

Western Australia has recently introduced major reforms to raise the literacy and numeracy standards for secondary school students through the introduction of externally developed on-line assessments at year 10. In addition to early intervention initiatives, from 2016 minimum literacy and numeracy standard requirements must be met by students sitting the Western Australia Certificate of Education. The NSW Government should closely monitor the impacts of these changes in WA with a view to implementing similar changes if the reform is shown to be successful.

As this report shows, the implementation of minimum standards in and of itself will do little to improve outcomes without strategies to support students where standards are not being met.

It is clear that intervention is required in the earlier years of schooling if we are to better equip early school leavers with the minimum levels of literacy and numeracy required to successfully function in society. There are many individualised programs that have been effective in raising literacy and numeracy levels. Early interventions should follow the key principles underpinning successful programs:

- Interventions are embedded in a whole school approach to enhance learning
- Early diagnosis and intervention for literacy and numeracy difficulties
- Effective diagnostic assessment
- An individualised approach to intervention
- The incorporation of evidence-based principles of effective teaching in literacy and numeracy interventions

Interventions are clearly focused on key aspects of literacy and numeracy development. There is a need for longer term commitment to effective early intervention literacy and numeracy programs. Continuity of program delivery is not only important for students but also has implications for teachers' professional development and application of best practice pedagogy.

Allocate resources on the basis of need with a focus on students in regional areas

This report shows that socio-economic status, regional location and gender have a clear impact on post-school destinations in NSW, as is the case across Australia. Outcomes are particularly poor for early school leavers.

Rates of transition to university and to post-school VET are much lower for young people attending school in rural and regional NSW than in Sydney. While the higher rate of transition to apprenticeships is one positive for regional NSW school completers, it does not compensate for the lower rates of transition to tertiary education there.

The Chamber supports needs based school funding allocation models as an important means of improving outcomes for all young people in NSW. Implementing more effective funding models is critical for improving student outcomes across the board. This will require state/territory and federal governments to work together to coordinate funding more effectively. The Chamber recommends that the NSW Government work in partnership with the Commonwealth to ensure a long-term commitment to effective needs based funding models.

Better help young people earn and learn

This report shows that numbers of young people who transition directly into the workforce following school find themselves in part-time, casual and low-skilled positions. These young people can find it difficult to secure full-time work. The Chamber believes it is important that more entry level roles involve formal nationally accredited training to ensure these young people can access genuine career progression opportunities.

Traineeships that provide opportunities for career progression play an important role in young people successfully transitioning into sustainable employment. The Chamber recommends that the NSW Government work closely with the Commonwealth to explore the re-introduction of financial incentives for businesses that employ new entrant trainees, or provide traineeships to existing workers.

Commit to a longer term strategy to support young people transition from school to work

The removal of funding for youth transition programs, without adequate replacement programs, is of great concern to industry. The continual chop and change of government programs in this area, including a long list of previous pilot programs, undermines important progress made in supporting young people. Strong, bi-partisan commitments from the Commonwealth and NSW Government to ensure the continuity of program delivery in this area is absolutely critical in addressing the challenges faced by youth.

The Chamber recommends the establishment of a co-ordinated and overarching youth employment strategy. Such a strategy should include policies to bring the education system closer to the labour market, programs to help disadvantaged young people find a job or participate in a training course, and initiatives that help facilitate the hiring of young people by businesses. More needs to be done to ensure a coordinated approach that covers education and training, labour market programs, industrial relations, employment services, human services, economic development and other key areas that impact on youth employment. A co-ordinated approach will help to create greater efficiency of service delivery, reduce duplication and build on best practice models to improve employment outcomes for young people. The strategy would be developed by state and territory governments and the Commonwealth, in partnership with industry, employers, unions, and relevant community organisations.

The Chamber believes that the best way for government to reduce youth unemployment is to focus on economic growth to boost demand for entry level positions. Additionally, labour market outcomes for young unemployed should be further improved through targeted programs that make them "job ready" and create clear pathways to employment. Programs that provide these services to young unemployed can increase their opportunities to move into work when extra jobs become available.

NEW SOUTH WALES
YOUTH IN TRANSITION

**A Thinking Business report prepared
for the NSW Business Chamber**

John Polesel

Mary Leahy

Suzanne Rice

Shelley Gillis

Gosia Klatt

Kira Clarke

Melbourne Graduate School of Education

The University of Melbourne

MELBOURNE GRADUATE
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Shaping minds, shaping the world

THE UNIVERSITY OF MELBOURNE

Executive Summary

The majority of young people in NSW, though not all, now complete secondary school – about three quarters. But of those, only about half will go to university. This raises an important question. What are the options we are providing for the remainder of the cohort – the six in ten or so who do not go to university, some of whom do not even finish school? We would do well to remember that they form the majority, not those who go to university. We would argue that the culture of our secondary schools is still one which valorises university entry for the minority at the expense of other pathways. The Going for Growth report noted that in Australia:

…the high share of the low skilled in unemployment and inactivity, especially early school leavers, suggests that the upper-secondary education system's emphasis on preparation for university is too narrow, hampering innovative activities and productivity growth. (OECD 2007, p.3)

Vocational and applied learning operate within an environment of status deficit and demonstrably weaker schooling outcomes – within a policy sphere which places emphasis on university entry. This is partly a problem of educational culture, a culture which can be inimical to VET. It is a problem which typifies approaches to VETiS which do not involve an apprenticeship model and which do not involve industry and the social partners. Vocational education is an important tool for engaging and re-engaging weaker learners but also different learners – because it is not just weaker learners who benefit from strong applied learning pedagogies and curriculum. However, if our systems and our schools can't assign real value to vocational programs, then they will always be seen as the low status option.

Careers education and guidance, too, delivered mainly in a "within-school" paradigm in Australian schools, runs the risk of focussing too narrowly on university preparatory pathways, with a consequent lack of information being made available to young people regarding vocational pathways and entry to the labour market. There is also a concern that within this model of delivery of careers education and careers guidance schools' interests may prevail at the expense of students' interests, with impartial advice as to subject choice, school choice and other options being denied to some young people.

With respect to literacy and numeracy standards, the research presented in this paper suggests that some caution is required about moving towards the introduction

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of minimum exit literacy and numeracy standards in NSW. There is a lack of clear evidence that such a strategy alone will raise student achievement levels. There are, however, a plethora of programs which continue to improve literacy and numeracy levels of young school students.

Alternative approaches exist mainly at the margins in Australian upper secondary education. Despite evidence that the mainstream secondary school model does not cater for all students, the role played by post-school VET providers for school-aged clients, although increasing, remains limited. We have also identified weaknesses in the current models of delivery of adult sector VET to school-aged clients, weaknesses which include unclear pathways, qualifications with limited value among employers and teaching staff who are inexperienced in teaching this younger age group. Collegiates and senior secondary schools (Year10-12 or Year 11-12), although they have been found to be valued highly by young people and by some teachers, also play a limited role in NSW as in the other Australian states and cannot be considered a mainstream solution (Polesel 2002).

There are things we can do to improve the situation. Firstly, we need to prioritise VET in the allocation of staff and physical resources. And we need to acknowledge the needs of students who want applied learning pedagogies and who will drop out of school if we don't engage them. We need to provide coherent integrated vocational programs, not piecemeal approaches consisting of unconnected subjects. We need to think about VET in schools as a pathway to further study, a way of engaging with broad industry areas and families of occupations. VET in Schools does not lead students directly from school into skilled well paid jobs.

Wheelahan, Moodie and Buchanan (2012) argue that the approach to pathways has focused on the supply side of education. This attributes the limited flow of students to a failure of the education sectors to co-operate effectively or inadequate education and training funding. However the labour market or the demand side for education has a significant impact on the movement between sectors. Wheelahan and colleagues found that there is a

relationship between the fragmented educational pathways and segmented labour market pathways. Strong pathways are possible but are more likely in the regulated professions such as nursing. According to Wheelahan, Moodie and Buchanan (2012 pp.7-8) achieving 'a more orderly flow of people into more desirable educational and labour market trajectories' requires adjustments in the labour market as well as in the education sector. This will be achieved by involving employers, unions and government as social partners (Moodie et al. 2013 p. 9).

Although relatively few students move between VET and higher education qualifications, educational pathways can have a transformative impact on individuals. They can

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provide an opportunity for students to build their skills, confidence and aspirations therefore expanding their opportunities for longer-term sustainable employment (Wheelahan, Leahy et al., 2012).

Some of the problems with fragmented educational pathways and segmented labour market pathways can be addressed by drawing on the concept of vocational streams (Moodie et al. 2013; Wheelahan, Moodie & Buchanan, 2012):

Vocational streams consist of linked occupations that relate to the core underpinning concept and set of practices; for example, care and care work. Preparation for a vocational stream implies that education will have a broader focus because it is preparation for a number of linked occupations rather than being specific preparation for specific jobs. In preparing students for vocational streams the focus will need to move beyond specific tasks and roles within jobs, to broad fields of practice, where the focus is on the development of the person, the attributes they need and the knowledge and skills they require to work within a broadly defined field of practice, in which educational and occupational progression is combined (Moodie et al. 2013, p. 32)

The challenge of choosing a future career is made easier if young people can first identify the broad field within which they wish to be employed (Wheelahan, Leahy et al. 2012). Rather than prepare for a specific job, young people will develop the knowledge, skills and attributes that will enable them to develop a career within a vocational stream (Moodie et al. 2013):

Preparation for vocational streams fosters identification with the field of practice rather than with a specific employer, enterprise, job or occupation. Preparation for vocational streams requires education in related clusters of knowledge and skills, which allows individuals to progress and/or specialise within a field of practice, or to move laterally into related occupations. Preparation for work would need to be based on a continuum of knowledge and skill that links work, vocational and higher education and include the capacity to accrue skills coherently and cumulatively. (Moodie et al. 2013, p. 32).

This type of education is not narrowly tied to a particular job, the nature of which is likely to change. Instead it can support educational progression as well as an individual's capacity to develop a career within their chosen vocational stream.

However, industry and employers have an important role to play and need to be more active social partners. It is no accident that countries like Germany and Austria have effective VET systems and low youth unemployment. In these countries there is a strong cooperative effort by government, employers and educators to design and deliver the kind of education and training which provides mutual benefits to industry and young people. The market will not do this on its own.

It is timely to remember that schools do not create unemployment and alone they cannot fix it. Schools do not create skills shortages and alone they cannot fix them. It is clear that a strong cooperative effort between government, schools, industry and the community is needed in order to improve outcomes for young people in NSW.

1. Introduction

Over the last decade, the three largest Australian states - New South Wales, Victoria and Queensland - have commissioned major studies investigating the study and labour market destinations of school leavers. These studies, curiously, have attracted relatively little attention in the media, despite revealing some disturbing trends. All these surveys have found that a majority in each of the three states' cohorts make a relatively successful transition from school into university, vocational education and training, apprenticeships, traineeships and, to an extent, directly into the labour market. However, the transitions for the remainder – about one quarter of the school completer cohort in New South Wales – are more problematic. This group of young people finds itself moving to mainly part-time, casual work in low-skilled and low-paid jobs, predominantly in hospitality and retail (Polesel et al. 2013). Young people employed during a gap year or while they are students can develop important work skills through their part-time and casual jobs. However the longer term outcomes for a significant minority are much weaker. They are at risk of churning through different low skilled precarious jobs, unemployment and periods out of the labour market (Yu et al 2012b). This has serious implications for the well-being of individuals and their families (Stanley et al 2005; Pocock et al. 2011; Pocock & Buchanan 2006; Standing 2011).

This pattern of transitions found in NSW and repeated in other Australian states largely reflects the nature of the labour market for young people (DEECD 2013, DETE 2013). Castles et al (2010) have described the decline of secure, full-time jobs for young people in many OECD nations, with those affected being characterised as an emerging 'precariat' (Castel 2003; Standing 2011), made up of employees in short-term contracts, dealing with job insecurity and poor conditions, and receiving little training. The social and economic costs of precarious employment not only impact on the individuals directly affected (Masterman-Smith & Pocock 2008), they have a corrosive effect on the whole society (Wilkinson & Pickett 2009; Nussbaum 2011; Sen 2009).

It is important to draw attention to the nature of the labour market for young people in Australia but schools cannot be held responsible for economic conditions. However we need to ask what schools can do to more effectively prepare young people for these conditions. Individuals are most vulnerable at the point of transition

"For young people the most critical transitions are between stages of education, including school to tertiary study or from a lower to higher level of tertiary study, and between education and employment."

from one phase of employment or education to another (Schmid & Schömann, 2003). For young people the most critical transitions are between stages of education, including school to tertiary study or from a lower to higher level of tertiary study, and between education and employment. Schmid and his colleagues highlight the importance of supporting people through these transitions, particularly those young people most at risk of becoming disengaged from education and employment.

The purpose of this report is to examine the transitions NSW youth make from schools to further study and employment and discuss the key issues impacting on the success of those transitions. The next section carefully analyses the data regarding transitions from school in NSW for both school completers and early leavers. It asks whether these transitions vary for young men and young women, for those living in Sydney and those living in rural and regional NSW and for those from different social backgrounds.

One strategy to improve the opportunities available to a broader group of young people involves the delivery of vocational programs in schools. Section 3 of this report considers the role of school based vocational education and training (VET) in preparing young people to meet the challenging circumstances they face upon leaving school. It asks whether these programs could be better adapted to meet these conditions.

Section 4 examines the role of careers advice and guidance in assisting young people to plan and make choices regarding their study and work. Individuals need to be literate and numerate to engage in the workplace and as active members of society. Section 5 outlines the principles common to effective initiatives introduced into NSW schools to raise literacy and numeracy levels. It also examines debates about literacy and numeracy standards for school leavers. Section 6 considers the structure of schooling, including the role of alternative providers and alternative approaches to provision. It asks whether these providers and approaches can assist us to better prepare the range of young people now completing school in NSW. The final section draws together the discussions and debates covered in the report and to make some recommendations regarding a way forward.

2. Transitions: what are the problem areas?

This section draws on a major survey of young people in NSW, their parents and teachers, examining post-school destinations of year 12 completers and early school leavers (Polesel et al. 2013). It should be noted that the post-school destinations of young people need to be considered in the context of an overall apparent retention rate from year 7 to year 12 of 76.7 per cent (Australian Bureau of Statistics (ABS) 2013). The retention rate is higher for female students (81.2 per cent) than for male students (72.4 per cent), and higher for Catholic school students (80.4 per cent) and Independent school students (87.5 per cent), compared with government school students (72.7 per cent). In other words, a significant proportion of the age cohort does not even reach the point of graduating from school, and its members are unevenly distributed across the population. It can also be noted that the NSW school completion rate is lower than the national average (81.6 per cent) and lower than all other states and territories except Tasmania and the Northern Territory (Polesel et al. 2013).

Australia's school retention rates are relatively low by international standards and have increased only a little over past two decades (ABS 2011). This is concerning given the strong evidence that non-completion of school is associated with poorer labour market outcomes and poorer health and wellbeing outcomes for individuals (Belfield & Levin 2007; Leigh and Ryan 2008; OECD 2010, Rumberger 2004; Oreopoulos 2003; Rouse 2005 cited in Rumberger 2011). Young people who do not complete year 12 are less likely to participate in the labour market, are less likely to find work, are more likely to obtain intermittent and insecure work when they do find a job and earn significantly less than school completers over a lifetime (Rumberger, 2011). Society also pays a price for school non-completion, which has been found to carry broader consequences in the form of lower productivity, lower tax revenue for governments, higher health costs, weaker social cohesion and increased crime and welfare costs (Rumberger 2011; Belfield and Levin 2007).

Figure 1 reports the main destinations in 2013 of school completers from the 2012 cohort in NSW. It utilises data collected from the students regarding both their study and labour market destinations, combining these to report a "main" destination which gives priority to the study. For example, those studying at university or in VET but also working part-time are classified as students. By way of contrast, those working (full-time or part-time), looking for work or NILFET (not in the labour force or education or training) are not in any form of study or training Apprentices and trainees are clearly both in paid work and in training.
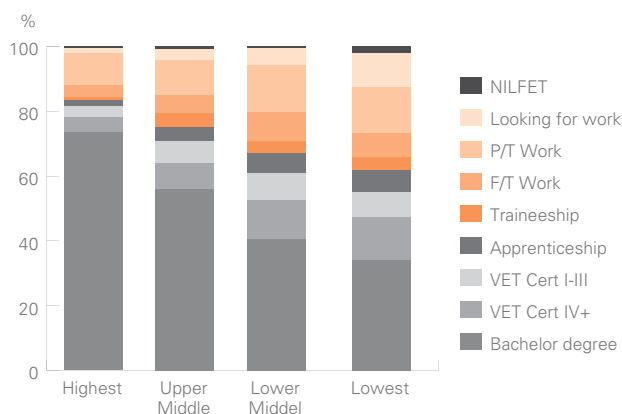
Figure 1
Destinations of Year 12 completers, NSW, 2013 (n=1656).
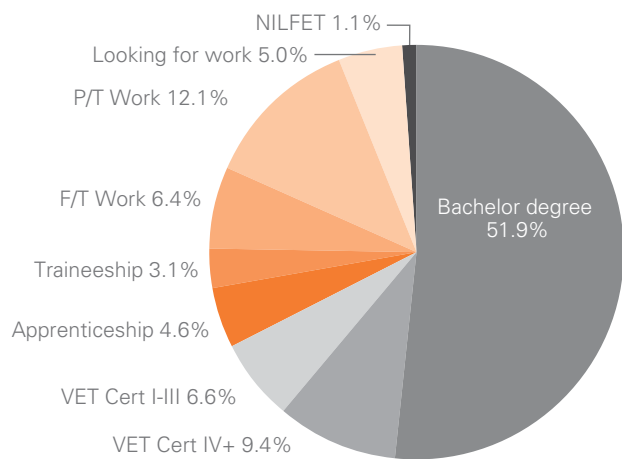
Source: Polesel et al. (2013).

Figure 1 shows that university study was the most common destination for school completers in NSW in 2013, accounting for just over half the cohort. It should be noted that the study did not distinguish between different types of degrees (Polesel et al. 2013). The potential employment outcomes and lifetime earnings of graduates vary, depending on factors which include the type of degree and the status of the university (e.g. Guthrie 2014).

A further 9.4 per cent of the cohort entered VET programs at Certificate IV, Diploma and Advanced Diploma level, mostly in Technical and Further Education (TAFE) Institutes. A slightly smaller proportion (6.6 per cent) entered VET at more basic levels – Certificates I, II and III. Apprentices and trainees accounted for 4.6 per cent and 3.1 per cent of the cohort respectively. The final group of destinations covers those who were not in education or training. Most entered the labour market, with 6.4 per cent in full-time work (classified as 35 hours per week or more), 12.1 per cent in part-time work and 5.0 per cent unemployed. The transition for this group of young people can be problematic. Only a minority find full-time work, with nearly two-thirds of them working part-time or unemployed. Moreover, those working are predominantly in low-skilled and low-paid jobs in the casualised sectors of personal services, hospitality and sales. There is also a final category, comprising a small proportion of school completers (1.1 per cent) who were neither in education or training nor in the labour market (i.e. not working but not looking for work either). This category includes those who might have been caring for a child or relative at home, or unable to work due to a disability (Polesel et al. 2013).

Figure 2
Destinations of Year 12 completers, NSW, 2013 by SES

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Destinations of Year 12 completers, NSW, 2013 by SES

Source: Polesel et al. (2013).

Data collected in the study also allowed the destinations to be broken out by socio-economic status (SES). Figure 2 shows that the most common destination for year 12 completers from each of the SES quartiles was university. However, destinations varied considerably according to SES. It can be seen that the proportion of year 12 completers going to university increases with SES. Almost three quarters of year 12 completers from the highest SES quartile went into this destination (73.5 per cent). This destination accounted for 56.1 per cent of the upper middle quartile respondents, 40.7 per cent of the lower middle quartile respondents and just over one third of those from the lowest SES quartile (34.0 per cent) (Polesel et al. 2013).

For those destinations other than university, participation tends to increase as SES decreases. For example 4.9 per cent of year 12 completers from the highest SES group compared with 13.3 per cent of the lowest SES group went into higher level VET courses. Similarly, one in ten year 12 completers from the lowest SES quartile was looking for work (10.6 per cent). This is double the proportion from the lower middle quartile (5.3 per cent) and significantly higher than the proportion from the highest and upper middle quartiles (1.5 and 3.3 per cent respectively). The proportions of school leavers entering the labour market also rose as the level of SES fell. SES has a clear impact on destinations in NSW, as it does elsewhere in Australia. Year 12 completers from the highest SES quartile are more likely to go to university

and the least likely to be not in education or training and not in the labour force. A much smaller proportion of Year 12 completers from the lowest SES quartile go to university and relatively higher proportions of this same group are unemployed or not in education or training or the labour force (Polesel et al. 2013).

Figure 3
Destinations of Year 12 completers, NSW, 2013 by region
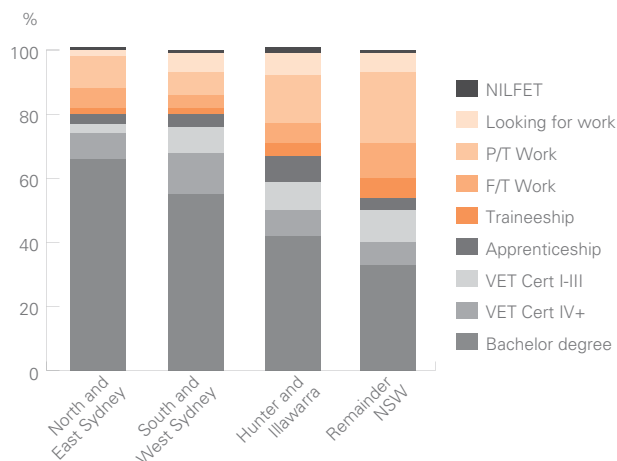
Source: Polesel et al. (2013).

Figure 3 reports destinations by region. It shows that students living in Sydney are much more likely to enter university than those in the Hunter and Illawarra regions and that the Hunter and Illawarra students are much more likely to do so than those in the remaining rural regions of NSW. Students in North and East Sydney were in fact twice as likely to get into university as those from Remainder NSW. The regional impact remains even after controlling for SES (Polesel et al. 2013).

The destinations of early leavers in NSW are even more problematic (see Figure 4). While a significant proportion of young male early leavers is able to enter the relatively secure pathway offered by apprenticeships, the destinations for the remaining early leavers are not so positive. Some enter post-school vocational programs (mainly in TAFE) but these are predominantly low-level programs at Certificate I and II level. Over one third of boys and nearly four in ten girls enter the labour market, with the majority either in part-time work or unemployed (Polesel et al., 2013).

Figure 4
Early leaver destinations in NSW, 2013
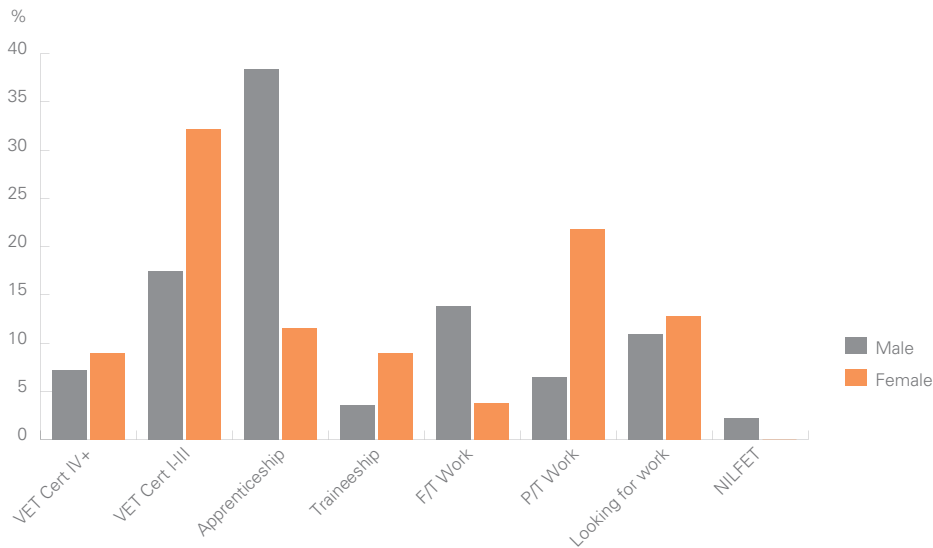
Source: Polesel et al. (2013).

In summary, then, university is the destination attracting the largest proportion of school completers in NSW – over five in ten – and approximately one-quarter of the school completers are entering vocational programs (mainly in TAFE, but also increasingly in fee-paying private providers) and apprenticeships and traineeships. The transitions for the remainder are, as we have seen, more problematic.

Moreover these patterns of transition affect different groups of students in different ways. While young women are more likely than their male counterparts to make a transition into university, they are less likely to access apprenticeships. For those making a transition directly into the labour market, part-time casual work with its associated insecurities is much more likely to await them than full-time jobs, in comparison with their male peers. Similarly, patterns of transitions are affected by SES, with those students from higher SES backgrounds more likely to enter university and less likely to move into part-time work and unemployment than their poorer peers.

There is also evidence of regional disadvantage. Rates of transition to university and to post-school VET are much lower for young people attending school in rural and regional NSW than in Sydney. While the higher rate of transition to apprenticeships is one positive for regional NSW school completers, it does not compensate for the

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lower rates of transition to tertiary education there. Regional students are also more likely to enter the job market directly out of school and consequently are more likely to find themselves in part-time work or unemployed (Polesel et al. 2013). Data from Victoria suggests that regional school completers are twice as likely to defer a university offer, citing costs, distance and the challenge of relocating to a big city as major barriers (Freeman et al. 2014).

For most early leavers, the situation is even worse. Some, mainly boys, obtain apprenticeships, and some go into entry level courses (Certificate I and II) in TAFE, but for most the reality is a cycle of under-employment and unemployment.

3. VET in Schools and program cohesion

VET in Schools (VETiS) has been introduced to expand the options for young people, particularly those most at risk of not finishing school and of making poor post-school transitions. VETiS typically involves basic entry-level vocational qualifications which usually form a very minor part of the broader program of Year 11 and Year 12 studies in the HSC. While requiring some structured workplace training, they typically do not involve an apprenticeship or traineeship arrangement. It is rare for a student to obtain even a very basic VET qualification while at school and the studies do not provide specific competencies or a 'licence' to practice a trade, with the units usually taken from the most basic qualification levels (Certificate I or II) (Polesel 2008).

Studies (e.g. PhillipsKPA 2006) have criticised Australian VETiS for not delivering the basic competencies required by industry, for being too oriented towards graded assessment and for operating within the constraints of schools and their requirements. Anlezark et al. (2006) have questioned the efficacy of school-based VET in creating pathways into post-school VET. There is also evidence that VET is not regarded highly in schools (Polesel & Clarke 2011), with traditional subjects given priority in staffing and resourcing, even when many students need the curriculum breadth it offers (Polesel et al. 2004). This is partly a problem of school culture which privileges traditional academic subjects and pathways to university.

The evidence for the effectiveness of VET in keeping students at school is mixed (Anlezark et al. 2006). Retention rates have not improved even though vocational programs were introduced in Australian schools in the 1990s. They have remained around the 80 per cent mark, lower in NSW. Moreover, research (Polesel 2008) suggests that VETiS graduates entering the labour market have no advantage over their non-VET peers, with both groups entering the same low paid, low skill occupations, characterised by part-time and casual work. Similar research conducted in Queensland came up with the same findings (DETE 2013). Anlezark et al. (2006) argue that VETiS does not prepare young people well for entry to work.

In addition, recent research suggests that these programs are associated with high levels of social selection (Polesel 2007; Polesel 2008), a phenomenon related to the roles played by the different school sectors and their relationship with socio-economic status (SES). The research shows that students from the lowest SES categories are much more likely to participate in vocational subjects, and typically as SES rises, the chances of participating in these subjects tends to fall (Polesel 2008).

There are three main issues: first, the coherence of an individual student's program of study, secondly, the resources required to support the delivery of effective VETiS programs and finally the status of VETiS.

A recent NCVER study (Clark 2014) found that effective VETiS programs require program coherence. The different studies and subjects which combine to make up the student's senior secondary certificate program need to be connected. For example, if a student is studying units which contribute to a Certificate II in Electronics, then mathematics studies at an appropriate level should be mandated or at least strongly recommended. Currently students have considerable choice and subject selections in many cases may not combine well to form a program with clearly identifiable pathways. The study also noted that promotion of VET in Schools subjects as a pathway directly into work is not appropriate, given both the very basic and incomplete qualifications which they confer at this level and the lack of skilled jobs for young people with these qualifications.

> "There is also evidence that VET is not regarded highly in schools (Polesel & Clarke 2011), with traditional subjects given priority in staffing and resourcing, even when many students need the curriculum breadth it offers."

The second issue concerns the significant resource implications for schools seeking to deliver VETiS. VET subjects are more expensive to deliver than subjects such as mathematics and English. However, they are more likely to be offered in disadvantaged government schools, where budgets are tight. There are usually additional VETiS program fees, but these can be prohibitive for the families of disadvantaged students.

Part of the cost of offering VETiS is linked to the organisation of the work component. On average, students in NSW are required to complete 40 hours of structured work placement per year, with some requiring 70 hours of mandatory structured work placement for a 240 hour VET Industry Curriculum Framework Course. In NSW, these

work placements are provided by Industry Partners (mainly businesses) to 65,000 students. In 2013, there were more than 20,000 placement providers registered in NSW, including major national organisations such as the retailer Kmart, ANZ Bank and several large hotels.

The structured work placements are organised through Work Placement Service Providers, funded by the State and Commonwealth governments. The Work Placement Service Providers, operating since 2011, coordinate mandatory work placements for Higher School Certificate (HSC) vocational education and training courses. Many of these providers were also contracted as School Business Community Partnership Brokers by the Australian Government. The total value of their contract with NSW can reach AUS$8M per annum (NSW BVET 2013). Although Work Placement Service Providers coordinate the work placements in NSW, the schools and TAFEs are still heavily involved in this process through reviewing the suitability of proposed placements, preparing students, making supervisory visits with the host employer, and communicating with the employers to provide information that they need to optimise the safety and success of the placement. The role of business partners is even more important in rural and regional Australia.

National research currently being conducted at the University of Melbourne, which is still in the process of being analysed and reported, suggests the centralised and comprehensive approach to VETiS evident in NSW is relatively efficient and effective. Nevertheless schools need the financial resources and staff capacity to successfully manage partnerships with business. Almost three quarters of a total of 85 respondents from the survey conducted among NSW schools claimed that teachers were overloaded which significantly affected the effective implementation of the partnerships. Additionally, about 60% of respondents pointed that the limited human resources as well as limited financial resources were other very significant factors. The challenges of forming and maintaining effective partnerships appear to vary by school location.

The third issue concerns the status of VETiS programs. A recently published Education Council report (2014) on VET for secondary students recommends the removal of the VETiS label, arguing that it creates a false and damaging distinction between VET qualifications offered in schools and those offered in adult sector providers. Although VET qualifications are not supposed to be differentiated by training provider, persistent concerns about quality of training delivery is undermining this core aspect of the national reform agenda (e.g. Branley & Hermant 2014).

The Education Council (2014) recommended better links between schools, other providers and employers. Strong links are evident in the apprenticeship systems of Germany and Denmark which depend on businesses,

unions and government acting as social partners. There is some debate on the extent to which the German and Danish model can be implemented in a country like Australia. Iannelli and Raffe (2007) describe the Australian system as being governed by an "education logic". On the other hand apprenticeship systems such as Germany have an "employment logic". According to Hall and Soskice (2008), countries like Australia rely on market mechanisms rather than training systems to select and train skilled workers. In turn, this has led to a reluctance by industry and trade unions to engage in the design of vocational studies, little commitment to providing training places (outside the traditional trade apprenticeships) and reduced interest in the qualifications which the VET sector supplies. The international evidence suggests that skills

"The international evidence suggests that skills development is stronger if businesses operate as social partners, contributing to the design and availability of quality training. "

development is stronger if businesses operate as social partners, contributing to the design and availability of quality training. However, given the structure of the Australian system and its "education logic" determining ways of strengthening business engagement in vocational education and training is essential. In systems such as Germany and Denmark, this involves a requirement from all employers to offer training places, with some subsidised and tax benefits provided in return.

4. Career development

The provision of quality career development is increasingly recognised as important for both individuals and societies (OECD 2004a, 2004b; CICA 2014). Quality provision increases the capacity of individuals to make successful transitions between school and work, and reduces the costs to both individuals and society of poor career choices (OECD 2004a; Sweet et al. 2009). Such costs can include poor productivity for an individual working in a job to which they are not suited, employer hiring costs, course delivery costs and fees, and time spent in an inappropriate course (OECD 2004a).

Quality career development provision can improve labour market efficiency by creating a greater degree of alignment between the needs of the economy and the profile of the workforce (Access Economics 2006; Sweet et al. 2009). Where students are provided with timely and accurate information about the labour market and potential career options, they have the opportunity to alter their choices and trajectories, for example, by electing to study for a role in which there is a shortage of qualified staff rather than one in which there is an oversupply; that is, they increase the alignment between supply and demand (Bimrose, Barnes & Hughes 2008). Career development is usually seen as having three interrelated components: careers education, careers advice and guidance, and work-related learning (Hutchison 2013).

1. **Careers education** has been defined as "a series of activities and engagements that help young people to understand themselves and the influences upon them (self-development), investigate opportunities in learning and work (career exploration) and make and adjust plans to manage change and transition (career management)" (Hutchinson 2013, p.3). Careers education is usually delivered in one of three ways: as a separate subject in the school curriculum, as a core component in another subject (such as Health) or through infusion across all subjects. Careers education includes exploration of one's own needs, interests and abilities, the development of skills to support lifelong transitions through various forms of work, and the provision of information about careers and the labour market, together with opportunities to explore this information.

2. **Careers advice and guidance** comprises one-on-one discussions that support a person to identify career needs, potentially suitable career pathways, and appropriate responses. Typically these will be provided by a careers counsellor.

3. **Work-related learning** is often delivered as a separate sub-stream within career development in schools. It incorporates learning for work to develop employability skills (for example, through activities focusing on time management skills), learning about work (for example, through vocational courses) and learning through work (for example, through work experience).

The Education Council (2014, p. 6) has emphasised the distinction between vocational learning and VET:

Vocational learning includes career education programs, through which secondary students explore the world of work, identify career options and pathways, and build career development skills… **Vocational education and training (VET)** enables students to acquire workplace skills through nationally recognised training described within an industry developed training package or an accredited course.

Delivery of career development services to school-aged students can be carried out:

1. Wholly through the school;

2. Wholly through external providers (either funded separately by the government or through funding provided to the school, which then subcontracts); or

3. As a combination of the two, with schools and external providers working in partnership.

Traditionally, the bulk of provision of career development services for school students in Australia has been carried out by the school (OECD 2004a). This has a number of strengths and weaknesses.

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The strengths of school-based career development for school students are that:

- School-based provision allows for developmentally-appropriate activities that support students across a number of years. Provision of the careers education component of career development is often commenced in early secondary school, and allows students to build their skills and knowledge gradually as they mature.

- Career education delivered as a subject, or as a component within a subject, has the capacity to increase substantially students' knowledge and skills around the world of work for a fraction of the cost of one-on-one counselling as it is delivered to an entire class simultaneously.

- School-based provision allows for the integration of career knowledge with the broader school curriculum. So, for example, students may be able to build a better understanding of, for example, how mathematics is needed in managing finances for a business, or how the knowledge they are studying on cells might be used by a pathologist. These connections not only support better quality decision making for students, but also increase student engagement and achievement in school (Hooley et al. 2011; Lapan, Gysbers and Sun 1997; Lapan, Gysbers and Petroski 2001; Lapan, Gysbers and Kayson 2007).

- School-based careers staff often have backgrounds in teaching or may concurrently hold a teaching role, which means they usually have detailed first-hand knowledge of the complexities of the senior secondary curriculum, and how the various subjects relate to course entry requirements at the post-secondary level.

- School staff usually have a broad, long-term knowledge of students, their backgrounds and their levels of achievement spanning the student's time at the school that can allow them to tailor their delivery. Frameworks of best practice in career development usually stipulate that additional support be provided to students most at risk of poor outcomes (Miles Morgan 2011; ACEG 2012; The Gatsby Foundation 2014; CICA 2014), and schools are in the strongest position to identify these students.

- Location of careers services on site at their school may facilitate student access. Students, for example, can easily come to a careers centre at lunchtime and locate information or organise a time to speak with a counsellor.

Weaknesses of school-based career development for school students have also been identified. These include the following:

- Several studies of school-based provision find that the provision of information to students tends to be skewed towards information about university courses, with less information provided around vocational education, training courses and work-related options (OECD 2004a, 2004b). Sweet et al. (2009) found that school provision of senior secondary course-related information in Victorian secondary schools was strongest for the Victorian Certificate of Education (which articulates with university study), weaker for VET in schools options, and weaker still for the Victorian Certificate in Applied Learning. The OECD (2004a) notes that schools' efforts are often focused on ensuring that those aspiring to a university education are fully aware of the subjects, options and processes involved, taking staff time away from those considering vocational training or workplace destinations (OECD 2004b).

- School guidance staff are often teachers who have taken on the role (with or without additional qualifications) and have therefore usually entered the workforce through a university-based pathway. Their knowledge of other types of pathways may consequently be weak (OECD 2004b).

- School-based provision can be underpinned by the assumption that students will be an employee as opposed to starting up their own business. As such, there is often little emphasis on entrepreneurial skills and students' capacities to develop their own business (OECD 2004a).

- A number of researchers have raised questions around the impartiality of school-based career development provision. They note that funding and accountability mechanisms for schools may subtly influence the advice and guidance provided by school-based staff, so that this advice may not necessarily be in students' best interests. Where school funding is tied to student numbers, and where schools are judged on the extent to which they have retained students across the senior secondary years, there may be pressures to keep students at the school, even when a student might be better served by moving to a different school, a vocational course or apprenticeship, or a job (Morris 2004; OECD 2004a).

- School-based career development provision has often

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traditionally focused on decisions (such as subject-choice decisions) at key points, rather than on the development of skills and knowledge to manage a career across the lifetime (OECD 2004a).

- Where the career counselling role is combined with a more general counselling role in schools, there are considerable risks to quality delivery. Sweet et al. (2009) note the body of research evidence that finds that, "attention to the career guidance needs of all students tends to get squeezed by organisational pressures to attend to the personal and social needs of the few, particularly those leading to behavioural problems within the school; such attention as there is to the needs of all tends to be on course choices, with little attention to their longer-term career implications." (p. 27).

As we have noted, where provision is done entirely through the school, there is often a lack of information and support for students who are considering vocational training or a direct path to employment, and the knowledge of school-based staff about current labour market conditions may be limited. There may be hidden incentives to provide students with counselling advice that meets the needs of the school, rather than the student. Finally, where

there are weak links with local industry, there is the potential for the careers advice and information provided to students to be poorly aligned with local industry needs.

Provision wholly by external providers, however, also has its limitations. The OECD (2004a, p. 43) notes that:

Services based outside the school can considerably strengthen careers programmes in schools. There is, though, a risk that too much dependence on such agencies will reinforce the concept of career guidance as a service and weaken links with the curriculum.

The capacity for such services to provide cost-effective, broad-based careers education (in addition to one-on-one counselling) may not be strong, such services may lack the detailed information schools have about individual students, and there may be little integration with the broader school curriculum.

For these reasons, the OECD recommends that externally-based services, "should reinforce, not replace, school-based programmes" (2004a, p.43). A partnership model, in which schools are responsible for some areas of career development, but partner with external agencies for other elements of provision, may have the capacity to provide the best of both worlds. Sweet et al. (2009) define best practice in careers development in schools as providing "structured links to external resources and programs, including state and area based and local or community resources and programs, and the integration of these resources and programs into the career development curriculum" (p. vii).

Potential roles for external providers could include:

- Provision of career information, particularly information about the labour market and about vocational pathways, either on an individual or a group basis, by arrangement or on demand;
- Provision of professional learning on the above for school-based staff; and
- Brokerage and/or coordination of work experience placements for students.

A number of overseas jurisdictions have moved to a partnership model involving both external providers and schools. This includes New Zealand (Careers New Zealand 2014) and Wales (Gyrfa Cymru Careers Wales 2014).

Careers New Zealand was established as a national external careers provider in 1989. It provides a "one-stop shop" online that incorporates careers information, interactive career planning tools, a job database, information about courses, information about the career outlook for various jobs, and resources for schools and tertiary providers. It also provides one on one careers counselling by telephone and through online chat. Materials and services are provided to support career development across the life course, so the service is accessed by both youth and adults.

"A partnership model, in which schools are responsible for some areas of career development, but partner with external agencies for other elements of provision, may have the capacity to provide the best of both worlds."

In addition, Careers New Zealand has established four Career Capable Communities centres in areas of high need. These centres work extensively in partnership with local education institutions, community, employer and iwi groups to link career planning with local needs.

Responsibility for careers education for school students is shared between Careers New Zealand and schools. Careers New Zealand has developed a broad range of resources that support schools in providing careers education, including teaching and learning materials, a television series and a set of tools that allows schools to benchmark the quality of their provision. Careers New Zealand also has career consultants, across 17 local offices, who are able to deliver workshops and tailored activities to local schools. Schools continue to have careers advisers, who will often lead careers education within the school.

Careers New Zealand provides support for schools on a number of levels. In-depth support is provided to targeted schools, most of which are in disadvantaged settings. Additional support is provided to some schools to help them review their careers education programs. Finally, professional learning for staff is available to all schools through Careers Education (Careers New Zealand 2014)

Gyrfa Cymru Careers Wales similarly offers a "whole-of-lifespan" approach to career development. Like Careers New Zealand, it provides extensive website career planning tools and information and a telephone careers counselling service. In addition, there is a network of drop-in centres across Wales, and targeted support for the most at-risk youth. Gyrfa Cymru Careers Wales works in partnership to broker links between employers and schools, and provides curriculum resources and training to schools to support them in providing careers education. Gyrfa Cymru Careers Wales also coordinates a national work experience database (Gyrfa Cymru Careers Wales 2014).

While an empirical research base that demonstrates these models are more effective than school-based provision is yet to be established, there are certainly indications that these types of models can address some of the known shortcomings of providing career development solely through schools. Providing a centralised, whole-of-life service promotes ease of access, and such services are able to work as resource centres, broker partnerships that strengthen the links between schools and workplaces, and develop a stronger alignment between the jobs market and the career choices made by students.

5. Literacy and numeracy for young people

Raising literacy and numeracy levels is a priority for all Australian governments. It has also been identified as an issue by business groups. Students with low levels of literacy and numeracy have very poor longer-term employment prospects and this has serious implications for their well-being and capacity to engage as social citizens. For example, low literacy achievement has been found to be strongly associated with the decision to leave school early (Rumberger 2004), lower earnings, greater likelihood of unemployment (OECD 2009) and weaker capacity to successfully transition from unemployment to employment (OECD 2009). It has also been found that those with lower levels of literacy when leaving school have less access to formal and non-formal learning opportunities that would help improve their literacy levels (OECD 2009).

At a national level, the achievement of NSW students in the National Assessment Program Literacy and Numeracy (NAPLAN) tests is relatively strong. NSW Year 9 student NAPLAN achievement in the 2013 tests in comparison with students in other Australian jurisdictions is summarised in the Table 1 below (based on ACARA, 2014):

In addition, ACARA data indicates that at the Year 9 level,

the achievement of NSW students in the reading and numeracy domains has not significantly changed across the period 2008-2014 (ACARA, 2014).

However, at an international level, Australian students' performance in the OECD Programme for International Student Assessment (PISA) has slipped in both maths and reading in recent years. In maths, Australia's performance ranked below 16 countries, equal with 7 others, and above 67 countries (ACER, 2014). In reading, Australia ranked below 9 countries, equal with 11 others, and above 67 countries. Across jurisdictions, NSW students' performance in the maths component was above the OECD average (along with that of students from ACT, WA and Queensland), and in reading, NSW was also above the OECD average (together with WA, ACT, Victoria and Queensland). Overall, Australia's drop in performance was driven by a drop in the proportion of students achieving at the very top level in the tests, and an increase in the proportion achieving at the lowest level. It is not clear why student performance appears to have dropped in PISA, but not in NAPLAN tests, although this may be related to either the nature of the tests, or differences in test samples (NAPLAN is a population test covering all students, while PISA utilises a stratified sample for the test).

Table 1: NSW Year 9 student achievement in NAPLAN compared to other jurisdictions

	Achieving above NSW	At a similar level	Achieving below NSW
Reading	ACT	WA Victoria	Queensland South Australia Tasmania Northern Territory
Writing	ACT WA Victoria	South Australia Queensland	Tasmania Northern Territory
Spelling		ACT Victoria	Tasmania Northern Territory WA Queensland South Australia
Grammar and punctuation	ACT	Victoria WA	Queensland South Australia Tasmania Northern Territory
Numeracy		ACT Victoria WA	South Australia Tasmania Northern Territory Queensland

NOTE: States were classified as achieving at a similar level to NSW where the average NAPLAN score was 5 points above or below that of NSW. Those classified as achieving above NSW had average scores more than 5 points above, and those below had average scores more than 5 points lower.

While the national and international data provide some evidence that students in NSW are achieving relatively well, these levels of achievement need to be set within the particular context, and considered in the light of the potential consequences for both individuals and society. First, as the Australian economy continues to have a strong knowledge focus, and as a growing range of jobs (including manual work) draws on increasingly sophisticated literacy and numeracy knowledge and skills, previously acceptable skill levels are no longer sufficient. Evidence from employers supports this, with many employers indicating that the current skill levels of many workers are not sufficient to meet the demands of industry. Second, there is sound evidence that at a national level, the capacity to grow an economy is linked to increases in skill levels within the population (Hanushek and Wößmann 2007), so across Australia and within NSW, improving literacy and numeracy skills would be likely to strengthen economic capacity and growth. Finally, Australia does not exist in a vacuum. In a globalised business environment, many businesses compete internationally, and their capacity to succeed will depend on the intellectual capital of their workforces. For all these reasons, lifting student achievement in literacy and numeracy is imperative.

In the state of NSW many programs aimed at improving literacy and numeracy skills were introduced under the banner of NSW Smarter Schools National Partnerships (2009 to 2012). Most of these initiatives targeted primary students, seeking to prepare them for high school. A 2013 review of literacy and numeracy interventions, most of which were implemented in NSW, identified the following key principles underpinning effective programs:

- Interventions are embedded in a whole school approach to enhance learning

- Early diagnosis and intervention for literacy and numeracy difficulties

- Effective diagnostic assessment

- An individualised approach to intervention

- The Incorporation of evidence-based principles of effective teaching in literacy and numeracy interventions

- Interventions are clearly focused on key aspects of literacy and numeracy development (ACER 2013, p. xiii)

Reports documenting and evaluating specific initiatives provide a wealth of information about programs, resources and teacher practices that can help address the challenges facing local communities (see ACER 2013). A sustained effort is vital to ensure that programs become embedded into the school curriculum and building the capacity of teachers.

In addition to developing programs to improve the literacy and numeracy skills of young people while they are still at

school, there is strong interest in measuring their performance when they leave school.

NSW students who leave school before completing years 11 or 12 may obtain a Record of School Achievement (RoSA). Early leavers also have the option of sitting a literacy test and a numeracy test with the results provided in an additional report. These tests are based on the Australian Core Skills Framework (ACSF) developed and endorsed by the Australian Government Department of Education and Training. This framework also underpins TAFE NSW Foundation Level Programs and the Foundation Skills Training Package (BOSTES 2014).

These tests are not compulsory. Mandating minimum exit standards has been proposed as a way of raising literacy and numeracy achievement levels by concentrating school resources on the teaching of these skills, particularly for those at highest risk. For example, in 2013, the WA Education Minister Peter Collier announced that every senior student would need to meet a minimum literacy and numeracy standard in order to graduate from high school, or achieve their WA Certificate of Education (WACE). The intention is to provide students who do not meet the minimum standard, with extra support through targeted programs. They will be required to re-sit the assessment until they have met the minimum standard.

Although compulsory exit standards have political currency, the research evidence on their effectiveness is mixed (Rice et.al. 2010). For example, Bishop, Mañe & Bishop (2001) found that exit requirements did raise achievement standards whilst Grodsky and colleagues found no effect (Grodsky, Warren & Kalogrides 2009). The conflicting evidence is partly due to the methodological difficulties of measuring and isolating the impact of standards given the multitude of variables (Rice et al. 2012).

Rice and colleagues (2012) did identify a number of perceived benefits of introducing exit literacy and numeracy standards. These include:

- a clearer articulation of the minimum levels of attainment students are required to reach;

- increased employer and parent confidence in the school sector;

- greater accountability for schools to ensure students meet minimum literacy and numeracy standards;

- explicit reporting of students' level of literacy and numeracy when exiting the school system that could be used to better inform potential employers, and/or other educational providers, of students' capabilities;

- identification of the areas in which the student needs further education and/or training to improve their literacy and numeracy.

However, the introduction of minimum literacy and numeracy standards alone will not necessarily lead to

such benefits. There is a risk of diverting resources from programs that develop literacy and numeracy skills. There is also a risk that the curriculum will be further narrowed (see, for example, Polesel el al. (2012) on the impact of NAPLAN on schools).There are still questions about how the standards should be developed as well as the most appropriate method of assessing students against them.

There are a number of options for setting minimum standards for literacy and numeracy within the school sector. The main options are:

- the selection of compulsory units within existing curriculum based units that form the NSW HSC and have been mapped against existing literacy and numeracy standards (such as NAPLAN or the Australian Core Skills Framework (see DIISRTE 2012)

- utilise existing standard referenced framework for literacy and numeracy to set minimum standards such as:
  - NAPLAN (e.g. year 9 results in reading, writing and numeracy) and/or
  - The Australian Core Skills Framework in reading, writing and numeracy.

It should be noted that using subjects and units within the existing senior secondary education curriculum (such as English and Mathematics units) as the benchmark for literacy and numeracy narrows the definition of literacy and numeracy. There is widespread agreement within the international educational community that literacy and numeracy is more than "reading and writing" and "numbers and measurement", respectively. For example, UNESCO defines literacy as the:

…ability to identify, understand, interpret, create, communicate, compute and use printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society. (UNESCO 2005)

The NSW Department of Education and Communities takes a similarly broad view of the notion of numeracy:

In New South Wales, we understand numeracy to involve using mathematical ideas efficiently to make sense of the world. While it necessarily involves understanding some mathematical ideas, notations and techniques, it also involves drawing on knowledge of particular contexts and circumstances in deciding when to use mathematics, choosing the mathematics to use and critically evaluating its use. Each individual's interpretation of the world draws on understandings of number, measurement, probability, data and spatial sense combined with critical mathematical thinking. (NSW DEC 2011)

"There is widespread agreement within the international educational community that literacy and numeracy is more than 'reading and writing' and 'numbers and measurement.'"

Once a decision has been made as to what will form the minimum standards in literacy and numeracy, it is necessary to consider how such standards should be best assessed if they are not embedded within existing curriculum based units. Options include the introduction of:

1. A standardised, externally set examination which is externally administered and scored and designed to measure student development against an existing framework such as NAPLAN or the ACSF;

2. School –based assessments where teachers have the autonomy to design, administer and judge student performance against the standards;

3. A combination of the two.

Each of the three options presented has its advantages and disadvantages. For example, the introduction of a standardised, externally set examination that measured students' performance against literacy and numeracy standards (for example, the Australian Core Skills Framework) would help ensure rigour and uniformity across schools within the state and avoid duplication at the school level. It is also has minimal marking and administration costs although there are considerable costs associated with maintaining a highly secure, valid and reliable examination and item bank, as has been the experience with the NAPLAN testing program at years 3, 5, 7 & 9.

The alternative is to introduce school based assessments in which teachers have the autonomy to design and administer their own assessments against the standards to meet local needs, improving the face validity of the assessments to meet workplace requirements. There are however professional development implications for teachers if they were required to develop assessments against the standards, as was the case for teachers delivering VETiS and conducting competency based assessments for purposes of issuing nationally recognised qualifications.

A third option is to combine school based assessments with an external examination. This option has the capacity to incorporate some of the strengths of the external exam – greater uniformity of standards, ensuring minimum competency standards for students exiting school, and generating greater community/industry confidence in school qualifications. At the same time, it provides some flexibility to cater for local requirements and tailor assessment to local contexts.

While establishing exit level standards in literacy and numeracy for students completing their senior secondary certificate of education is one way to attempt to raise the literacy and numeracy levels of students, it will not address the needs of early school leavers, who are at most risk. Intervention is required in the earlier years of schooling if we are to better equip early school leavers with the minimum levels of literacy and numeracy required to successfully function in society. One may argue that NAPLAN results in years 7 and 9 could serve this purpose and that there is no further need to introduce another standard referenced assessment system into the school sector in the middle years if minimum benchmarks are reached. If however, minimum NAPLAN standards are not met in year 9, then there may be a need and benefit of introducing an external assessment in year 10 as planned in Western Australia.

In other jurisdictions, Queensland and South Australia have both introduced minimum standards of literacy and numeracy requirements within their senior secondary certificates of education. In Queensland, there is an assumption that attainment in certain English and Mathematics subjects offered within the QCE and/or VET qualifications (e.g. Certificate I or II in Core Skills for Employment and Training) satisfies the literacy and numeracy requirements set by the Board of Studies. Hence, literacy and numeracy are not assessed or reported separately as part of the QCE. In South Australia, the SACE Board has endorsed the Australian Core Skills Framework level 3 descriptions in reading, writing and numeracy as a reference point for the SACE literacy and numeracy. However, as in Queensland, the SACE Board has specified that students must complete a certain number of credit points in literacy and numeracy through the completion of subjects within an approved listing (e.g. English, Mathematics, Literacy for Work and Community). The assumption is that successful completion of such credit points aligns to at least level 3 on the ACSF in reading, writing and numeracy.

In both examples, there is no stand alone, externally administered exit examination for determining minimum levels of literacy and numeracy of school leavers– the standards are embedded within the existing senior secondary curriculum. Yet, as previously noted, without the introduction of a stand-alone assessment system that directly measures literacy and numeracy, the benefits are limited.

Western Australia however has recently introduced major reforms to raise the literacy and numeracy standards for secondary school students through the introduction of externally developed on-line assessments at year 10. The

decision to introduce a formal standardised assessment in year 10, as opposed to an exit examination, has been argued by the educational minister's office to be an opportunity for the school to provide targeted intervention strategies and ongoing formative assessment to address any shortfalls throughout the rest of the students'

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schooling. In addition to the early intervention, the WA government has also introduced minimum literacy and numeracy standard requirements that must be met by students if they are to be eligible to graduate from the WACE in 2016 and beyond. There will be two ways in which students can demonstrate the minimum standard: prequalification through performance on Year 9 NAPLAN (i.e., Band level 8 or above in Reading, Writing or Numeracy) scores or through successful completion of the on-line examination which will be available to be sat each semester from year 10 onwards (note that students are only required to pass the on-line test once and would only sit the assessment in a later semester if unsuccessful in previous attempt following targeted intervention).

The research considered in this section suggests some caution is required before moving towards the introduction of minimum exit literacy and numeracy standards in NSW, given the lack of clear evidence that such a strategy will raise student achievement levels. Standards in isolation may send a signal to schools of the importance of literacy and numeracy, but do not provide the resources to address shortfalls in student learning. For this reason, it is essential to ensure that funding for interventions that successfully address low achievement in literacy and numeracy is provided to schools. If compulsory hurdle literacy and numeracy requirements are put in place for senior students, additional resourcing must be given to secondary schools so they can support the students who struggle to meet the requirements.

6. Senior colleges, adult VET providers and other alternatives

Section 2 described the poor transitions made by some groups of students. The majority of young people now complete senior secondary education. COAG agreements have resulted in specific interventions designed to increase retention. Nevertheless, persistent inequalities of educational outcomes remain, especially for young people from low socio-economic and Indigenous backgrounds (COAG Reform Council 2012). For some groups of senior secondary students, the experience of education is characterised by dissatisfaction, low achievement, and poor transition outcomes.

There is a persistent focus on the needs of those students whose trajectory is towards university studies at the expense of the broader cohort. The difficulties faced by specific groups of boys and girls (Karmel & Liu 2011; Polesel & Volkoff 2009) add further urgency to the debate over the appropriateness of the 'one size fits all' model of Years 7-12 schooling.

Mainstream schooling (despite a broadening of curriculum to include vocational subjects in most schools) does not seem to be catering for the full range of young people. Durkheim (1901) argued over one hundred years ago that secondary schooling has never had a vocational goal, and Ringer (1969) has elucidated the process by which the "guardians of orthodoxy" have protected schools from the need to modernise their curriculum. More recently, Keating et al. (2012) have argued that both the way that school completion targets are formulated and current notions of equivalency have shielded schools from the need to cater for the learning, welfare and pathways needs of a broad range of young people. Schools tend to remain locked within traditional structures that limit the kinds of pedagogy and curriculum that schools can offer and their ability to enable all young people to be successful learners.

This raises a number of important questions. What then are the kinds of schooling structures that we need to support the broad range of students to achieve success? What is the role of schools, of adult education providers such as TAFE and what, if any, role should be played by other types of providers?

A wide variety of non-traditional schooling structures has sprung up across Australia (Te Riele 2007). Many of these structures demonstrate a blurring of boundaries between general and vocational providers of senior secondary education for Australian youth. These include specialist vocational providers aimed at young people such as Trade Training Centres; forays into the schooling market by adult sector VET institutions such as Bradfield College in Sydney; and innovative general education structures such as senior colleges and collegiates in NSW. There are also adult education sector providers, such as Neighbourhood Houses, TAFE and Adult and Community Education that increasingly are used by young people to gain Year 10-12 equivalent general education qualifications (e.g. the Tertiary Preparation Certificate) or specific vocational qualifications. These providers make important contributions to educating young Australians.

"Mainstream schooling (despite a broadening of curriculum to include vocational subjects in most schools) does not seem to be catering for the full range of young people."

Well over 35 years ago MacFarlane (1978) questioned the appropriateness of eighteen year olds forming relationships with, and being required to conform with rules applicable to, children four years younger within the same schooling sites in Britain. He stressed the potential for damage to the younger group, as well as the limitation placed on growth and development in the older group. This suggest that a more adult setting is more appropriate for many students, but particularly for those who are marginalised and disenfranchised in mainstream schools (Mills & McGregor 2010; Polesel 2002; Te Riele 2006). The most widely established adult providers in Australia are TAFE Institutes, but past research has suggested that TAFE struggles to meet the needs of a younger cohort (Wyn et al. 2004), with reasons including the absence of clear duty of care relationships involving students, parents and staff and the inadequacy of courses for a younger clientele. Research also suggests that some TAFE lecturers question their own ability to cater for the learning needs of this younger clientele (Polesel et al. 2004) while research by Te Riele (2003) has pointed to concerns about the lack of pastoral care for students and insecurity of employment for staff in some adult learning environments. General education courses may also be seen as tangential to the core business of TAFE Institutes of providing vocational and trade training.

A further issue with post-school VET is the lack of alignment between qualifications and occupations.

Although VET qualifications are designed to prepare graduates for specific jobs, the alignment between qualifications and occupational outcomes is poor. The majority of VET graduates are not employed in a job that matches their qualification (Karmel, Mlotkowski & Awodeyi 2008; Winbrow 2014). A recent study found that only 37 per cent of graduates are working in the same field as their qualification, although the extent of alignment varies by level of qualification and field of study (Moodie et al. 2013). The proportion of Certificate III graduates employed in the same field (55%) was more than double that of graduates of diplomas and above (26%). The proportion of VET graduates working in the same field as their qualification varies even more by field of education, with the proportion for nursing (72%) and electrical and electronic engineering and technology (64%) being two to three times that for creative arts (10%) and information technology (25%). In many fields the proportion of graduates working in the same field differs significantly by qualification level. For example, in electrical and electronic engineering and technology, 84% of Certificate III, but only 30% of diploma and above, graduates worked in the same field, whereas in agriculture only 34% of certificate III, but 52% of diploma and above, graduates worked in the same field as their qualification (Moodie et al. 2013, p. 7).

The drop-out from VET programs is also relatively high (NCVER 2014) and there are challenges in the emerging training market. Australian governments have established a market for vocational education and training. The intention is to create conditions that encourage providers to be more responsive to industry needs. The overall aim is to increase productivity and social inclusion through increasing qualification levels. As a result young people are facing an increasingly complex tertiary education sector with a diverse range of organisations offering courses ranging from certificates to degree level programs. The implementation of demand driven vocational education and training has varied across the states. Underpinning the training market is the idea that consumers will make informed choices to select the qualifications in their best interests. Not only do they need to be able to assess the quality, cost and potential benefit of undertaking a qualification, young people need to assess the quality, standing and the stability of the training provider. This requires the capacity to evaluate the claims made by course recruiters (Australian Skills Quality Authority (ASQA) 2013; Montague 2014; Leahy 2014). There is evidence that providers are targeting the most disadvantaged communities, promoting expensive courses and do little or nothing to expand the employment opportunities available to young people and there are concerns about the quality of some courses (Skills Australia 2011) with employers losing faith in

qualifications issued by some providers (e.g. Bita 2014; Branley & Hermant 2014).

The emergence of vocational programs for young people both within school and in adult and alternative providers has reflected efforts to address these issues and accommodate the broader range of young people now staying on in education, but as we have seen these efforts have met with limited success.

"For some groups of senior secondary students, the experience of education is characterised by dissatisfaction, low achievement, and poor transition outcomes."

In the UK, Further Education (FE) colleges now cater for over half a million young people under the age of 19, and in most continental European countries the separation between academic and vocational education at upper secondary level has become the norm, with vocational and technical schools located in separate settings. However, these approaches are not without their problems. Tracked secondary systems tend to reproduce existing social divisions (Benadusi 2007) and the process of social selection in Anglophone countries has reinforced the failure of many vocational programs to impart the types of knowledge required for secure employment and longer term social engagement (Wheelahan 2010).

The main alternative to adult sector providers consists of those school sector providers focussing on the upper secondary aged cohort – senior schools, senior colleges and collegiate. Research carried out for the NSW government a decade ago (Polesel 2002; Polesel, Teese and O'Brien 2001) suggests that these models of delivery have much to recommend them. Among their benefits are the facilitation of a broad and relevant curriculum (beyond the university-preparatory studies which dominate the HSC), a more appropriate schooling environment for young adults (especially those showing signs of disengagement) and an environment which allows teachers at both the junior sites and the senior sites to focus on the respective needs of their student clientele. Having said this, the number of senior secondary sites remains small. One concern is that junior sites provide potentially disadvantageous or limited career and promotion opportunities for teachers who no longer have "prestigious" opportunities to teach and coordinate at the HSC level. There is the potential to address these concerns by focussing on the significance of teaching practice at the junior and middle secondary level. There is also the potential to provide additional professional development opportunities through partnership arrangements between junior and senior secondary schools.

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NSW Business Chamber

Tracing our heritage back to 1825, NSW Business Chamber's mission is to create a better Australia by helping businesses maximise their potential. The Chamber is a passionate advocate for business in the public arena: whether standing up to government and decision makers when business interests are neglected or working together to create positive change.

On a one-to-one basis, the Chamber helps all businesses from small enterprises to large corporations. Our commercial services division, Australian Business, delivers a range of business services to both member and non-member clients throughout Australia, with the operating surplus going back to supporting Chamber initiatives. In all, we believe it's important for Australia's business community to succeed, because prosperity creates new jobs, social wealth, and better communities in which to live.
• Local, regional, state and national coverage
• Public policy and advocacy.
• Reducing complexity to manage risk
• Empowering business through connections, knowledge and expertise.

Let the NSW Business Chamber team be an extension of your business so you can concentrate on what you do best – growing your business.
For more information: nswbusinesschamber.com.au

NSW Business Chamber Head Office
Street Address
140 Arthur Street
North Sydney NSW 2060

Postal Address
Locked Bag 938,
North Sydney NSW 2059

t   13 26 96
f   1300 655 277
e   businesshotline@nswbc.com.au

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