

NATIONAL VOCATIONAL EDUCATION
AND TRAINING RESEARCH PROGRAM

RESEARCH REPORT

Entry to vocations: building the foundations for successful transitions

Kira Clarke

UNIVERSITY OF MELBOURNE



Australian Government
Department of Industry



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This document should be attributed as Clarke, K 2014, *Entry to vocations: building the foundations for successful transitions*, NCVER, Adelaide.

COVER IMAGE: GETTY IMAGES/THINKSTOCK

ISBN 978 1 925173 06 2

TD/TNC 118.08

Published by NCVER, ABN 87 007 967 311

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About the research

Entry to vocations: building the foundations for successful transitions

Kira Clarke, Melbourne Graduate School of Education, University of Melbourne

The viability of VET in Schools as an effective pathway to work and further education for Australian students is critical to the lives of young people and deserving of detailed policy scrutiny. There is great variability in how it is delivered across schools and how it is incorporated into the senior secondary certificates across the various Australian jurisdictions as well as inconsistency in the level of workplace learning involved. Providing students with an alternative pathway to higher education is vital, but what can be done to strengthen the outcomes of VET in Schools programs for students?

The culmination of nearly three years of investigation into this issue, this report highlights important themes and structural changes for strengthening VET in Schools. The author tests these changes through consultations with stakeholders, who include representatives from departments of education and training, boards of study, industry, schools and vocational education and training (VET) providers.

This report is part of a wider three-year program of research, *Vocations: the link between post-compulsory education and the labour market*, which is investigating the educational and occupational paths that people take and examining how their study relates to their work.

Key messages

The report identifies the following strategies as a way of strengthening VET in Schools:

- Define the purpose of vocational education and training in secondary education as foundational preparation for access to mid-level qualifications and entry to employment-based learning such as apprenticeships.
- Better align the school vocational curriculum with labour market opportunities so that vocational qualifications reflect the skills and knowledge needed to enter and move through an industry. One example might be to redevelop or reconceptualise all certificates I and II as industry/occupation exploration or 'career start' qualifications primarily for use by school students.
- Develop thematic packages of curriculum, whereby vocational and school subjects are connected, to create a stronger articulation pathway. The study of English and maths should also be compulsory.
- Make explicit connections between vocational education and training undertaken at school and post-school VET study to strengthen the pathways to post-school vocational courses.
- Use units of competency within certificates I and II for the exploration of occupations and industries in the junior and middle years of schooling.

Dr Craig Fowler
Managing Director, NCVER

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Executive summary

VET in Schools is intended to provide young people with an opportunity to develop skills for a range of vocational occupations as they complete their senior secondary certificates. However, many VET in Schools students participate in programs that do not deliver effective pathways into higher education, higher-level vocational education and training (VET), apprenticeships, traineeships or skilled work. As part of the three-year NCVER-funded consortium project *Vocations: the link between post-compulsory education and the labour market*, researchers from the University of Melbourne explored students' transitions from VET in Schools to post-school VET and occupations. Emerging from this *Entry to vocations* strand of the research is a clear set of challenges that need to be addressed.

Aim

This report draws together findings from all three years of the *Entry to vocations* research project and presents a set of implications for those stakeholders looking to strengthen VET in Schools delivery at system and practice levels. This research has focused on the 15 to 19-year old cohort and used a definition of VET in Schools that includes all vocational education and training undertaken as part of a senior secondary certificate of education. With more and more young Australians staying on at school, increasing the provision of VET in Schools programs is one of the key ways by which the Australian senior secondary education landscape has adapted to this situation, with these programs now accounting for a cohort of more than 242 000 VET in Schools students annually (NCVER 2013b).

Findings

The research in the first year of the *Entry to vocations* study explored the complex policy contexts for VET in Schools delivery and revealed the contrasting expectations of the purpose of vocational education and training for young people. A working paper and a research report prepared in the first year of this research project (see Clarke 2012; Clarke & Volkoff 2012) highlighted the different VET in Schools policy structures in the various states and territories (see Clarke & Volkoff 2012) and deepened understanding of the types of qualifications to which VET in Schools students have access. A key observation was that the predominantly low-level VET (certificates I and II) offered through VET in Schools is problematic in providing successful pathways into full-time, sustainable employment (Stanwick 2005; North, Ferrier & Long 2010). In the second year of the project, the focus of the research was on identifying the common challenges facing VET in Schools stakeholders and possible ways of strengthening systemic approaches (see Clarke 2013). Several key dilemmas for how VET in Schools supports entry to work were identified, including the nature of workplace learning, the relationship between the VET curriculum (applied learning) and the academic (disciplinary) curriculum, and the role of non-school stakeholders. Furthermore, current VET in Schools approaches to learning *in* and *about* work were also identified as being limited by an unclear and poorly defined role for employers and non-school registered training organisations (RTOs).

A new model of foundational vocational education in secondary education

The purpose of the final year of this research was to identify possible ways to strengthen the future role of VET in Schools. The proposed approach, which has been termed 'foundational vocational education in secondary education', is not a prescriptive model of delivery but rather a series of evidence-based principles for ongoing policy reform of VET in Schools. This approach is grounded in an

assumption that Australian senior secondary schools make a contribution to both human capability for the labour market and the development of successful learners and informed citizens (Ministerial Council on Education, Employment, Training and Youth Affairs 2008).

Four key concepts that emerged during the three years of the research were used to frame the proposed approach. Firstly, a critical approach to vocational education in secondary schools cannot be focused on curriculum alone: pedagogy is a crucial piece of the solution. In the final year of this research, the importance of context and pedagogy to our understanding of how to strengthen VET in Schools has come to the fore. The relationship between the VET in Schools curriculum and pedagogical innovation is particularly pertinent to a consideration of how to promote integration across traditional disciplinary and occupational silos. The second concept is what can be described as a ‘problematic certificate paradigm’; that is, there appears to be a simultaneous acknowledgment of, on the one hand, the limited value of both entry-level VET certificates and senior secondary certificates in the labour market and, on the other, an increasing focus on the attainment of these certificates as the key policy measure of effective youth transition. This tension can generate unrealistic expectations for students, while also complicating the work of schools in supporting strong post-compulsory pathways (Clarke & Polesel 2013). Thirdly, despite a strong emphasis on the role of VET in Schools in promoting retention, there are still large numbers of young Australians opting out of senior secondary education, suggesting that current models of provision are not working for all students. The fourth and final core concept is that it is important to acknowledge the role that VET in Schools plays in reproducing existing socioeconomic inequalities.

These issues of pedagogy, the tensions regarding the value of entry-level certificates, the role of VET in Schools in promoting retention, and the socially stratifying role of vocational programs in schools have all informed the development of a proposed new approach to the purpose, structure and context of vocational education in secondary education. In relation to its *purpose*, the researchers proposed this as being foundational preparation for entry/access to mid-level qualifications and for entry/access to employment-based learning such as apprenticeships. Next, the researchers proposed a *structure* that called for the consideration of a non-training package-based, purpose-built school vocational education curriculum. Finally, the researchers highlighted the need for an enabling *context* for foundational vocational education in secondary education. This context should include career education but also have the capacity to enable students to explore potential careers coherently, the aim being to inform their vocational and technical education pathway choices.

While the suggested context aspect of the proposed model of foundational vocational education in secondary education generally received stakeholder support, stakeholders on the whole were very reluctant to consider abandoning national training packages as the basis for vocational education in schools. In teasing out the concerns of stakeholders, four distinct themes that could inform a revised model of foundational vocational education in secondary education were identified. These themes were:

- The qualifications completed during school must reflect the employment and training opportunities in the labour market.
- A safety net is needed for students who enter the labour market directly.
- Systems and schools must avoid the emergence of a system which tracks students on the basis of their social background.
- Workplace learning needs to support learning for and about, not only in, work.

Implications and challenges

VET in Schools aims to enhance educational and employment outcomes for young Australians (Ministerial Council on Education, Employment, Training and Youth Affairs 2000). Feedback from stakeholders across the three years of the *Entry to vocations* project indicates that, in its current systemic forms, VET in Schools is not fulfilling this purpose. The findings across this research indicate that holistic change to all aspects of the delivery of VET in Schools is needed if its role is to be strengthened. Policy reform needs to consider not only the purpose of VET in Schools, but also the purpose of the qualifications used by VET in Schools programs. What are the most meaningful and valuable qualifications for young people in our schools?

The findings of this study reinforce the need for greater alignment of the school vocational curriculum with labour market opportunities. The vocational curriculum should reflect the broader range of skills and knowledge needed to enter and move up and through an industry. The current narrowly defined occupational focus of VET in Schools qualifications does not achieve this. A new approach to address this must recognise both the limited currency of the entry-level VET in Schools certificates and the need for the models of vocational education in schools to be 'certified' or distinguished from the 'mainstream' pathway to university.

One possible approach for consideration is the redevelopment of certificates I and II as industry/occupation exploration or 'career start' qualifications, for predominant use by young people in schools. Stakeholder feedback highlighted that any revisions to the VET in Schools curriculum need to ensure access for all students to the foundational disciplinary skills and knowledge necessary to support their careers. Feedback from stakeholders identified four structural changes with the potential to strengthen VET in Schools:

- *Development of thematic packages of curriculum:* this is in contrast to the inclusion of one or two vocational subjects in an unconnected collection of senior secondary subjects, subjects that do not necessarily provide a well-signposted pathway to further education and training. This work has already begun in at least one jurisdiction and if pursued has the capacity to generate greater synthesis.
- *Expanding the mandated curriculum to include English and maths:* this is connected to the first point and reflects the need for coherent programs of study that provide clear pathways. As there is evidence that more guidance is needed for schools in understanding the disciplinary knowledge necessary to support particular vocational pathways, a clearer articulation of the importance and relevance of the English and maths curriculum to post-school vocational pathways could strengthen thematic approaches to vocational education in schools.
- *Explicit connections made between school VET and post-school VET courses:* in much the same way that particular subjects in the academic curriculum in the senior years are recognised as being prerequisites for entry to university courses, more explicit links between clearly defined but flexible packages of school-based vocational education and post-school vocational courses could strengthen the pathways from VET in Schools to intermediate-level training.
- *Use of 'exploration' units of competency in junior and middle years:* if Australian Qualifications Framework (AQF) VET qualifications at certificate I and II levels are to remain the dominant basis of the VET in Schools curriculum, consideration should be given to how some competencies within those qualifications could be used to support and inform exploration and decision-making prior to the senior secondary years.

A key challenge for all stakeholders involved in senior secondary education is how to provide high-quality workplace and career exploration as a fundamental part of the secondary school curriculum. This can be problematic when the primary mission of secondary schooling is still defined in terms of preparation for university. Throughout the *Entry to vocations* research, there has been evidence that more coherent leadership is needed at the system level to support this work, particularly in relation to consistent support for career exploration and workplace learning activities.

Introduction

VET in Schools is intended to provide young people with an opportunity to learn about and develop skills for a range of vocational occupations as they complete their senior secondary certificates. For some students, VET in Schools provides a pathway between school and higher-level VET or higher education and can provide a foundation for entry to apprenticeships and traineeships in a wide range of trade and non-trade occupations. VET in Schools can also enable access to authentic workplace learning and can help to create synergies between different subjects. In many circumstances, vocational programs provide a robust learning experience that informs and inspires career development and aspirations.

There are best practice examples of VET in Schools around Australia to illustrate this. However, many VET in Schools students participate in programs that do not achieve clearly signposted, effective pathways into higher education, higher-level vocational education, apprenticeships or traineeships, or skilled work. The landscape in which these young Australians complete their secondary schooling is complex.

As part of the three-year NCVER-funded consortium project *Vocations: the link between post-compulsory education and the labour market*, researchers from the University of Melbourne conducted a broad range of consultations with stakeholders involved in the development, delivery and use of VET in Schools programs. The purpose of Strand 1 of this consortium project was to explore transitions from VET in Schools to post-school VET and occupations. Emerging from this strand of the research is a clear set of challenges that need to be addressed.

A definition or clear understanding of what is encapsulated by the term 'VET in Schools' is a complexity facing those in the Australian senior secondary education landscape who are seeking to strengthen VET in Schools. This research has used a definition that includes all vocational education and training undertaken as part of a senior secondary certificate of education; that is, all VET that is used to contribute to the requirements of a senior secondary school certificate. Within this definition there is a great diversity of models of delivery. In some states, such as Victoria, schools deliver VET in Schools programs themselves as registered training organisations. In others, the various departments of education and archdioceses in the Catholic sector are the registered training organisations responsible for delivery. TAFE (technical and further education) institutes and private training organisations are also heavily involved in the delivery of VET in Schools, both through delivery in their own facilities and through auspiced delivery in schools. There has been a decline in auspiced delivery of VET in Schools but it is still used in some contexts, particularly in South Australia. Students undertaking vocational education and training as part of their senior secondary certificate of education may also participate in a school-based apprenticeship or traineeship (SBAT), which involves a combination of school, workplace and learning that takes place in a registered training organisation. While school-based apprenticeships and traineeships are included in the broad definition of VET in Schools used in this research, the focus has been on non-SBAT VET in Schools programs.

This research focused on the youth cohort aged 15 to 19 years and their participation in VET in Schools across different sectoral contexts. This scope was cognisant of the fact that there are young people undertaking their senior secondary certificates in a variety of school and adult settings. This discussion of VET in Schools aimed to encapsulate the diverse institutional, delivery and certification contexts that inform and shape VET in Schools.

This report draws together findings from all three years of the *Entry to vocations* project and presents a set of policy options for consideration by those stakeholders looking to strengthen VET in Schools delivery at system and practice levels.

Terminology

The terminology was carefully considered and utilised in the early stages of the *Entry to vocations* research, an approach that has continued to be important in the third and final years of the research. The final stage of this project involved the development and testing of a proposed approach to foundational vocational education in secondary education. The choice was made to use 'vocational education', because there was a desire to move away from a perceived rigidity in VET in Schools discourse, which restricted the discussion to the existing parameters of the current system/s of provision. Across the three-year duration of the project, this research sought to examine not just existing conceptualisations of VET in Schools but also to promote and facilitate thinking and discussion of new and innovative approaches. The term 'secondary education' has been used rather than secondary schools in order to recognise the fluidity and diversity of the senior secondary landscape. This choice of term is also congruent with a strong theme throughout this research: that there is a need for a vocational curriculum throughout secondary education, one not limited to the senior secondary certificates of education. It is important to acknowledge that not all young people are undertaking their senior secondary certificates of education in schools and also that not all VET in Schools is undertaken in the senior secondary years of Year 11 and Year 12.

Methodology

The research in the final year of the *Entry to vocations* project involved roundtable consultations with VET in Schools stakeholders in Melbourne, Sydney, Perth, Adelaide and Brisbane. These roundtables were designed as a follow-up to the stakeholder roundtables conducted in the second year of the research (see Clarke 2013). A total of 89 representatives from departments of education and training, boards of study, industry training and advisory boards (ITABs), industry skill councils (ISCs), TAFE institutes, private registered training organisations, group training organisations (GTOs), Catholic education offices, peak independent school sector organisations and secondary schools participated in five roundtables during July and September 2013. Audio recordings of all roundtable discussions were transcribed and coded using both deductive coding (drawn from themes identified in the first and second years of the research) and inductive coding techniques.

Framing the discussion

Australian senior secondary certificates of education (for example, the Victorian Certificate of Education, the Higher School Certificate) were traditionally designed to support access to higher education (university). The last decade has seen several senior secondary certificates of education reviewed and redeveloped (for example, the Queensland Certificate of Education, the South Australian Certificate of Education, the Western Australian Certificate of Education, the Victorian Certificate of Applied Learning) to incorporate a broader range of learning options within their completion requirements (for example, community-based learning, employment-based learning, VET qualifications). This evolution reflects how senior secondary certificates of education are now being expected to provide the foundational learning for a much broader range of post-school learning and employment options, beyond entry to university.

The labour markets into which young Australians make their transition from education are demanding ever-increasing levels of skills. Successful completion of Year 12 is the minimum prerequisite for entry to an increasing number of occupations that historically have been accessible to early school leavers, and jobs once accessible to Year 12 completers are increasingly requiring post-school qualifications. The adoption of 'Learn or Earn' policies and targets around Australia in recent years, which have raised the age at which young people are required to be engaged with education and training to 17 years of age, has placed even more pressure on schools and the senior secondary certificates of education to provide access to the breadth of academic and vocational learning opportunities needed to support successful education-to-work transitions.

With increasing numbers of young Australians staying at school to follow a range of academic, vocational and employment pathways, one of the key ways by which the Australian senior secondary education landscape has adapted to the diverse needs of this cohort and to a complex labour market context is through the increasing provision of VET in Schools programs.

More than 242 000 Australian young people participate in VET in Schools annually (NCVER 2013b). While there are considerable variations in the approach to VET in Schools across Australia (discussed in further detail below), all states currently use a qualifications-based approach to VET in Schools; that is, students enrolling in a VET in Schools program as part of their senior secondary certificate of education simultaneously achieve credits towards their school completion and competencies towards an AQF VET qualification. In preparing young people for an increasingly volatile labour market in which certification of skills and knowledge is valued, this approach is intended to provide a broader range of effective pathways for the range of school completers.

The question that arises however is: are young people being provided with access to meaningful and valuable qualifications? There are two different ways to look at this question. Firstly, the ways by which qualifications can be of value to young people may be considered. The achievement of qualifications has three purposes: entry to work and progression to higher levels in work; entry to higher-level qualifications; and widened access to tertiary education (Gallacher, Ingram & Reeve 2011). If this proposition is accepted, then what do we know about the role of VET in Schools in achieving these? Evidence from studies that track the destinations of school completers in Victoria (Rothman et al. 2011) and Queensland (Queensland Department of Education and Training 2011) demonstrates that VET in Schools is playing a limited role in supporting entry to work. Findings from these tracking surveys indicate that the type of work that school leavers not in education or training enter is often low-skilled, low-paid and casualised. Similarly, there is little evidence to suggest that VET in Schools is providing an effective launching pad for school completers to access higher-level qualifications. Post-school tracking surveys in Victoria (Rothman et al. 2011) and Queensland (Queensland Department of Education and Training 2011) reveal that VET in Schools is playing a limited role in widening participation in tertiary education, with VET in Schools students entering university programs at lower rates than their non-VET in Schools peers. Moreover, access by VET in Schools students to post-school VET shows evidence of decline in recent years (Polesel 2008; Victorian Department of Education and Early Childhood Development 2012).

The second approach to considering the question of whether young people are being provided with access to meaningful and valuable qualifications is drawn from emerging work on the National Trade Cadetships (Australian Curriculum, Assessment and Reporting Authority 2013). This approach considers the extent to which the vocational curriculum enables learning *about*, learning *for* and learning *in* work. If we consider current mainstream models of VET in Schools against this framework, a broader understanding of the role of vocational education in schools begins to emerge. We begin first by

considering *learning about work*. Learning about the industry context of a chosen vocational occupation is an inherent aspect of a meaningful exploration of the occupation. The VET in Schools curriculum is drawn from training packages that assume employment in the occupational field. Therefore, current approaches to VET in Schools contain limited learning *about* an industry. In terms of *learning for work*, within current models of delivery, this could be described as being fairly limited to the development of vocational competencies. However, learning for the industry or occupation ideally includes the attainment of broader applied and disciplinary knowledge, which complements and scaffolds those vocational competencies. While there are examples of complementary academic curriculum being used in themed programs of VET in Schools in various locations across Australia, this broader conceptualisation of how young people learn for work is not inherent in mainstream VET in Schools models. In terms of *learning in work*, the opportunity to develop and apply vocational competencies in a workplace or industry environment remains limited for many VET in Schools students. By using training packages as the foundation for VET in Schools, the system relies on curriculum that is an occupational standard for entry to work. This is in direct contrast to an acknowledgment that so-called entry-level qualifications do not in fact enable entry to those occupations (Stanwick 2005; North, Ferrier & Long 2010).

The story so far

Year 1: the complexities of a national discussion of VET in Schools

With more than 90% of Australian schools now delivering or providing access to some form of vocational education (Nguyen 2010), VET in Schools is very much a core feature of the Australian senior secondary education landscape. The first year of the *Entry to vocations* research revealed the ways in which a discussion of this increasingly significant VET in Schools activity is one that crosses policy silos and requires input and collaboration from stakeholders who often hold contrasting and competing expectations of the purpose of vocational education for young people. The working paper prepared in the first year of the *Entry to vocations* research (Clarke & Volkoff 2012) explored the place of vocational education and training in the senior secondary certificates of education, the direction of the various jurisdictional policies and the impact of those policies on the provision of VET in Schools, and the access of senior secondary students to high-quality vocational programs. The analysis in this first year also aimed to deepen our understanding of the extent to which VET in Schools provides strong education-to-work transitions (Clarke 2012). This initial work highlighted commonly held deficit views of VET in Schools (Barnett & Ryan 2005a, 2005b; Dally-Trim, Alloway & Waller 2008), how VET in Schools often fails to deliver effective pathways into post-school VET or full-time employment (Anlezark, Karmel & Ong 2006; Polesel & Volkoff 2009), the importance of workplace learning and exploration in supporting progression to further study in the field (Smith & Green 2005), and the considerable variation in the extent to which the fields of education undertaken by VET in Schools students align with post-school VET and employment opportunities (Anlezark, Karmel & Ong 2006).

Findings from the first year also highlighted the different VET in Schools policy structures in Victoria, New South Wales, Queensland and South Australia (Clarke & Volkoff 2012). The research identified significant system-based differences in how VET in Schools programs are administered and delivered, and the ways in which the VET curriculum is accommodated and included in the senior secondary certificates of education (Victorian Certificate of Education, Higher School Certificate in New South Wales etc.). However, while each state has its own approach to VET in Schools, research from the first year highlighted that stakeholders in each state are grappling with a number of common conceptual, structural and contextual dilemmas.

A key finding from the analysis of policy structures in this year was the apparent lack of understanding of the ‘in schools’ aspect of VET in Schools. This finding informed four case studies, conducted during the first year, that examined best practice examples of VET in Schools across four different states (New South Wales, Queensland, Victoria and South Australia). These case studies revealed some key aspects of an approach which might be used to strengthen VET in Schools. These included:

- the articulation of a coherent purpose and role for VET in Schools
- a clarification of the most appropriate level of qualifications for use in VET in Schools
- the expansion of employment-based training pathways
- the strengthening of career advice to support vocational pathways
- a systemic approach to supporting schools working with industry
- a systemic approach to workplace learning.

In clarifying the role that VET in Schools can play in supporting entry to work, it is important to understand the types of qualifications to which VET in Schools students have access. VET in Schools programs, which are based on training packages, consist of units of competency that describe specific workplace tasks and responsibilities. Most (92%) of the qualifications completed by VET in Schools students (including school-based apprenticeships and traineeships) are at certificate II (54%) or certificate I (38%) level. This type of basic VET (certificates I and II) has been shown to be ineffective in providing successful pathways into full-time, sustainable employment (Stanwick 2005; North, Ferrier & Long 2010), and this has implications for how the system conceptualises the purpose of VET in Schools. In other words, can VET in Schools be seen as a pathway to work program if the qualification levels do not provide access to jobs?

Year 2: unpacking the key dilemmas

In the second year of the research the focus was on identifying the common challenges facing VET in Schools stakeholders. Following on from the case studies of the previous year, the findings from a series of five roundtable consultations in the second year of the project clarified the highly contested nature of the perceived purpose of VET in Schools. The structures of the senior secondary certificates of education in different states were also perceived by stakeholders as having a complicating effect and, in some cases, a constraining impact on the development and delivery of high-quality VET in Schools programs.

In this second year several key dilemmas for how VET in Schools supports entry to work were identified. These included the nature of and access to workplace learning, the relationship between the VET (applied learning) curriculum and the academic (disciplinary) curriculum, and the role of non-school stakeholders. As noted above, learning *in, for and about* work are important components of a vocational education qualification. Stakeholders at all roundtables consistently described a lack of coherence in workplace learning activities in VET in Schools programs, with no common approach to the inclusion of workplace learning in VET in Schools programs across Australia. Where it is included or mandated, stakeholders expressed concern about the quality, depth and relevance of the learning. The use of occupation-specific training packages was also described by some stakeholders as narrowing the focus of VET in Schools too closely on the development of job-specific skills without addressing the broader educational development needed to support ongoing training and career growth. Stakeholders, particularly those involved in the delivery of VET in Schools programs in the traditional trades, regularly described the importance of the mathematics curriculum in supporting post-school work and learning outcomes for VET in Schools students. Despite this, there is currently no consistent approach to mandating a mathematics curriculum for VET in Schools students. Stakeholders from registered

training organisations and industry described a lack of understanding in schools about how the academic curriculum can support and complement vocational learning. The scope in current VET in Schools approaches to learning *in* and *about* work was also described as being limited by an unclear and poorly defined role for employers and non-school training organisations. Stakeholders also emphasised the problematic nature of asking students at age 15 or 16 years to select a very narrow occupational VET qualification, despite their limited understanding of the industry they were choosing.

The findings from the second year of the research also highlighted issues relating to cross-sectoral collaboration and the relationships between the various stakeholders involved in the development and delivery of VET in Schools programs. This cross-sectoral collaboration was described as particularly important for enabling the high-quality career exploration and career education activities needed to support appropriate VET in Schools choices. A central finding emerging from this year was the need for a more coherent or ‘programmatic’ approach to VET in Schools (Clarke 2013). A programmatic approach is one where there are closer links between the academic (disciplinary) and vocational (applied) curriculums in senior secondary education and where students are given clear and explicit advice on the subjects they need to undertake to maximise their post-school learning and work opportunities. The focus in this approach is on the pathways from vocational learning in senior secondary school to vocational learning in apprenticeships and post-school VET providers.

Year 3: proposing a new model of foundational vocational education in secondary education

The findings from the first and second years of this research highlighted the conceptual, structural, and contextual dilemmas facing VET in Schools programs; the purpose of the third and final year was to identify possible ways to strengthen the future role of VET in Schools in the senior school certificates of education.

The proposed approach, which was informed by the findings from the previous years, emphasises the foundational nature of the vocational learning that takes place for young people in schools and emphasises its role as a pathway to higher-level vocational studies following school rather than being a job-preparation program. This is an important and necessary conceptual shift. Jobs that do not require post-school qualifications are declining. Current VET in Schools programs are not providing strong job outcomes for school completers (Rothman et al. 2011; Queensland Department of Education and Training 2011) and the nature of the predominantly low-level qualifications offered means that such programs have little capacity to support entry to skilled work. This is particularly true for the skilled, sustainable, meaningful and secure work that we would hope our young people can access.

Research across the first two years of the project revealed an increasing focus in VET in Schools around Australia on the instrumental purposes of education and on employment outcomes. Consultations with stakeholders indicated little emphasis on the role of VET in Schools as a pathway to skilled technical and vocational employment or as a pathway to intermediate skilled jobs that require certificate IV and above qualifications.¹ For these jobs, secondary school completion is insufficient. By default, vocational learning in school must form the foundation for entry to these qualifications; however, in its current form, with its emphasis on predominantly low-level qualifications and with limited learning *about* and *in* industry, it cannot on its own prepare young people for direct entry to work.

¹ In March 2014, the Assistant Federal Minister for Education, Sussan Ley, announced a policy move towards increasing school-based apprenticeships and traineeships. At the time of writing the nature of the policy change that will be implemented to support this remains unclear.

This proposal of a programmatic approach to foundational vocational education in secondary education is set against a backdrop of a shifting policy landscape. Several of the states under examination in this study have recently conducted or are currently conducting reviews and reforms of their VET in Schools provision. The *Queensland Skills and Training Taskforce final report* (Queensland Government 2012), released in November 2012, indicates what could be interpreted as a significantly utilitarian policy shift for VET in Schools in that state. Recommendations from the report suggest that there is 'a clear role for VETiS [VET in Schools] into the future, within a strictly applied framework that supports achievement of the Government's economic goals' (p.11). The report goes on to recommend that government VET General Revenue funding of VET in Schools be limited to programs 'focused on employment outcomes and aligned to the skill needs of industry' (p.11). The New South Wales Government's *Review of Tertiary Pathways* report (New South Wales Department of Education and Communities 2012), released in June 2012, highlighted some of the key barriers to student pathways from school to VET. These included a lack of knowledge about the benefits of vocational education and training, the low levels of qualification attainment in vocational courses in schools and that the available courses did not match workforce opportunities (p.63). The review also found that a lack of contextualised language, literacy and numeracy in VET in Schools courses may be hindering effective transitions to intermediate and higher-level courses. In May 2013, the Victorian Curriculum and Assessment Authority (VCAA) released the discussion paper, *Strengthening senior secondary pathways*, which outlined three possible reforms to senior secondary education – a Victorian baccalaureate, specialist programs and industry pathways. The industry pathways were described as being developed 'in consultation with the relevant industry to determine the best mix of industry-based learning and academic studies' (2013, p.6).

At a federal level, the Australian Curriculum, Assessment and Reporting Authority (ACARA) has developed the Years 9–10 Work Studies Curriculum as part of the National Trade Cadetships initiative and is currently developing a 'draft shape paper' of the Years 11–12 National Trade Cadetship (NTC) Curriculum. While this curriculum is still in its very initial stages of development, the extent to which it may or may not interact in the future with and/or complement existing VET in Schools provision remains unclear.²

Looking ahead

Across the three years of the *Entry to vocations* research, consultations have sought to deepen understanding of the role that schools are playing in supporting entry to work. As noted earlier, the third and final stage of the research has drawn together findings from the first and second years of the research to provide a possible alternative model of thinking about the design and delivery of vocational education for young people in secondary education. The next section of this report outlines the development of the proposed approach and presents the findings from the testing of the approach with stakeholders.

² At the time of writing it remains unclear whether the National Trade Cadetship will continue to an implementation stage.

Foundational vocational education in secondary education

Developing the proposed approach

The proposed approach, which we have termed ‘foundational vocational education in secondary education’, is not a prescriptive model of delivery, but rather a series of evidence-based principles for the ongoing policy reform of VET in Schools. This approach is grounded in an assumption that Australian senior secondary schools make a contribution to human capability for the labour market and to the development of successful learners and informed citizens (Ministerial Council on Education, Employment, Training and Youth Affairs 2008). The approach also aims to address the current flaws and weaknesses in national, state and institution-based conceptualisations of senior secondary education. It is important to acknowledge how this context impacts on the development of policies regarding VET in Schools programs.

With this in mind, the four key concepts that emerged during the three years of the *Entry to vocations* research have been used to frame the approach. Firstly, a critical approach to vocational education in secondary schools cannot be focused on the curriculum alone: implementation and delivery are crucial pieces of the solution. Across the three years of the research, the strengths and weaknesses of the qualifications and training packages and their adaptation for use in schools have been consistent and dominant themes. In the third and final year of the research, the importance of context to our understanding of how to strengthen VET in Schools has come to the fore. Of particular relevance have been questions relating to how the VET in Schools curriculum is being used in different ways and how the nature and structure of this curriculum support and limit innovative approaches to its operationalisation in schools. The relationship between the VET in Schools curriculum and pedagogical innovation is particularly pertinent to the consideration of a programmatic approach to vocational education, which seeks to promote synthesis across traditional disciplinary and occupational silos.

Secondly, a key issue in the broader discussion of the purposes of senior secondary education and this specific discussion of VET in Schools is what can be described as a ‘problematic certificate paradigm’; that is, there appears to be a simultaneous acknowledgement of, on one hand, the limited value of both entry-level VET certificates and senior secondary certificates in the labour market and, on the other, an increasing focus on attainment of these certificates as the key policy measure of effective youth transitions. This tension can create confusion for users of VET in Schools programs and generate, in some cases, unrealistic expectations for students in relation to the usefulness of VET in Schools in creating pathways to work. It also complicates the work of schools in supporting strong post-compulsory pathways. Inherent in the approach proposed here is a shift to the establishment of different and clearer expectations of vocational education in secondary education; namely, as a pathway into post-school learning rather than as a direct path into post-school work.

Thirdly, despite policy-makers’ and practitioners’ strong endorsement of the role of VET in Schools in promoting retention, a large number of young Australians continue to opt out of senior secondary education. In 2012, 56% of 15 to 19-year-olds studying VET outside a senior secondary certificate (for example, those no longer in school) had not completed Year 12 (NCVER 2013a). Clearly, the current models of provision are not working for all students. Any discussion of ways to strengthen VET in

Schools must consider the needs of both existing cohorts and those of young people leaving the senior secondary education system. The proposed model encourages broader consideration of how vocational learning in schools can be extended beyond the senior secondary years to create opportunities for exploration of and engagement in the vocational curriculum in the junior and middle years.

Finally, it is important in a discussion of the place of vocational learning in Australian secondary education to acknowledge the role that VET in Schools plays in reproducing existing socioeconomic inequalities. If we look beyond the socioeconomically stratified patterns of participation in VET in Schools, we see there are also significant class-based distinctions in relation to the purpose of senior secondary education more broadly. Middle class children are more likely to use senior secondary education as an educational pathway to post-school education and training for entry to the professions, while working class children, aspiring to employment, are more likely to use senior secondary education as a foundation for entry to jobs (Teese & Polesel 2003). Where therefore is the pathway for those aspiring to technical/vocational occupations?

These issues of the implementation of the VET in Schools curriculum, the tensions regarding the value and purpose of entry-level certificates, the role of VET in Schools in promoting engagement and retention, and the socially stratifying role of vocational programs in schools have all informed the development of the proposed approach. The approach consists of three key elements: an explicit *purpose* of vocational education in secondary schools, an ideal *structure* for vocational education in secondary education, and a *context* that would best enable strong foundational vocational education for young people in secondary schools. These three elements are described below. The intention of the third and final year of the *Entry to vocations* research was to test the feasibility and validity of this approach with stakeholders.

The purpose of vocational education in secondary education

The researchers proposed that the explicit purpose of vocational education in secondary education is the foundational preparation for entry/access to mid-level qualifications and for entry/access to employment-based learning such as apprenticeships. As discussed above, this articulation of the purpose of vocational education in secondary education is a response to mounting evidence that current approaches to VET in Schools and the changing nature of the Australian labour market are not supporting direct entry to work for school completers.

The structure of vocational education in secondary education

The researchers proposed a movement away from the dominant current approaches that present VET in Schools options to students as 'VET subject' offerings alongside the mainstream or academic subject offerings. The proposed model encourages a movement towards thematic programs of foundational vocational and technical education; these programs would incorporate relevant vocational and academic subjects with the aim of contributing to knowledge and practice in broad occupational fields. This could take the shape of thematic packages of complementary academic and vocational curriculums that jointly establish the foundations for transition to post-school learning in broad occupational fields.

This proposed shift in the structural approach to vocational education in secondary education seeks to address the stakeholder concern that the narrowly defined job-based competencies that form the basis of the VET in Schools curriculum are insufficient in supporting learning *about* and *for* occupations. This structural aspect of the proposed approach sought to encourage consideration of an alternative purpose-built, non-training package-based approach to the vocational education

curriculum in schools. There are three key possible benefits to this approach. Firstly, a movement away from the use of training packages and AQF qualifications as the basis for the school-based vocational curriculum may alleviate some of the expectations of VET in Schools as a job-preparation program. Secondly, a purpose-built curriculum has the potential to embrace a broad industry perspective rather than being occupation-specific, thereby allowing for greater exploration of a range of career options. Finally, current approaches to VET in Schools, whereby AQF qualifications are used, link participation in vocational education to the senior secondary certificates of education and can constrain use of the vocational curriculum in the junior and middle years. A purpose-built vocational curriculum for schools has the potential to be flexible enough for use in the different stages of schooling as well as for the exploratory and engagement activities required prior to the senior secondary years.

In addition to the consideration of a new approach to a vocational curriculum in secondary education, this structural aspect of the proposed approach also encourages reflection on the role of the academic curriculum in vocational education programs. The inclusion of core disciplinary knowledge, such as language, literacy and numeracy, beyond that currently contained in training packages, is needed to inform both industry and occupation-specific learning and to support transition to VET participation at a higher level following school. Stakeholders highlighted the need for greater clarity and guidance for schools in combining the academic and vocational curriculums to create opportunities for students to develop the breadth of skills and knowledge needed to support pathways to occupations.

The context for foundational vocational education in secondary education

Intrinsic to foundational vocational education in secondary education is a context that facilitates and enables students to explore their potential career options and where career education is coherently provided, the aim being to inform their choice of vocational and technical education pathways. This element of the proposed approach is not suggesting any significant conceptual or structural shift, but it seeks to reinforce the important cross-sectoral nature of vocational education in secondary education and the need for a stronger and more clearly defined role for employers and registered training organisations. It also aims to signal the need for exploratory and experiential learning *in* and *about* occupations as core components of secondary education. Employers and training organisations have a key role to play in enabling access to this learning.

Stakeholder perspectives – testing feasibility and validity

In discussions of the proposed approach with stakeholders during the final roundtable consultations, contradictory viewpoints emerged: some acknowledged weaknesses in the current approach to VET in Schools, while others demonstrated a reluctance to move away from the current training package-based model.

While the context element of the proposed model of foundational vocational education in secondary education was generally supported by stakeholders, the purpose and structure aspects of the approach, particularly the source of the curriculum and the need for certification, were more contested. Stakeholders were generally very reluctant to consider abandoning national training packages and AQF qualifications as the basis for vocational education in schools. The proposal that school completion through VET in Schools should not lead directly to the labour market was also considered to be problematic.

In the process of teasing out the concerns regarding the purpose and the structural aspects of the model, four distinct themes with the potential to inform a revised model of foundational vocational education in secondary education were identified. These themes were:

- Qualifications completed during school must reflect the employment and training opportunities in the labour market.
- A safety net is needed for students who directly enter the labour market.
- Systems and schools must avoid the emergence of a system which tracks students on the basis of their social background.
- Workplace learning needs to support learning for and about, not only in, work.

The following section will expand on the nature of these identified themes, as discussed and described by stakeholders during the roundtables.

Qualifications completed during school must reflect employment and training opportunities in the labour market

In all five of the roundtable discussions, participants described a lack of connection between the skills demands of employers and industry, and the types of qualifications being obtained through VET in Schools. This disconnection was described as having several aspects. It was first of all an issue of level of qualification. Stakeholders consulted in the third year of the project confirmed the findings from the previous years of research: that the predominantly low-level qualifications used in VET in Schools programs do not match the intermediate skill needs of employers.

A particular focus in these discussions was a perceived gap between what employers wanted in terms of skills and experience and the capacity of the current models to provide sufficient skill and workplace exploration. As one stakeholder explained:

Employers want a different thing compared to what the students want: so the students effectively are provided with a qualification as such which almost discounts them from the employment market ... So that disconnect between a student wants to do this and an employer wants X and the two don't marry up. And particularly in certain areas where we've got high youth unemployment.

(System stakeholder)

Beyond this mismatch in the level of qualification, industry stakeholders consulted in the third year also described a weak link between their needs and the occupational fields of some VET in Schools qualifications being delivered in schools. The second problem to emerge from the roundtable consultations was that there is a difference between the qualifications that schools offer to their students and the qualifications that employers and industry need. Within this problem there are two sub-sets of issues. The first is an issue of comparability, as articulated by a school stakeholder:

You can't compare the Certificate II in Construction with a Certificate II in IT and yet they're both called Certificate II and from a school's perspective, well they are going to say they're [Senior Secondary Certificate of Education] certified and both get four credits ... But the disconnect with the AQF is a fundamental problem.

(Schools representative)

The second is an issue of purpose, as described by this stakeholder from a TAFE institute:

We ran some VET in Schools forums with coordinators and heads from some of the schools across Brisbane and even yesterday had a question from a particular school saying will you support a Cert. II in Construction and Engineering? And the message has been for a number of years that we won't because that's not what industry and employers are telling us and also with the

employment system in Queensland, we know that puts the students too far into an apprenticeship around a number of competencies they've completed.

(TAFE representative)

The issue of maximising student access to occupations, particularly in regions of high youth unemployment, was described as compromised by a gap between the jobs available to school completers and the types of qualifications which young people held when leaving school. Common examples included low-level qualifications in retail, sport and recreation and community services. These programs were described as being widely delivered in schools because they are attractive to students; however, they do not reflect the employment opportunities in the post-school labour market. The narrow occupational focus of these qualifications was also described as a problem. Where a young person has completed a qualification and cannot find work, the lack of broader industry skills and knowledge was perceived as limiting their mobility and capacity to look for horizontally related opportunities in industry.

Stakeholders frequently endorsed the role of industry in working with boards of study to develop and accredit VET in Schools curriculum, but this alone was described as insufficient to address the perceived limited value of VET in Schools qualifications in providing pathways to jobs. A key theme emerging from this discussion was that the issue was not just the curriculum in the approved VET in Schools programs, over which the boards of study had centralised control, but the issue was the implementation or operationalisation of that curriculum in varying pedagogical contexts. In other words, how the VET in Schools curriculum was translated for delivery in schools was described as alternatively enhancing or limiting its role in supporting post-school entry to work. These concerns, with implications for how we think about the purpose and structure of VET in Schools, were raised frequently throughout all five roundtables.

Despite the frequency with which stakeholders highlighted concerns about the low value of VET in Schools qualifications in the labour market, there was a general reluctance to consider relinquishing training packages and AQF qualifications as the basis for vocational education in secondary education. Formal certification of vocational learning in schools was consistently described by the majority of stakeholders as very important. As more than one stakeholder reported, 'it might be the only qualification they get'. The anxiety about a non-training package curriculum in schools, as featured in the proposed approach, was also informed by a concern that not only would such a curriculum not be trusted by employers but also that the current qualifications-based approach is seen as crucial to earning points/credits towards the senior secondary certificates of education.

The conclusion that emerges from this discussion of the nature of the qualifications used in VET in Schools is that in the certified training package approach changes needed to be made to both the alignment of the school vocational curriculum with labour market opportunities and the narrowly defined occupational focus of the qualifications accessed by young people in schools.

A safety net is needed for students who enter directly into the labour market

Across the five roundtables conducted in the third year of this research, school and industry stakeholders frequently indicated that young people benefited from being employed after leaving school. These stakeholders described this employment as important for developing generic

At the moment there are gaps between the types of qualifications young people leave school with and the jobs available to them. These qualifications need to better reflect the employment and training opportunities in the labour market.

employability skills and 'getting a taste' of their chosen industry. In contrast to this, TAFE and policy stakeholders highlighted the social segregation between those who use this post-school employment exploration as a stepping stone to further education and/or higher-level employment and those who have limited mobility and employment security. They described school completers from low socioeconomic backgrounds with low achievement as more likely to move in and out of low-skilled, insecure work in their post-school years. This was perceived as particularly problematic for those school completers with insufficient core skills and knowledge to navigate the opportunities for the further education and training needed to access more secure employment at intermediate skill levels.

This was a key concern of many stakeholders, in particular those who expressed doubts about the value of entry-level qualifications. One area of key need identified by stakeholders was for more explicit awareness of the links between VET in Schools and post-school VET, with stakeholders from registered training organisations and industry indicating a consistent lack of awareness by students and their families of the opportunities for progress to higher-level VET following participation in VET in Schools. Addressing the limited occupational mobility of young people without pathways to post-school education and training was described as a key policy challenge. As one industry representative noted:

One of the things is the world of work is changing, which you all know, hugely! And work is not so certain as it has been in the past and I think there's something to be said about preparing kids in order to manage their own careers throughout their life and I think that's something that has to be built into the curriculum at some point.

(Industry representative)

Emerging from these discussions is the need to question the quality of young people's post-school employment outcomes (Karmel & Liu 2011) and the opportunities inherent in those outcomes for further training, promotion and mobility. This has implications for thinking about the purpose of vocational education in schools and the role of partnerships and cross-sectoral stakeholders in strengthening the pathways from school to vocational careers. A revised approach to vocational education in secondary education also has implications for structural issues, particularly with respect to the role of the traditional subject disciplines in supporting vocational and occupational mobility following school.

Systems and schools must avoid the emergence of a system which tracks students on the basis of their social background

Despite significant structural differences in the nature and architecture of the senior secondary certificates in each of the five states participating in this research, there were concerns expressed at every roundtable about the impact of recent and planned changes to the senior secondary certificates. Changes in all states apart from New South Wales were seen as 'opening up' senior secondary certificates of education to include an increasingly diverse range of learners. This breadth of learning was described as necessary to promote retention and to respond to the needs of the diverse cohort of young people now staying on until the final years of secondary education. However, this opening-up was also described as creating a risk of too much choice and unstructured or incoherent pathways. Greater flexibility in senior secondary education means that Australian secondary students have more choice than ever before in the subjects they choose.

Young people entering the labour market directly from school tend to have limited opportunities for further training, promotion and mobility.

The language used in national attainment targets for school completion, which refers to 'Year 12 or equivalent' (Council of Australian Governments Reform Council 2013), was also described as complicating understanding at system and school levels of the purpose and value of different qualifications for young people. Some interpretations of this policy were also seen as encouraging a shift towards a 'hidden tracked system'. Stakeholders expressed concern that Year 12 certificate completion with an Australian Tertiary Admission Rank (ATAR) and a certificate II vocational qualification were being positioned as two school completion alternatives. This comparison was described as creating a potential space within which schools could formally track students into university and non-university pathways.

In this context, stakeholders noted a more noticeable divide between those students accessing and acquiring foundational disciplinary knowledge in their final years of schooling and those not doing so. This was a reference to the practice by which students can satisfy the requirements of their secondary school certificate through a predominantly vocational curriculum. The price paid for retention and school completion is that these students' access to discipline-specific subject knowledge may be more limited in their final years of schooling. As one school stakeholder explained:

We need to think about the kid and not just what a theoretical employer might want. We are talking about kids, we're talking about school-based programs, which have to have more than just an instrumentalist, vocational purpose, they're also supposed to create citizens, and they're also supposed to create young people who can function as mature members of society, you know, the broader purposes of schooling.
(Schools representative)

The key takeaway message from this discussion was the importance of ensuring that any revisions to the VET in Schools curriculum address the issue of all students having access to the foundational disciplinary skills and knowledge that support their careers.

Workplace learning needs to support learning for and about, not only in, work

The final problematic area emerging from the stakeholder roundtables was essentially a structural issue, but it has implications for how we consider the broader purpose of vocational education in the senior secondary certificates and the context in which vocational education programs are delivered. Stakeholders from all perspectives and in all five states expressed concern that students in mainstream models of VET in Schools had insufficient exposure to workplace learning to support pathways directly to occupations. As one stakeholder from a TAFE institute noted:

I'll give you an example ... we had a kid the other day apply for an apprenticeship ... he came to us to do construction, he's got about 18 competencies out of 30 needed to be a tradesmen in carpentry ... we uniquely have a competency-based progression arrangement in our industrial relations so the more competencies you have, the further up the trail you're going to move in terms of a trade. He was entitled to just short of third year in terms of wages. He'd had 200 hours of workplace experience as opposed to an apprentice who had gone through the same number of competencies in the trade who would have had something like 4000 hours of workplace experience. That's the difference, it's just not fair.
(TAFE representative)

Concerns were expressed that changes to secondary school certificates have opened up the ability for schools to track students into university or non-university pathways. Revisions to the VET in Schools curriculum need to ensure that all students access foundational disciplinary skills and knowledge.

Generally, the workplace learning components in VET in Schools programs are inadequate for providing direct pathways into occupations, although they do inform post-school employment and training decisions. For this reason, workplace and career exploration should be made a more explicit part of the secondary school curriculum.

learning can lead to students making ill-informed and risky post-school choices.

From this discussion, it can be seen that, the key implications for revision of the proposed approach to foundational vocational education in secondary education is the need for a more explicit consideration of workplace and career exploration as an embedded and fundamental part of the secondary school curriculum.

The issue of workplace exposure highlights a tension between the current structures of VET in Schools in the senior secondary certificates and the expectations of the role VET in Schools can play in providing pathways directly to work. Exposure to meaningful amounts of integrated and structured workplace learning for VET in Schools students was described as logically ‘complicated’, ‘resource intensive’ and ‘at odds with the broader role of school’. Current approaches to workplace learning were also seen as providing students with limited insights into industry more broadly, by focusing, as VET in Schools qualifications do, on narrow job tasks. Workplace learning was described as playing a key role in informing post-school employment and training decisions. Inadequate opportunities for learning *about* and *in* their preferred industry through workplace

Implications

A vision for vocational education in secondary education

VET in Schools, as articulated in existing policy (Ministerial Council on Education, Employment, Training and Youth Affairs 2000), is intended to enhance and strengthen transition outcomes for young Australians. In synthesising the feedback from stakeholders across the three years of the *Entry to vocations* project, it emerged that in its current systemic forms VET in Schools is not fulfilling this purpose. This research has asked questions about changes that need to be considered in relation to the purpose, structure and context of vocational education in Australian secondary schools.

Outlined below are four key principles or ‘ingredients’ with implications for ongoing policy reform of VET in Schools and for any new approach to vocational education in schools. These are evidence-based principles, developed from the three years of the *Entry to vocations* research. Individually, some of these elements are already being pursued or considered in some jurisdictions. The findings across the three years of the *Entry to vocations* research indicate that it is holistic change to all aspects of the delivery of vocational education in schools that is needed if the role of VET in Schools is to be strengthened.

Qualifications for young people

The policy aimed at reforming VET in Schools needs to consider not only the purpose of VET in Schools more broadly, but the purpose of the qualifications used by VET in Schools programs. What are the most meaningful, appropriate and valuable qualifications we should be offering young people in schools?

The findings across the three years reinforce the need for greater alignment of the school vocational curriculum with labour market opportunities. This is not to say that only vocational programs relating directly to skill shortage areas should be funded and delivered in schools. The link between school-based vocational programs and labour market opportunities is a more nuanced one. The vocational curriculum in schools, and by extension the vocational qualifications offered in schools, should reflect the broader range of skills and knowledge needed to enter and progress through a career path in industry; that is, the vocational qualification with which a young person leaves school should form the foundation not only for their first job but for their ongoing career in their preferred industry. The current narrowly defined occupational focus of VET in Schools qualifications does not achieve this.

A new approach to address this must recognise both the limited currency of the entry-level certificates predominantly used in VET in Schools and the desire for models of vocational education in schools to be ‘certified’. One possible approach for consideration is the redevelopment or reconceptualisation of all certificates I and II as industry/occupation exploration or ‘career start’ qualifications, for predominant use by young people in schools.

The vocational qualification a young person leaves school with should form the foundation for their first job as well as their ongoing career in their preferred industry. One approach to achieve this would be to reconceptualise all certificates I and II as industry/occupation exploration or ‘career start’ qualifications, predominantly for use by school students.

Any redevelopment of this nature needs to consider:

- how to enable, within these entry-level qualifications, exploration of a broader range of related occupations within an industry
- how to integrate meaningful ‘learning about’ the industry, including understanding local issues and those related to mobility and growth
- how to create clear, coherent and transparent pathways from these foundational or ‘career start’ qualifications to intermediate and higher-level qualifications.

Programmatic approaches to senior secondary education

Suggestions to strengthen VET in Schools include: developing thematic packages of curriculum; expanding the mandated curriculum to include English and maths; making explicit connections between school and post-school VET; and using ‘exploration’ units of competency in the junior and middle years of schooling.

Stakeholder responses to the approach proposed in the third year of the project highlighted that any revisions to the VET in Schools curriculum need also to ensure access for *all* students to the foundational disciplinary skills and knowledge required to support their careers. Consideration also needs to be given to how the vocational curriculum can be used to greater effect in the junior and middle years of school to support and inform the vocational pathway choices in the senior years. This, as has been described by stakeholders across the three years of this research, is currently complicated by the location of VET in Schools subjects only in the senior secondary certificates. This research indicates that opportunities for vocational education to play a broader role across all secondary education, not just the senior years, should be explored.

The architecture for scaffolding or supporting this type of reform of certificates I and II for use in schools also needs to be considered. The feedback from stakeholders over the last three years of consultation has suggested four structural changes with the potential to strengthen the role of VET in Schools in the senior secondary certificates. These include:

- *Development of thematic packages of curriculum:* this is in contrast to the inclusion of one or two vocational subjects in an unconnected collection of senior secondary subjects, subjects that do not necessarily provide a well-signposted pathway to further education and training. This work has already begun in at least one jurisdiction and if pursued has the capacity to generate greater synthesis.
- *Expanding the mandated curriculum to include English and maths:* this is connected to the first point and reflects the need for coherent programs of study that provide clear pathways. As there is evidence that more guidance is needed for schools in understanding the disciplinary knowledge necessary to support particular vocational pathways, a clearer articulation of the importance and relevance of the English and maths curriculum to post-school vocational pathways could strengthen thematic approaches to vocational education in schools.
- *Explicit connections made between school VET and post-school VET courses:* in much the same way that particular subjects in the academic curriculum in the senior years are recognised as being prerequisites for entry to university courses, more explicit links between clearly defined but flexible packages of school-based vocational education and post-school vocational courses could strengthen the pathways from VET in Schools to intermediate-level training.

- *Use of ‘exploration’ units of competency in junior and middle years:* if AQF VET qualifications at certificate I and II levels are to remain the dominant basis of the VET in Schools curriculum, consideration should be given to how some competencies within those qualifications could be used to support and inform exploration and decision-making prior to the senior secondary years.

Context for vocational education in schools

A meaningful discussion of the purpose of vocational education in schools and subsequent changes to its architecture and curriculum are equally important to any effort to strengthen the role of VET in Schools. However, a close look at the broader context in which vocational education in schools is delivered and used is also crucial. Changes to entry-level qualifications will ensure their more meaningful and coherent use in schools. However, the ways by which young people make decisions and understand the vocational pathway choices available to them must be informed and supported by relevant, reliable and timely information (OECD 1997). An integrated career development curriculum from the start of secondary school would facilitate the provision of this type of information. Such a curriculum would include learning about the world of work in the middle years and, where appropriate, learning that takes place in the world of work, in the middle and senior years.

A key challenge for all stakeholders involved in senior secondary education is how to develop and provide high-quality and authentic workplace and career exploration as an embedded and fundamental part of the secondary school curriculum. Throughout the three years of the *Entry to vocations* study, stakeholders from all sides frequently acknowledged that this requires cross-sectoral collaboration at all stages of the curriculum — its design, development and delivery. Clearer and more coherent leadership is needed at the system level to support this work, particularly in relation to the consistent provision of career exploration opportunities and workplace learning activities.

Introducing an integrated career development curriculum in secondary school could help young people make informed decisions about their vocational pathway choices.

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NVETR Program funding

This work has been produced by NCVER under the National Vocational Education and Training Research (NVETR) Program, which is coordinated and managed by NCVER on behalf of the Australian Government and state and territory governments. Funding is provided through the Department of Industry.

The NVETR Program is based on priorities approved by ministers with responsibility for vocational education and training. This research aims to improve policy and practice in the VET sector. For further information about the program go to the NCVER Portal <<http://www.ncver.edu.au>>.

The author/project team was funded to undertake this research via a grant under the NVETR Program. These grants are awarded to organisations through a competitive process, in which NCVER does not participate.



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