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Enhancing the standing of vocational education and the occupations it serves: Australia

Stephen Billett, Sarojni Choy and Steven Hodge (Griffith University, Australia)

Abstract

In Australia, the relatively low standing of vocational education and the occupations it serves is of growing concern. This standing is held to contribute to an increased number of young people preferring to engage in higher education and to look past vocational education as a potential post-school pathway. Consequently, there are skill shortages in some occupations, as young people who might be suited to them are now completing university degrees instead, including those with no clear alignment with occupations or employment outcomes. To redress this imbalance, it is necessary to identify factors shaping young people's decision-making about post-school pathways and preferred occupations. The findings of a project investigating these factors and how they might be addressed are presented and discussed here. Central are interactions with familiars, including parents, teachers and peers. However, the degree by which interactions are informed, engaged and influential differed. Teachers may need to be impartial and students' deliberations about post-school pathways more widely informed. Strategies to achieve these outcomes were evaluated by informants, leading to suggestions for policy initiatives. These included government's role in championing vocational education and how schools might more effectively inform and support students' decision-making about post-school pathways.

Keywords: standing of vocational education, societal sentiments, post-school pathways, occupations, young people's decision-making, educational policy

Enhancing the status of vocational education

The relatively low standing of vocational education and training (VET) is of global concern, as it impacts young people's engagement in this important educational sector and the occupations it serves (Billett, 2014). This concern is acknowledged across countries with advanced industrial economies (Cedefop 2014; Clement 2014) and those with developing economies (UNESCO-UNEVOC 2018). The heightened aspirations of young people and their parents, globally, does much to reinforce and entrench vocation education and the occupations it serves as a less- or non-preferred post-school option in a range of countries. This concern exists even in countries where VET is regarded as having relatively high status (e.g. Germany) (Deissinger and Ott 2016) and is what Wyman et al. (2017) refer to as the 'university or bust' phenomenon. Indeed, regardless of whether vocational education is pursued in upper secondary schooling or as a post-school option, it faces challenges associated with its relatively low standing or status. Issues associated with the standing of vocational education and the occupations it serves have become a key concern in Australia with both federal and state governments (Parliament of Victoria Economic 2018) considering how this issue might be redressed. In particular, there is a concern that young people's decisions about post-school pathways are leading to skill shortages, on the one hand, and increasing numbers of young people engaging in circuitous and ever-lengthening higher education

studies that are not specifically aligned with occupational outcomes nor leading directly to employment, on the other (Parliament of Victoria Economic 2018).

The process of identifying and selecting an occupation is quite central to the project of vocational education. Dewey (1917) proposes it as the first of two goals for education for occupations. He holds that the priority is to assist young people identify the calling or occupation to which they are most suited. Only then, should the focus be on preparing them for that occupation. He argues that there was a risk for individuals who failed to identify an occupation to which they were suited to engaging in what he refers to as an uncongenial calling (i.e. being engaged in occupations that they were uninterested and/or ill-suited). It follows that the process of identifying a preferred occupation and the post-school pathway is an important goal for vocational education. As elsewhere (Clement 2014; UNESCO-UNEVOC 2018), there is growing concern in Australia that this decision-making is being driven by the heightened and possibly unrealistic aspirations of young people and their parents, and that their decision-making about post-school options may not be adequately informed. Given its importance both for young people's immediate post-school trajectories and their ability to secure the range of skills required to meet economic and social needs, it becomes necessary to identify factors shaping that decision-making. Specifically, here is a focus on understanding what needs to occur for vocational education and the occupations it serves being considered as a viable and worthwhile post-school pathway.

Changes to the Australian VET system over the last few decades including the differentiating through mandated competency-based training, its privatisation and narrowing profiles, as well as recent controversies associated with poorly regulated private providers have done little to enhance its standing, nationally. Indeed, as in other countries, the very public way these changes and controversies have played out may well be fuelling global trends of increasing aspirations that are eroding the status of VET and reinforcing decisions favouring higher education as the preferred post-school option. VET reform commencing in the 1990s reshaped many aspects of the Australian system (Smith and Keating 2003), including presenting and promoting it as having very pragmatic and limited focuses. Government policy aimed for a marketized VET system with public funding progressively made available to both private training companies and public providers has potentially also contributed to this low status, by positioning it as a form of educational service that can be provided by anyone, but preferably the lowest bidder. The influx of private companies into the 'training market' added to lower status through serial scandals associated with private providers who accessed public funds, targeted ill-informed and vulnerable people to enrol in courses for which they were ill-equipped and failed to provide adequate support. Consequently, large numbers of students were left with debts for qualifications that did not lead to employment (Warburton 2016). Wide press coverage and public outrage left the entire VET sector with a tarnished reputation, as members of the general public would not be able to discern the differences between legitimate and dishonest providers, particularly when the latter aped the institutional titles of the former. Marketisation of VET also had a negative impact on public providers by reducing their funding, making it difficult for them to pursue their traditional social mission (Wheelahan 2016). Vocational education institutions that were household names and served well their communities in cities to some of the most remote parts of Australia were disfigured through restructures, mergers and closures. Thus, the public perception of VET was dramatically altered with doubts raised about its integrity and status as a worthwhile post-school educational option.

Changes more internal to the VET system may also be indirectly contributing to wider perceptions of a quality problem with VET. These include the shift to a competency-based curriculum which has

narrowed the focus of vocational education to immediate employer needs (Wheelahan et al 2015). Added here is the downgrading of teachers' professionalism through restricting their discretion and only requiring minimal preparation for those teaching in the sector (Hodge 2016). Perceptions of VET may also be undermined by falling levels of funding over time when compared with higher education which has seen expanded funding (Joyce 2019), making it difficult to compete in terms of facilities and marketing. So, in these country-specific ways, changes to Australian VET work against being an attractive and worthwhile post-school option not only for young people, but also those who advise and influence their decision-making (i.e. parents, teachers and other familiars)

The key influences on young people's decision-making about post-school pathways as identified in Europe are: i) parents, ii) school teachers, iii) work experience, and iv) school guidance officers (Clement 2014). In terms of human sources of advice, all are close or proximal sources. Yet, as elsewhere, there are concerns about how these close sources of advice are sufficiently informed, engaged in the process and are influential when shaping young people's decision-making about preferred occupations (Fuller, McCrum, and Macfadyen 2014). Students' confidence in career advisors in some Australian schools is reported as being low (Bisson and Stublely 2017). These researchers also identified unevenness in advice about and encouragement for VET options, such as apprenticeship in high schools. While it has been suggested that promoting vocational education as a viable option is best achieved through schools, this can be difficult as university entrance is often privileged in those schools (Clarke 2015). This privileging is, in part, a product of school performance measures (i.e. graduates' university entry), but also a reflection of VET being unknown to and viewed negatively by many who assist young people's decision-making (e.g. parents and teachers). As in Australia, UK research found that whilst influential in young people's decision-making, teachers had insufficient knowledge and experience outside of their own careers to provide informative advice (Fuller et al. 2014). A specific and relevant finding is that the process used in Queensland schools to advise young people and their parents about post-school pathways may work against generating diverse post-schooling options. Hay and Sim (2012) report teachers' personal preferences and biases are overly influential in this process and can direct students in unhelpful ways and only to vocational education when students are deemed to be 'low school achievers' (i.e. unlikely to meet university entrance requirements).

Australian parents' ability to provide informed advice to their children has been found to be uneven and students from disadvantaged backgrounds may be further disadvantaged by limited parent knowledge, engagement and direction (Bisson and Stublely 2017; Lamb et al. 2018). An American study (Phillips 2012) suggests that educating parents is now required about the worth of occupations not seen as high status, emphasising demanding requirements (i.e. cognitive, procedural) to perform that work. Yet, not all school-leavers have decided what is their preferred occupation. This lack of clarity, undecidedness and confusion or 'occupational uncertainty' (Sikora 2018) is evident in much of the student data, like what Gore et al. (2017) and Hargreaves and Osborne (2017) found. A broad consensus (Cedefop 2014; Clement 2014; UNESCO-UNEVOC 2018) is that, perhaps unsurprisingly, young people are primarily interested in stable, secure, and well-paid employment, and this is seen as being a more likely outcome from participation in higher, than vocational education. As Wolf (2011) reports from the UK, many young people avoided engaging in post-school options that were seen to be too occupationally specific and socially-undesirable, whilst being attracted to courses that were less occupationally specific, and more socially desirable. Australian vocational education students' post-school preferences are also associated with gender, age and educational achievement (Gore et al. 2017). Students' social and economic background are also mediating factors in their knowledge of, scope for and decision-making

about post-school pathways. What is required now is identifying more fully the factors shaping individuals' participation in VET and choice of occupations (Fowler 2017). So, there is a need to identify how vocational education can be viewed as being a worthwhile, viable and potentially attractive post-school option for young people. This requires understanding the decision-making processes young people participate in and the influences on that decision-making. Perhaps only through understanding these processes and factors will it be possible to identify strategies to enhance the standing of vocational education. These are the key focuses of the inquiry reported and discussed here.

Drawing on the findings of this investigation, which sought to understand the factors shaping young people's decision-making about post-school pathways, this paper, firstly, canvasses reasons for and consequences of the relatively low standing of vocational education. However, the key focus of the investigation and what is proposed here is to understand what might be done to redress this situation. That is, for young people and those influencing their decision-making to make informed and balanced decisions about post-school pathways, including consideration of vocational education and the occupations it serves as potentially worthwhile and viable options for them. The investigation was conducted in the Australian state of Queensland and comprised gathering data from high-school-aged-children, those who teach them and parents, as well as vocational education students and their teachers, through interviews and focus groups. This round of interviews was followed by a survey responded to by over 800 informants that was used to verify and extend the findings of the interviews and focus groups.

Investigating decision-making about post-school pathways

The project whose processes and findings are described and discussed here sought to understand the factors shaping young people's decision-making process associated with post-school pathways and what kinds of interventions might be helpful in presenting vocational education as a viable pathway. The project was funded by the Queensland Government and engaged 11 state high schools, three vocational education institutions and teachers and students from those institutions, as well as parents of school-aged children from some of these schools located in the metropolitan area of the capital city (Brisbane) and in regional Queensland in focus groups and interviews in its first phase. The student focus groups and teacher interviews occurred within the school and vocational education premises, whereas parents were interviewed by phone or face-to-face at an agreed site. The project was subject to strict ethical clearance requirements through university and educational department processes and informed consent. This requirement extends to children under the age of 18 requiring parental permission for any data gathered in focus group activities and also participation in anonymous online surveys along with parents and teachers from schools and vocational education institutions.

The research questions informing the project are as follows:

How can vocational education's standing be enhanced to secure greater participation and better educational outcomes for its graduates?

The informing sub-questions are:

What shapes Queensland community members' perceptions of vocational education and the occupations it serves?

What has to change to realise enhanced engagement by students and support from parents and employers?

The findings described and reported here are those derived only from the students' interviews and focus groups in Phase 1 and descriptive analyses of the survey in Phase 2, although the project comprised three phases of inquiry, the third being a set of workshops with teachers and administrators to identify how the practical strategies might be implemented. The overall orientation of the data-gathering and analysis was to identify sources and factors shaping school students' decision-making about post-school pathways, and vocational education per se. This required gaining insights from school students, school teachers, parents, vocational education students and their teachers about their perspectives and influences on that decision-making. That is, to capture the suggestion being projected by the social world and individuals' taking up of that suggestion. Data specifically associated with understanding the factors shaping decision-making and how they might be addressed are emphasised in the analysis reported here. An overview of the research procedures across the project is, however, provided here first.

Phase 1: Capturing the qualities, sources and consequences of societal sentiments

This phase comprised engaging with interviews and focus groups of parents and school-aged students in low-, mid- and high-SES metropolitan and regional communities to secure perspectives about VET and its associated occupations. Both parent and student focus groups occurred in: i) a high achieving state high school (i.e. Academic High), ii) a mid-range high school (i.e. Coast High), iii) a lower SES community (e.g. Southside High), and iv) a regional state school (i.e. Plains High). Focus groups with current students also occurred in three vocational education institutes (Apprentice Centre, Coaltown TAFE, Tech College). A total of 113 school-community members, 63 of whom were Year 10 or 11 school students, participated in these interviews and focus groups. As noted, ethical clearance was secured prior to data gathering at both university and education department levels.

In the students' focus groups and individual interviews, demographic data about participants were captured on worksheets (e.g. age, gender, educational achievement, statements about educational and occupational preferences and their sources and, where appropriate, work histories). Other statements gathered through prompts were entered onto a hard copy interview schedule to optimise informants' time, and for ease of entry into a data base. To secure grounded and informed qualitative data, responses to scenario-based procedures were gathered through interviews and group discussion. These qualitative responses were recorded, transcribed and entered in a data base. These data were then tabulated under categories associated with particular classes of informants: students, parents and teachers. Within that tabulation, thematic analyses were undertaken, and themes were identified, and data categorised and clustered within tables on those topics. The quantitative data were analysed descriptively (e.g. frequencies and cross tabulations) and aligned with qualitative responses to the open questions. These analyses aimed to identify patterns of factors shaping societal sentiments about vocational education and the occupations it serves and how these might be enhanced.

Parents were asked questions under three categories: i) You, your children and occupation; ii) Vocational education and you; and iii) Enhancing the status of vocational education and the occupation it serves. In the first section, data was gathered about the individual, their children and level of education and also what the parent was doing at the age of 25, the kind and level of education required to be employed in that form of work, and whether they would recommend that work to their children, finishing with a question about what for them comprise worthwhile occupations. In the second section, they were asked about their preferences for university versus vocational education, whether vocational education is seen as being worthwhile option for their children and friends of their children and were then asked to indicate the kinds of educational achievement required to enter specific occupations. The

third section focused on how the standing of vocational education and the occupations it serves could be enhanced. The parents were asked to indicate the influence of a range of suggestions on young people's thinking and acting (e.g. positive news stories, good role models in television, positive social media, career websites, showing jobs as being important, high-paying etc). Then, they were asked to rank a series of statements about what might change their views about vocational education. Then, they were asked about who or what influences their children's decisions about career choices (i.e. parents, school teachers, guidance officers, friends, others). Having provided these responses, they were asked to rate a series of suggestions about how vocational education might be made more attractive to young people. So, the overall concern was to understand these parents' personal perspective and how and what they report as influencing their children's decision-making and how a more positive view of vocational education and the occupation it serves might be engendered. Teachers were asked the same set of questions with a focus on their students. Scales and ranking of these strategies were used to gather quantitative responses about their perceived worth.

The analysis of these data focused on the perceived purposes and role of vocational education and contributions to young people's decision-making about occupations, including what constitutes worthwhile work and preferred post school pathways, as is reported below.

Phase 2: Verifying and elaborating findings through survey

The findings from Phase 1 interviews and a review of initiatives were used to develop, pilot and administer an online survey to verify and elaborate these findings across a broader population of parents, schools, and vocational education students, vocational educators and employers. The survey was made accessible, easy and quick to complete online. Most items were invited responses to Likert-like scales and responses, but some had drop-down options and open responses (i.e. free text) to address issues not best captured through scales. The items in the survey gathered demographic information in the first section about the age, gender, informant category (i.e. employer, school student, schoolteacher, VET student, VET teacher, parent, guidance officer), and whether the respondent had school-aged children. The next section invited responses to a set of items that were identified in the first phase about what might make more people considerate of vocational education, the most effective means of conveying messages for young people to make it more worthwhile, and those who needed to be more informed about vocational education to enhance its standing. Then, in the third section of the survey, responses were invited to propositions arising from the first phase findings along with ratings of factors judged to be influential in young people's decision-making. The administration and distribution of the survey was facilitated through school and institutional contacts and through social media. Incentives in the form of prizes were included in the information about the survey. School-aged students were required to secure parental permission before participating in the online survey and were also eligible for prizes. This proved to be a very difficult process as it required students to take home an informed consent sheet and return this before being able to complete the survey in a hard copy form which was then transferred to the survey instrument manually. Overall, responses were gathered from informant categories (i.e. parents, school-aged and vocational education students and teachers and employers) to provide responses representative of those categories. These outcomes verified and elaborated those from Phase 1 and permitted analyses across the entire data body from informant groups' perspectives. Over 1,000 responses were received and 871 useable surveys were analysed using largely descriptive processes.

Findings

In this section, relevant findings from Phases 1 and 2 are presented in overview and discussed.

Phase 1 Findings

The Phase 1 findings were those about: i) educational purposes, ii) identifying preferred occupations, and iii) deciding upon educational pathways that were largely drawn from some of the data representing students, teachers and parents' perspectives.

Purpose of participating in vocational education

Although many student informants were not necessarily considering vocational education as post-school options, those who were identified three distinct kinds of purposes for participating in it. These purposes were: i) to secure preferred career goals; ii) as a fall-back option if other plans/options fail, and iii) to achieve outcomes that will assist securing part-time paid work. These purposes are illustrated in Table 1 below that provides utterances from students, categorised under these three headings: securing preferred career goals, as a fall-back and to assist employment in part-time work. The left column indicates the school and gender of informants, and the right column their utterance.

Table 1: Purposes of Vocational education

Informant	Direct quote
To secure preferred career goals	
CH - M	Go straight to TAFE, that's the plan... Outta here. Cert 2 Electrotechnology, that's full time for 10 weeks. You've got 8 weeks of learning and then 2 weeks of work. I'm looking forward to it. Cert 2 will help me get it [electrical apprenticeship] I mean one of mum's good friends is high up in an electrical company so that's an option.
PSH - F	[Family encourage] Electrical or building or construction. I enjoy woodwork and electrical like if I was like to continue onto finish the trade I'm doing now and then go onto electrical I would be getting paid a bit better than a lot of jobs.
PSH - M	Well, if you did TAFE, that would help in the Army if you wanted to construct things ... but I've always wanted to be a sniper ever since I was a little boy coz I've grown up around guns and stuff ...
VET as a fall-back position	
PSH- M	Coz that's why I want a trade like welding or plumbing or construction or like that then if the army or something doesn't work out or you don't have a job at a certain time like they're always looking for tradespeople to do jobs
To get paid part-time work whilst uni	
AH - F	Maybe in year 12 I'm thinking about doing a cert For when I go to uni, so I can work while I'm at uni

Notes: AH – Academic High School; CH – Coast High School, PSH – Plains High School; F = female; M = male

These school-aged informants reported a range of potential purposes pertinent to their decision-making about post-school pathways, albeit differently across the student cohort. These purposes and their salience differed across the student cohort for both immediate (i.e. as a fallback, paid part-time work) and longer-term outcomes (i.e. preferred career). For those who had identified their preferred occupation and vocational education was the pathway to it, achieving the long-term outcome was an important purpose. Students' occupational certainty (i.e. certain of their preferred occupations) differed across the cohort, with schools they attended and year level (i.e. Year 11 more decided than Year 10) being bases of some of those differences. For instance, those from Academic High (i.e. most likely destined to go to university) were less likely to identify an occupational purpose, not least because many informants remained uncertain of their preferred occupation and were intending to engage in higher education regardless. It was noteworthy that the students who viewed vocational education as a

fallback were more likely to come from a regional than a metropolitan school. There was a pattern, albeit from a relatively small number of informants (n=63) that vocational education options were viewed in a more considered and positive way in the regional schools than those in the metropolitan schools. The common quality of these purposes were the specific and applicable outcomes of vocational education programs: providing pathways to preferred occupations, alternative pathways and the skills to find part-time employment. Here, decidedness – the intentional focus and engagement of students were quite strongly marked.

Identifying preferred occupations

The student informants also provided data about how they identified their preferred occupations, which extended to: i) the means by which they selected their preferred occupations, ii) what constitutes worthwhile work, and iii) the processes by which they decided to which occupation they are suited. As noted elsewhere (Gore et al 2017), there was often reported conflict between idealised or preferred occupations and students understanding of or concerns about pathways to those occupations. Table 2 provides illustrative quotations from some of these students about: i) their deliberations about preferred occupations and ii) the processes employed in making decisions about post-school pathways. The left column indicates the informants' school and gender and the right column their utterances about preferred occupations and processes of decision-making.

Table 2: Identifying for what occupations individuals are suited

Informant	Utterance
Idealised occupation, lack of awareness of the work or education pathway	
AH - F	I want to be a pilot so bad ... that is my dream job ... except, the thing is ... do you need to like take physics and stuff because I can't do physics for my life Honestly that is like my dream job ... I feel like ... Do you have to do an aviation course at university ... Do you even need a degree to be a pilot?
AH - F	Medicine is hard because there's a lot of factors that need to be taken into consideration and it depends on what you want to do as well, do you want to do pharmaceutical or surgery ... but like being a tradie is also hard [strenuous] ... but if you're like my dad who's a tradie and owns his own business, there's also lots of factors to be considered like architectural and organisational ... Every job is hard no matter what you do, it's like hard in its own way ... but some people prefer medicine because they're good at remembering stuff etc
AH - M	Some of the high paying jobs are with the "bad guys" like some of the veterinarian jobs are with the horse racing sector which I guess vets are against but they choose it anyway because it pays well
PSH – M	I want to go into nursing because I want to help people
Processes of identifying preferred occupation	
CH – M	Mum and my nans ... asking about how to get into what I want to do
CH – F	I've had meetings with different people but, I don't know
CH – M	The guidance officer down there ... but she can't really help me ... she does resumes and stuff
CH – M	We have to find stuff out ourselves
CH – M	They just give you a form to look through. Half taught life stuff.
CH – M	My dad doesn't look at all that stuff, he's just a brickie. I talk to him but he just, dunno, doesn't know. He's like for doing sports he reckons that's what I should be doing.... He says don't be a brickie. Be something like a plumber or electrician or something good ... because he works commercial block laying in the city and he doesn't enjoy it but he's like 46 so he can't get out of it now.
CH – M	I used to talk to my mum about it but she has a narrow point of view so instead I just find people who know ['friends' met in chat rooms online]

PSH - F	[Family encourage] Electrical or building or construction. I enjoy woodwork and electrical like if I was like to continue onto finish the trade I'm doing now and then go onto electrical I would be getting paid a bit better than a lot of jobs.
PSH - F	I want to follow my families footsteps. My dad and my brother are motor mechanic and I kind of enjoy that stuff so I can work on big machinery and stuff and get paid lots

Notes: AH – Academic High School; CH – Coast High School, PSH – Plains High School

As foreshadowed, the decision about postschool pathways is central to the project of vocational education (Billett 2011, Dewey 1917), albeit not always occurring within provisions offered through vocational education programs and institutions. For these young people, this decision-making largely occurs within the social environments in which they engage and through interactions with familiars. Here, the influence of these familiars is seen to be influential in negotiations about the options available, rather than just being directed by them. In terms of decision-making, it was explicitly stated by some students and implied by many more, that this decision-making comprised a personal negotiation that included reconciling a range of factors. These included their interest in the occupation, the degree by which the work they select is perceived to be stable and well-paid, and their ability to engage in educational pathways leading to it. Whilst straightforward in some instances, in others these negotiations were more contested. Noteworthy here is that some informants referred to these discussions within family being one of negotiating between the students' interest and the advice provided by parents. The following two quotes illustrate quite different ways in which parents might come to influence decision-making; through either opening up options or attempting to control decision-making.

My parents said do whatever you want to be happy. Don't succumb to what the community says to do. Because like in Indian communities there's always like ... I'll use Jeff as an example... Jeff's parents his mum wants him to be an engineer, but Jeff's passion is to be a pilot ... he's focused on the fact he wants to do something (Academic High - M)

Then I want to do law, but they want me to do medicine, but I just said to them like oh they both save lives you know a doctor literally saves lives and a lawyer can save an innocent person... (Academic High – F)

In these examples, and as discussed below, there is a rich interplay between personal preferences and those of parents. For those who are decided, the decision-making related very much to which of the pathways would lead them to their preferred outcome, whereas for those who are undecided, issues about the quality of work and instability and level of remuneration were factors in their deliberations. Making decisions in these circumstances is very much premised upon the information students can access and what they personally value.

As found elsewhere (Clement, 2014), many informants reported that familiars, principally parents, siblings and other relatives and teachers, contributed to those discussions and decision-making, and were influential as something variously to be advised by or resisted. So, familiars, but most centrally parents/caregivers and teachers, were found to be key sources of advice and suggestions in decision-making about post-school pathways. Yet, more broadly, familiars who engage directly with them (e.g. teachers and peers) are reported as key influences in decision-making, with less direct sources (e.g. electronic and broadcast media) also, but less, influential. Yet, also as elsewhere (Bisson & Stubley, 2017; Fuller et al., 2014), from the interviews with students, parents and teachers it was evident that these familiars differed in their: i) knowledge, ii) influence, and iii) engagement, and these factors are not always correlated. The point here is that these familiars, particularly parents and teachers, were

highly influential, they are more or less informed, more or less influential and more or less engaged in the process of providing advice and shaping their children's decisions about post-school pathways. There is also the evidence from parents' and teachers' transcripts that the advice being provided by these familiars is often based on and limited to their own experiences. That is, rather than being based on a broader and more informed consideration of the suitability of advice and its relevance to the young person, it reflects these adults' own experiences and preferences. So, there will be differences in the quality of advice and its quality coming from key informants that may not be impartial or particularly well informed. All of this suggests that involving parents and teachers in discussions about post-school pathways, including vocational education, would be helpful when they are informed, impartial, engaged and influential, in providing informed discussions amongst familiars in decision-making associated with these young people's career and post-school pathway choice.

Deciding upon educational pathways

A key distinction amongst the students who participated in the focus groups and completed an associated survey form, was the degree by which they were decided about their preferred occupations. For occupationally-certain VET students, their vocational teachers were reported as being more influential than for school students, and VET student families' knowledge was higher than for school students, but school teachers had low influence for school students. However, occupationally-undecided school students are often drawn to university, seemingly because of its social and institutional attractiveness and breadth of options and pathways (Sikora, 2018). The specific occupational focuses of vocational education and training programs are implied as being a barrier for the occupationally uncertain (Wolf, 2011).

What constitutes pathways to worthwhile work was a clear factor for many student informants, with some responses referring directly to the occupations to which they were attracted. Some students had clear preferences for post-school destinations, and these were often associated with identifiable occupations (e.g. trades, law, medicine). Others were concerned about the broad characteristics of what might constitute worthwhile work (e.g. stable, well paid) in deciding what occupations they would consider, thereby reflecting findings from other inquiries (Cedefop, 2014; UNESCO-UNEVOC, 2018). These are referred to as clean work and carries the nomenclature of being 'professional'. Such work has long been privileged as societally esteemed and attractive. Importantly, so-called liberal education was introduced as a means for the children of middle-class parents to find work within the public sectors, diplomacy and clergy. These kinds of occupations have expanded in contemporary societies (rise of professions) and are inevitably entered through a higher education pathway. So, what students report as being preferred kinds of occupations are both aligned to university education and are the opposite of what can be secured through vocational education. Hence, any initiatives associated with getting students to consider what constitutes worthwhile work and how these play out across different occupations will need to be mediated so that societal sentiments such as these can at least be tested when young people make career choices.

In terms of the kind of post-school pathways available to these young people, a key educational might be on identifying what kind of pathways would suit their purposes. Yet, the data here, and those reported by Gore et al. (2017), indicate that there was often lack of understanding about the range of available pathways. The problem is that, students able to secure university entry, this becomes the desired and default post-school option. For those students who cannot access higher education and who

are undecided, vocational education programs only offer options aligned with specific occupations. Also, some students reported that their parents were not particularly engaged in the process of advising about post-school destinations and only know about their own relatively narrow field of experience. The great risk here is that students from these family backgrounds may not be broadly and deeply informed about occupational choices and pathways, leaving them relatively disadvantaged in this decision-making.

It follows that, for at least some students, the arena of post-school pathways is unclear and confusing to these young people, and choices and decisions may well be constrained by this lack of clarity and sources of informed advice and expectations. Given that these students' key sources of advice are likely to differ by the degree by which they are informed, engaged and influential, issues arise about the role of schools or educational processes seeking to mediate these differences. It is noteworthy that both school and VET students, as well as parents and teachers suggested actions that schools needed to take, what VET institutions needed to do to attract young people and actions by government to support young people's engagement in VET. It is these suggestions that were used in the survey in the second phase of the project.

Parents and teachers' perspectives

Parent and teacher interviews provided a range of perspectives informing young people's decision-making about post-school destinations and pathways. These perspectives are extensive, but broadly reflected in the survey findings reported below. There were some noteworthy key qualities. As already noted, from their interview data, the degree by which the parents and teachers were: i) informed (i.e. knowledgeable about occupations in post-school pathways), ii) engaged (i.e. directly participating in young people's decision-making), and iii) perceived to be influential in that decision-making process differed quite widely (Bisson & Stubbley, 2017; Fuller et al., 2014). In overview, parents and teachers' own experiences and aspirations were central in shaping the kinds of advice that were giving to school-age children, albeit through their regular interactions as much as specific advice. Except for students whom they designated as being likely to participate in vocational education because of a lack of success in schooling, teachers seemingly emphasised progression onto university as the default post-school pathway. Of course, it is understandable and might be expected that teachers would encourage students to do as well as they can and try and achieve the highest-level post-school outcome that is possible for them. So, this preference may go beyond a reliance on their own experiences and be the exercise of teachers who want the best possible outcome for their students. Again, perhaps this finding is not surprising given what has been stated earlier about the relatively low standing of vocational education and the occupations it serves. Certainly, this could be the exercise of their professional obligations. That is, these teachers are working to position their students as having the best opportunities for engaging in what they believe to be well-regarded and well-remunerated work. Parents, when engaged and informed, often indicated the importance of realising their children's aspirations and, often, wanting these to be exercised within high-status work. However, this was far from a uniform expression. Some parents stated, presumably with sincerity, that the most important thing was for their children to be happy and enjoy working in the occupation they have selected. Others indicated that it was their own experiences which limited their understanding and extent of advice. Yet, some teacher informants were quite candid about their preference for their students to progress onto higher education and that vocational education was a less desirable outcome and only for specific kinds of students (i.e. 'non-academic'). This preference is also exercised institutionally in terms of

performance indicators that are used by school administrators (i.e. percentage of students gaining university entry) and what is championed and celebrated within schools. At Academic High, there was some openness to vocational education, but unquestionably this was a lower priority, whereas at Southside High and Coast High there was a sense of being aspirational and wanting to secure a high percentage of university entrants from its senior year cohorts. Moreover, some teachers commented that they were ill-equipped to advise about post-school pathways that differed from their own. So, there was an institutional preference and suggestion that privileged university pathways over that leading to vocational education in these schools and this was likely exercised, albeit unintentionally, through everyday conversations between teachers and students.

From the analysis of the first phase data from students, parents and teachers, it was possible to identify a range of considerations that shaped the deliberations in which young people engage, the influences on decision-making about post-school pathways, and the qualities of those who inform young people's choices about post-school pathways. It was these findings that were used to prepare the survey for Phase 2.

Phase 2 Findings

As foreshadowed, an online survey was developed using the findings from the Phase 1 interviews and focus groups. This survey was accessed by an electronic link and attracted over 1,000 respondents, with 847 usable responses. Respondents to the survey comprised 162 school-aged students, 143 school teachers, 230 parents, 14 VET students and 298 VET teachers. Given the differences in the numbers of respondents it is not possible to provide any correlational comparisons across the cohort. Hence, comparisons of rankings within each cohort are used here. Hence, comparative weightings within cohorts are represented through these rankings. The survey data were used to identify and rank: i) influential others in school students' decision-making about post-school pathways, ii) important factors in decision-making about those pathways and preferred occupations, iii) messages to promote the standing of vocational education, and iv) how the presentation of informed and positive messages about vocational education might be achieved. In the sections below, each of these sets of findings are presented and briefly discussed.

Influences on students' decision-making

To verify the findings from Phase 1 about who or what is influential in shaping students' decision-making about post-school pathways and comparing them those factors with the rankings of other categories of informants, their similarities and differences were compared. The Phase 1 data suggested that parents are highly influential and deduced that teachers may well underestimate their influence and the expectations of school counsellors' roles that may be unrealistic. In Table 3, the categories of informants' ranking of those factors that influence students' decision-making are compared. The classes of informants reported as providing advice and guidance are listed in the left column, and in columns to its right are the rankings of their influence by: i) school students, ii) school teachers, iii) parents and iv) vocational education teachers. Rankings were used because of the different frequencies of these classes of respondents. Given their small numbers, vocational education students are excluded here. The data are organised with the rankings of the school students' data being presented in the second column from the left and then to the right of them the rankings of other actors are used for comparative purposes.

Table 3. *Ranking of Close Influence in Students' Decisions to Engage in Post-school Pathways*

Actors	School students	School teachers	Parents	VET teachers
Parents	1	1	1	1
School teachers	2	5	5	2
Schools	3	3	3	5
School-based career counsellors/ guidance officers	4	2	2	4
Other students	5	4	4	3
The community (everybody)	6	6	6	6

Broadly, across these data, the pattern emerges that those who are most proximal (i.e. have close interaction) are reported by students as having the greatest influence (i.e. parents and teachers), and with the exception of 'Other students', those who are more distant are seen as being less influential. As can be seen in this table there is some agreement across the classes of informants about which factors are ranked as most and least influential.

What can be seen in Table 3 is a consensus that parents are ranked first amongst the sources of influence on students' decision-making about post-school pathways; and the general community is least influential. Interestingly, however, whereas these students rank teachers as the second most influential, teacher and parent informants rank teachers as having a lower level of influence. Vocational educators concur with the ranking of school students. This is interesting as the small sample of vocational education students ranked their teachers as being far more influential than those they encountered in schools.¹ What these findings suggest is that teachers may be much more influential on these students' decision-making than they realise, and also school counsellors/career guidance officers are far less so (Bisson & Stubley, 2017). It was consistently reported in the Phase 1 interviews that there are often only one or two guidance officers in these high schools and their responsibilities for and engagement with entire cohorts of students is necessarily limited. That is, they have far less contact with individual students than do classroom teachers and parents. This engagement is often restricted to students with specific needs. Also, it was stated that school counsellors have responsibilities for student welfare more generally and not career counselling. A frequently referred to concern that arose in the Phase 1 interviews is that the key goal of many of the schools and the default position of many teachers is that a good schooling outcome comprises a pathway to university (Clarke, 2015). Indeed, this suggestion was reported in both positive and the negative, that is, the desirability of progressing to higher education and vocational education as a default for those who would be unable to secure entry into higher education. These sentiments are reported as being exercised explicitly through what is valued and celebrated within schools, and implicitly in the everyday conversations that teachers have with students.

So, central here is that parents and teachers are key sources of advice and influence and that teachers' and parents' influence may well be stronger than they realise. So, whereas expectations about intentional efforts to support students' decision-making by guidance officers are misleading, it is the unintentional influence arising through teachers' activities that seems to be quite potent. Here, the much mis-used term 'hidden curriculum' is at play, that is, the impact of unintentional learning arising from the exercise of teachers' views and preferences. In their everyday encounters with students, the expression of personal preference of parents and teachers were seemingly predominant, rather than conscious efforts to be impartial about the diversity of post-school pathways.

¹ Because of their small numbers, these responses are excluded from these tables.

Important factors in decision-making

The survey data included rankings of what students, teachers, parents and vocational educators proposed as being the most desired outcomes from post-school pathways from what they believed to be the perspective of school-aged students. That is, whilst students reported their own priorities, the teachers and parents were asked to rank what they believed were the priorities of school-aged children. These data are presented in Table 4. In the left-hand column is a list of outcomes (averaged rankings) that students want from post-school pathways, and in columns to the right are what school students reported and then the perspectives of teachers, parents and vocational educators. Again, the presentation of the ranking is based upon students' preferences, as indicated in the second column from the left. As above, in this table these students' ranking are used as bases for comparing the responses of other informant cohorts.

Table 4. *Ranking of Desired Outcomes for Young People when Considering Post-school Pathways*

Desired outcomes	School students	School teachers	Parents	VET teachers
Future job satisfaction	1	2	2	2
Future job security and stability	2	4	4	4
Personal interests and passions	3	1	1	1
High-paying work in the future	4	6	6	6
Future prospects	5	3	3	3
Status of the future occupation	6	7	7	7
Status of the qualification	7	8	8	8
Other lifestyle benefits (e.g. travel)	8	5	5	5

As can be seen from Table 4, school students ranked desired post-school employment as: i) future job satisfaction, ii) future job security and stability, iii) personal interests and passions, iv) high-paying work in the future, v) future prospects, vi) status of the future occupation, vii) status of the qualification, and viii) other lifestyle benefits. Given the discussion on young people's growing aspirations and concerns about the 'Status of educational outcomes', it is noteworthy that these student informants rank them sixth and seventh, respectively. Some of the key differences between students and adults (i.e. school teachers, vocational educators and parents) is that whereas the former indicates 'Personal interests' as being a third ranked priority, the latter viewed it as the first. Also, concerns about Job security and stability, that students ranked second, was commonly ranked fourth by the adult informants. This may well be a product of the uncertainty in the contemporary labour market that young Australians face, which might be quite different from those of their parents. Noteworthy, and consistent with these differences, is that whereas students rank 'Other lifestyle benefits' eighth, adults ranked them fifth. This ranking may well express concerns about being realistic by young people who are facing an uncertain labour market than those who are secure within it (parents and teachers).

Importantly, what these data suggest is that there are differences in perspectives between these school-aged students and their adult counterparts. Given the reported influence of both general and vocational teachers and parents, this difference is noteworthy, as it may well be exercised in ways that override or overly influence the young people's decision-making about post-school pathways, which was reported by some students in Phase 1. On the one hand, it seems that perceptions of what directs young people's decision-making may not be fully understood by these adults who are those that advise them. On the other hand, the decision-making processes are also shaped by implicit or explicit influences of power and authority. These differences may be areas of negotiation and resolution by

young people when deciding their post-school pathways, albeit often mediated in circumstances influenced by teachers and parents (e.g. subject selection, post-school planning activities).

Messages promoting the standing of vocational education

In Phase 1, a list of means for presenting positive messages about vocational education and training was identified from the interviews and focus groups. In Phase 2, the survey respondents were asked to rank the elements of this list in terms of the likely effectiveness of those measures to achieve that outcome. The findings are presented in Table 5 which, again, ranks these data across school student, school teacher, parents and VET teacher informants. In this table, the means are listed in the left-hand column and are ranked on students' preferences in the second column from the left, as before. To present positive messages about VET, students ranked the following strategies: i) schools providing personalised career information about VET jobs, ii) exposure to a range of work situations whilst at school, iii) exposure to different institutes and education facilities (e.g. visits to TAFE institutes), iv) accessible online materials, v) promoting role models with successful careers after completing VET qualifications, vi) wide advertising (e.g. TV, radio, social media), and vii) simple, easy to understand printed materials (e.g. brochures, guide books).

Table 5. *Ranking Ways to Present Positive Messages to Young People about Studying in VET*

Means of presenting message	School students	School teachers	Parents	VET teachers
Schools providing more personalised career information about VET jobs	1	3	2	3
Exposure to a range of work situations while still at school, to help with career decisions	2	1	1	1
Exposure to different institutes and education facilities (e.g. visits to TAFE institutes)	3	4	5	4
Online materials that are easy to access	4	5	4	5
Promoting role models who have successful careers after completing VET qualifications	5	2	3	2
Wide advertising (e.g. TV, radio, social media)	6	6	6	6
Simple, easy to understand printed materials (e.g. brochures, guide books)	7	7	7	7

There is some consensus in the rankings of the means by which messages about enhancing the worth of vocational education should be projected across the different categories of informants. There is general agreement at both the top and the bottom of the rankings. What appeared to be common about these responses is that those that can be experienced directly and mediated were deemed to be more effective, than when those processes were not mediated by close informants. For instance, the highly ranked request by students for 'Personalised assistance' appears to arise from a concern expressed in the Phase 1 student focus groups that they are being provided with an overwhelming set of materials about post-school pathways and occupations from searching on the web or information about different kinds of work. Yet, their teachers are less convinced about this method and, from the interviews in

Phase 3, this is seen as being beyond the resources available in schools; it was claimed that it cannot be conducted by the sole career counsellor within the school or individually by classroom teachers.

Noteworthy also is that the three most highly ranked means by school students are all within the ambit of school activities. That is, schools are well placed to address these first three preferred kinds of interventions: i.e. i) provision of personalised career advice; ii) exposure to a range of work and workplaces and iii) exposure to a range of post-school educational options. Hence, as many of the students stated in the interviews, they wanted direct experience, but needed some assistance in mediating those experiences as well as this advice and information when making decisions about post-school pathways. This is perhaps hardly surprising given that there are many gaps in the information provided and, the difficulty in choosing amongst what is being proposed in an informed way when the students' own information basis is low. Hence, the preferred means of projecting information about vocational education is elaborated here, leading to a consideration of what other kinds of messages and influences need to be exercised.

Presenting informed and positive messages about vocational education

Informants were also asked about what kinds of messages needed to be sent to encourage school students to consider vocational education as a worthwhile and viable post-school pathway. The aim is to identify how best students can be engaged in a more informed consideration of post-school pathways that include the worth and viability of vocational education. The ranked responses offered in the Phase 2 survey that arose from suggestions made during Phase 1 are presented in Table 6. As with the other tables, these kinds of message are listed in the left-hand column, and the second column from the left presents the school students' rankings, which are then used as a basis for comparing those of school teachers, parents and vocational educators.

Table 6. *Effectiveness of Messages to Encourage Young People to Engage in Vocational Education*

Strength of message to promote standing	School students	School teachers	Parents	VET teachers
Leads to stable jobs	1	7	6	7
Students can study a wide range of courses	2	3	4	2
Leads to well-paid jobs	3	6	7	6
Leads to good job prospects	4	1	2	1
Is delivered in a friendly learning environment	5	9	5	9
Leads to interesting and worthwhile jobs	6	5	3	5
Courses suit all genders	7	10	8	10
Classes are practical	8	8	5	8
It is a high-quality, well-respected post-school option	9	2	1	3
It can be a stepping-stone to university	10	4	10	4
Courses are easy to get into	11	12	13	12
Is a good first choice	12	11	8	11
Is a good option for smart students	13	13	9	13

It can be seen in Table 6, there is significant disparity between the ranking of these messages by students (i.e. Leading to stable jobs) and what adult informants suggest (i.e. Leading to good job prospects, high-quality and respected post-school options). Whereas the students privilege post-school pathways leading to 'stable work', the teachers privilege prospects for the future, and parents are concerned about the status of the occupational destination. Yet, this preference is ranked ninth by these

students. However, what is suggested here is that there are likely to be different kinds of messages favoured by categories of individuals who influence students' decision-making about post-school pathways. There are some potential practical implications arising from the differences in these rankings. Not the least here is that the differences between students' preferences and those who provide close guidance and influence, and how this might lead to distorting the decision-making process and, potentially, restricting the perspectives and decision-making of school students. For instance, when there are processes organised by educational institutions such as the Secondary Education and Training (SET) adopted in Queensland schools involves teachers and parents engaging the students, there is a real risk that consonance between parents and teachers' perspectives might distort the process and result in students engaging in non-preferred pathways (Hay & Sim 2012) that Dewey (1916) refers to them as being placed in uncongenial callings (i.e. non-preferred occupations). Given current high attrition rates (i.e. over 50%) of young Australians in entry-level training (e.g. apprenticeships), there are significant concerns about the social and economic costs of such uncongeniality. So, processes implemented to assist students' decision-making might strive for greater impartiality and focus on the students' preferences and capacities.

Implications for enhancing the status of vocational education and the occupations it serves

As noted, the overall purpose of this investigation is to identify means by which the standing and status of vocational education, as a worthwhile and legitimate post-school pathway, might be enhanced. From the findings set out above, it is possible to identify four kinds of interventions that can be derived from the findings across these two phases of the investigation. These are: i) a process of public education; ii) informing, advising and supporting post-school pathways; iii) vocational education programs and environment; and iv) promoting the occupations served by vocational education. In overview, each of these implications are now briefly described and justified. Each of these suggestions has requirements and resource implications associated with their implementation. These are not addressed here, except to say that in different ways they reflect initiatives already being conducted across nation states. In Australia, there are already efforts associated with social marketing occurring, that in a different way were held to be effective in Switzerland, advising about career options are also intensifying, and, in Denmark efforts to make VET institutions more attractive have been enacted.

A public education/social marketing process

Given the range and multiplicity of sources of advice and influence on young people's decision-making about post-school pathways, the process of informing that decision-making cannot be restricted to what occurs within schools or can be undertaken by vocational education institutions. Instead, a public education or social marketing process seems necessary to promote vocational education as a viable and attractive alternative (e.g. give VET a 'fair go'). Here, government leadership and action are implied to effectively promote VET through social marketing to shape and influence societal sentiments positively about it. This is an important role that governments can play. If vocational education institutions are charged with this responsibility, it might be perceived as self-interested marketing of their courses and provisions. The data from other projects (e.g. UNESCO-UNEVOC, 2018) and this one suggests that public education might extend to the use of celebrities or other publicly acknowledged individuals to endorse VET, the provision of online materials that are easy to access and understand; social advertising (e.g. TV, radio, social media); and simple, easy to understand printed materials (e.g. brochures, guide books), such as those being provided by the Victorian government's 'Get VET' program which captures these

qualities. Such a public education process will need to be enduring and engaging to bring about the desired change in societal views about vocational education and the occupations it serves.

Informing, advising and supporting diverse post-school pathways

For school-aged children, the findings imply that schooling systems and schools may need performance indicators, curriculum practices and enact guidance through processes that deliberately promote vocational education as a viable post-school option. These might act to counter social biases in schools, including those of teachers, that may, unintentionally, work against the provision of impartial advice and guidance to students. So, informing students and their parents impartially about post-school options might be a key educational goal seems to be the core concern. Schooling systems might review their institutional goals, performance indicators, and curriculum processes to more adequately support students' decision-making amongst the range of post-school pathways through giving equal and impartial emphasis to VET options.

The importance of the exercise of impartiality by teachers in their day-to-day interactions with students and comprehensive advice about the range of post-school pathways and supporting students' progression to selected pathways is implied by the findings. It would be helpful for schools to target and assist students who require specific guidance or support, particularly when their parents are ill equipped (i.e. ill informed, unengaged or not influential) to guide post-school options. As presented in Table 5, school student informants' three top-ranked actions to present VET more positively can be undertaken by schools: i) providing more personalised career information about VET jobs; ii) providing exposure to a range of work situations while still at school, to help with career decisions; and iii) providing exposure to different institutes and education facilities (e.g. visits to TAFE institutes), and also providing access to young people who have successful careers after completing VET qualifications (see Table 5).

Finally, there is nothing wrong with school-aged students remaining undecided or uncertain about their preferred occupations (Sikora, 2018). Indeed, the high attrition rate in programs such as apprenticeships in Australia (National Centre for Vocational Education Research, 2019a) and also higher education programs indicates that early decisions and choices made may not be fully informed or ultimately helpful for young people. However, the default for this indecision should not necessarily be a choice between either attending higher education or having no other pathway until they decide. Consequently, school students may need to actively consider how opportunities provided to support their choice of preferred occupations can be best informed and carefully decided upon. That is, ultimately, they have to decide and that decision needs to be carefully considered and as well informed as possible, and potentially against the advice of familiars such as parents and teachers. Potentially, there are specific lessons for different kinds of schools. Schools like Academic High might consider vocational education as diversifying its post-school outcomes. Then, schools like Southside and Coast High seeking to be aspirational might view vocational education pathways through which students might realize their aspirations. For schools in regional areas, such as Plains High might emphasise local employment options realized through vocational education.

Vocational education institutions and provisions

There are three practical implications for vocational education institutions. Firstly, many young people remain undecided about their preferred occupations (Sikora, 2018), and vocational education programs are usually occupation-specific (Wolf, 2011). This suggests some reconsideration of its programs, as undecided young people with university entrance may well opt for the more open-ended course options

and the more attractive physical and social environments of universities. However, for those young people who are undecided and not eligible for entry into university, they are limited in post-school choices. Whilst vocational education institutions should continue to offer programs with highly employable outcomes, more broadly positioned programs within industry sectors might provide experiences (e.g. Diplomas of Engineering, Information Science, Healthcare, Arts) for students who are undecided about their preferred occupation with an educational pathway. Equally, programs that provide options to experience a range of occupations (e.g. prevocational programs) may also have a role to play in this kind of provision. Secondly, these provisions might be further enhanced by collaborations with industry and enterprises to provide work experiences and practicums as these afford opportunities for students to directly experience occupations and develop applicable knowledge in ways that they might not get within schooling environments. Thirdly, VET institutions might consider how to make their educational and social environments more attractive to young people to encourage their engagement in the institutions' activities. Together, these suggest that key goals for vocational education institutions and programs are to make them more interesting and attractive to young people, and particularly to those who remain undecided about their specific occupations.

Promoting the occupations vocational education serves

The finding from the interviews in Phase 1 and the Phase 2 survey data confirm findings from elsewhere (UNESCO-UNEVOC, 2018) that without enhancing the status of the occupations vocational education serves, participation in VET runs the risk of continuing to be viewed as a second, poor or last resort choice for school students. Consequently, as in other countries, concerted effort and leadership by government and industry sectors is needed to inform about these occupations and present them fairly and realistically to young people and their parents (Deissinger & Ott, 2016). It is implied that industry and professional bodies may be better able and more effective to take leadership in and promote the occupations that vocational education serves. Again, if vocational education institutions were to undertake this form of promotion, it may be taken as marketing to secure students for these institutions. Industry and professional bodies are well-placed to coordinate this kind of initiative. In doing so, these partners may well consider specific requests from school-aged children, such as for: i) online materials that are easy to access; ii) wide advertising (e.g. TV, radio, social media); and iii) simple, easy to understand printed materials (e.g. brochures, guide books) (Joyce 2019).

Conclusions

In overview, like other research (Cedefop, 2014; Clement, 2014; UNESCO-UNEVOC, 2018), this investigation found that there is a complex of factors that shape young people's decision-making about post-school pathways. Central here are the interactions with familiars and, most influentially, their parents and teachers. However, the degree by which these interactions were informed, engaged and influential differed across the school-aged students, including the quality of those interactions and deliberations about whether post-school pathways need to be more broadly and widely informed. Moreover, it was identified that those young people who remain undecided about their intended choice of occupation often viewed participating in higher education as offering a greater range of pathways and as being more socially attractive. The occupation-specific focus of VET courses was seen to be unattractive to those who remain undecided about their preferred occupation (Sikora, 2018). As a consequence of interviews and survey work, above, a set of interventions have been identified and proposed that are associated with: i) social marketing (i.e. public education about vocational education),

ii) actions in schools to provide opportunities for vocational education to be discussed more broadly and impartially to be seen as viable post-school options, iii) actions to be taken by vocational education to enhance its relevance to young people, and iv) the need for industry stakeholders to champion the quality of occupations. The findings here are well aligned with those emanating from engagements with a range of informants from across more than 80 countries in a virtual conference and follow-up survey (UNESCO-UNEVOC, 2018). Of course, changing societal views about vocational education will not be achieved in the short term. It needs measures like these to be enacted in the longer-term, evaluated, and refined to achieve their purposes. Whilst all of this might seem to comprise costly interventions, these are commensurate with the problem of not having sufficient numbers of young Australians participating in vocational education to develop the occupational competence required to meet communities' social and economic needs (National Centre for Vocational Education Research, 2019a, 2019b). Also, given the high attrition rates within Australian vocational education currently, there is a strong argument for seeking to improve its standing and processes of advice, and for young people and their parents to be informed about the potential positive outcomes of participating in vocational education. So, to address these issues and to secure better participation and the best results out of vocational education, there is a need for a response that is as multifaceted as the factors that shape young people's decision-making about post-school pathways. In an era of high aspiration, however, vocational education and the occupations it serves exist to meet the needs of individuals, workplaces and the Australian community through providing the kinds of skills they require. However, as its current relatively low standing makes it in danger of falling well short of realising its potential to make contributions to the well-being and progress of individuals and their communities.

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