School choice in an information desert: A multimodal website analysis of vocational education offerings

Alison L. Hilton, Sian Chapman and Laura B. Perry

Murdoch University, Australia

Australian schooling is characterised by high levels of choice and competition, and education policymaking promotes the dissemination of information to assist families to choose a school. The aim of this study is to examine whether current information sharing is adequate for informing school choice for young people seeking vocational education and training (VET) opportunities. We examined secondary school websites in Western Australia, a state that is experiencing severe skills shortages, to ascertain the nature and extent to which information about VET in secondary schools is publicly available. Our findings showed that information about VET programs is largely invisible on school websites, as well as on the state jurisdiction's website (Department of Education WA, n.d.).

Introduction

School choice is enshrined in Australian policy and legislation. As engaging in school choice requires information about schools, state and territory education authorities provide information about schools and curricular offerings on their websites, as do individual schools. Information about curriculum offerings is especially important for secondary schooling, where students' interests start to diverge into different curriculum areas. Moreover, while Australian secondary schooling is comprehensive, upper secondary (the final two years of schooling) curriculum offerings differ substantially between schools (Dean et al., 2023). Choice of secondary school in Year 7, the first year of secondary schooling, can shape students' curricular opportunities in the final two years of secondary schooling as schools are forced to make choices about what curricular programs they offer, based on student numbers and school resources (Perry & Lubienski, 2020). Some schools offer many academic subjects while other schools offer only a few; conversely, some schools offer a rich range of vocational subjects while other schools' offerings are limited (Dean et al., 2023; Perry & Southwell, 2014). Few schools can offer both strong academic and vocational education and training (VET) programs (Gonski 2018; Joyce 2019), that allow a range of options for students in the post-compulsory school world.

While VET programs are often seen as the inferior, second-status cousin to an academic education (Fogelgarn et al., 2024; Wheelahan, 2015), VET in secondary schooling can provide a solid foundation for direct employment or further education and training via apprenticeships, or tertiary study at a technical college or university. Job opportunities in trade vocations are plentiful and often well paid, and opportunities are only going to increase with the Australian Government's national manufacturing priorities on high value-added industries in space, defence, renewable energy, mineral technology and processing, medical supplies and food and beverage (Department of Industry, Science, Energy and Resources, 2020). Governments will need to leverage off the secondary education system where students are first exposed to VET qualifications and pathways in

order to meet the growth and demand requirements of the country. Given this confluence of factors, it is likely that some families and young people need information about VET opportunities to inform their choice of a secondary school.

The aim of our study was to examine the degree to which information about schools' VET offerings are visible and accessible. We did this by examining the websites of all government secondary schools (referred to as 'public schools') in one state, as well as the website of that state's education authority. We chose Western Australia as the site of our study for two reasons. First, the authors have extensive experience and knowledge of this jurisdiction and many of its schools, giving us insider knowledge that can enhance our understanding and interpretation of the findings. Second, like all jurisdictions in Australia, this state is experiencing significant labour shortages in many VET-aligned industries (National Skills Commission, 2022). The state also has great potential to contribute to many of the nation's manufacturing priorities, especially in mineral processing, renewal energy and defence, but labour shortages have been identified as a major challenge (Department of Industry, Science, Energy and Resources, 2020). We are interested in how schools promote their VET offerings to the public and how they position VET education on their school websites. This visibility is deemed vital for families to make informed decisions about secondary pathway opportunities.

However, there is a caveat in the positioning of this work. The study did not compare the visibility of VET and academic offerings in schools. All secondary schools offer a range of academic subjects. For families that are considering a VET pathway as an alternative to an academic one, there will be relevant academic subjects in core learning areas to choose from regardless of the school chosen. What is less easy to ascertain is what subjects are offered as part of the VET suite at a particular school, if at all. This is where the school website and the visibility of the offerings are crucial in making informed schooling decisions.

Background

In this section we provide an overview of secondary schooling in Australia. We then briefly provide a background to VET delivery in Australia, however a more detailed focus on Western Australia's VET delivery in secondary schools is offered. This is because VET is delivered differently in secondary schools in Western Australia than other states. Finally, we provide a brief overview of marketisation as the theoretical framing underpinning our analysis.

Context of secondary schooling in Australia

Australian secondary schooling is comprehensive, meaning that all schools provide both academic and vocational pathways. This contrasts with many European secondary education systems, which differentiate academic and vocational education pathways into separate institutions. Both academic and VET pathways can lead to a secondary school leaving certificate and in most states of Australia VET attainment contributes towards an Australian Tertiary Admissions Rank (ATAR), which universities use for admitting students. In Western Australia, VET qualifications completed in secondary school do not contribute to an ATAR score, but rather can contribute only to the Western Australian Certificate of Education (WACE) school leaving certificate. Many universities provide admission pathways for students who have VET qualifications.

In most communities and locations throughout Australia, young people and their families have a range of schools (either public or private) from which to choose. All young people are guaranteed a place at their local public school, but they may also apply for admission to a non-local public school (for example a school located in another suburb or boundary) or to a private school. Significantly, as students and their families are free to engage in school choice, schools engage in competition for students. Public schools can enrol students from outside their catchment zone if they have space, and many public schools create specialised programs to attract students to their school. However, public schools in lower socioeconomic areas in metropolitan areas tend to have smaller enrolments, a reflection of their residualised status as a school of last resort. For example, in Perth, the capital city of Western Australia, the average enrolment size of a secondary school in the lowest socio-educational advantage quartile is 700 students, compared to 1200 in the highest quartile of socio-educational advantage (Perry & Southwell, 2014). By contrast, public schools in affluent communities are typically over-subscribed, with admission limited to students who reside within the catchment zone or who are admitted to a selective specialist program.

Selective specialist programs have blossomed in Western Australian public schools (and in other education jurisdictions). These selective programs offer a way for public schools to compete for students from the private school sector (Campbell, 2009; Windle, 2015). The Western Australian Department of Education (WA DoE) regulates the offerings of officially endorsed *Approved Specialist Programs*, although all schools are free to also create in-school specialist program as well. The process for gaining admission to a WA DoE Approved Specialist Program is centrally administered and is highly competitive, with the supply of places substantially less than the number of applications. WA DoE endorses more than 100 Approved Specialist Programs at 56 schools in academic and applied disciplines, sports, and visual and performing arts (Department of Education WA, n.d.).

School choice and competition is undergirded by Australian Government and state jurisdictional school funding policies, which direct public funding to both private and public schools for the goal of promoting a wide range of schools from which families can choose. The other side of the coin is that school funding policy is largely based on perpupil enrolments, meaning that schools are incentivised to compete for students. Larger schools enjoy economies of scale that allow them to offer a wider range of curricular offerings than smaller schools (Perry & Lubienski, 2020).

VET in Australia

VET is largely funded through the Australian and state/territory governments. Much of this funding is directed to supporting apprenticeship programs and administrating national training systems.

All providers of VET training programs are nationally accredited to deliver approved qualifications, skills sets or units of competence via either the national regulator, the Australian Skills Quality Authority (ASQA; https://www.asqa.gov.au/) or via one of two state regulatory bodies (Western Australia and Victoria). Registered Training Organisations (RTOs) are governed under the *National Vocational Education and Training Regulator Act*, 2011 (https://www.legislation.gov.au/C2011A00012/2017-07-01/text). RTOs must meet rigorous standards for accreditation and are subjected to ongoing monitoring and evaluation of their practices. Non-compliance with national standards and requirements can result in infringement notices being issued with financial penalties or cancellation of registration.

There are a range of different ways in which VET programs can be delivered including via formal apprenticeships and traineeships, government or private training courses, or through a secondary school delivered program. Historically, VET in schools as a post compulsory education program appeared in the early 1990s as part of secondary education curriculum reform. The introduction of VET offered secondary school students additional education and training opportunities and encouraged retention of students in the post compulsory cohort (Years 10-12) (Polesel, et al., 2004; Van Dyke & Jackson, 2019).

As in many other countries, secondary school VET is generally considered lower status than academic pathways (Fogelgarn et al., 2024; Wheelahan, 2015). VET pathways are perceived as less prestigious by students and are considered as more of a fun or easy subject selection rather than a legitimate and relevant curriculum choice (Dalley-Trim et al., 2008). Teachers often identify VET pathways as appropriate for students with lower academic performance and/or inclination (Gore et al., 2017). Schools often perceive VET as the only option for students at-risk of disengaging from schooling or for students from low socio-economic backgrounds (Polesel, 2008; Van Dyken & Jackson, 2019; Xing & Gordon, 2021). Concerningly, recent research has identified that as the global teacher shortage continues, the pipeline of suitably dual-qualified VET teachers remains perilously low (Fogelgarn et al., 2024). VET delivered in Australian secondary schools has had several name changes, and for this paper, we refer to VET being offered to secondary school students enrolled in secondary schools in Western Australia as *VET Delivered to Secondary Students* (VETDSS).

Marketisation

Our study is informed in part by marketisation theory because of the expectation for schools to compete for the 'best' students. Marketisation is the application of market principles to a public sector provision; educational marketisation is the application of market principles to schooling. The main marketisation principles in education are choice, competition, and accountability (Whitty & Power, 2002). Marketisation proponents such as Chubb and Moe (1990) view competition between schools as healthy as it encourages schools to focus on quality and innovation as mechanisms for attracting students. Accountability is the process by which government authorities hold marketised entities responsible and accountable for the services they provide. In Australia, school

accountability is realised through a number of measures including the National Assessment Program - Literacy and Numeracy (NAPLAN) and other school-based reporting mechanisms of student learning and achievement. The Australian Government's MySchool website (https://www.myschool.edu.au/) serves as a public accounting of nationally consistent school performance data and as a source of information about schools, for the explicit aim of helping families "make informed decisions about their child's education" (ACARA, 2023). However, specific information about curriculum offerings requires the perusal of individual school websites, and it is this platform that is the subject of our study.

Multimodal communication

Our methodological approach is based on the theoretical insights of multimodal communication, which is described as an "ever evolving process of encoding [and decoding] cultural and social contexts through a complex interplay of meaning making practices" (Maiorani & Christie, 2014, p. 2). Therefore, understanding multimodal communication involves interpreting the visual, textual, and auditory messages shared with an audience, such as those presented through a website. The placement of text, the choice of image, the use of video and sound all present a broad outward impression of a way to be seen and interpreted.

Importantly then, broadening the socially constructed view of communication to include the full range of semiotic resources is vital to comprehending both intended and unintended meaning and value assigned to a communication method (Fernández Benavides, 2019). Therefore, analysing digital multimodal structures such as websites requires a framework of analysis that draws on both the linguistic and signification systems presented (Hull & Nelson, 2005). Images and words impart meaning and where the images and words are placed within a website is also relevant. School websites are not impervious to this interpretation, especially when viewed from a marketisation and selection perspective of prospective parents as outlined already.

Website-based multimodal analyses have been used in a variety of ways. From exploring how identity is constructed on government homepages (Liu et al., 2022), to understanding how environmental public reputation is built into global company websites (Fernández-Vázquez, 2021), to uncovering how rhetorical elements of a non-governmental organisation's website is used to elicit public support (Ochowicz, 2018), multimodal analyses provide a variety of ways to interpret semiotic meaning.

Method

This study used a multimodal analysis based on the work of Pauwels (2012) to examine the availability and accessibility of VET information on Western Australian government secondary school websites and on the WA DoE website. This multimodal analysis framework focused on the available textual, visual, and auditory components of school websites and how their interaction communicated an intent to the audience (Pauwels, 2012). While Pauwels linked his multimodal framework to decoding cultural positioning on the Internet, the development of this tool also has capacity as an analytical device to explore website interfaces more broadly. For example, the number of images and who or what is in the images on the opening page of a school website gives an insight into the values of a school. Likewise, the textual components, in terms of how easy information is to find and what is given central placement on the website, also provide insight into what a school administration wants the community to 'see' first.

There were several stages to the selection of the school websites used in the analysis. The initial screening process involved reviewing the websites of all 164 secondary schools in Western Australia. Of these, a total of 56 (34%) school websites were excluded from the analysis because they were either a recently opened school or were a District High School (primary to Year 10) and were therefore not teaching upper secondary courses to be able to offer VET programs as described in this study. Subsequently, a further 26 schools (16%) did not indicate any VET offerings on their websites, so were also removed from the review as it could not be determined using publicly available information if these schools had VET offerings for students. This left a total of 82 (50%) secondary school websites that initially provided some indication that VET programs were offered to students. A desktop audit of the 82 websites was then conducted and basic descriptive statistics were collected relating to the VET programs and offerings available at the schools according to their websites.

Next, the deeper analysis of the content and information contained in the 82 websites identified as offering VET was conducted using the multimodal framework. Each school website was identified by a unique code, and data was collated using the *Microsoft Forms* platform with a range of questions asked of each website. Figure 1 provides a visual of the form used. This provided a consistent method of data capture across the research team with a separate form completed for each school site.

* <i>Required fields</i> 1. School ID Code*
2. Look and feel of the website at a glance (describe) *
 3. At first look, can you determine if VET is offered at this school* Yes No
4. If yes, what is it that prompts you to think this school offers VET (i.e images on front page? Headings refer to Trade Training Centre? etc)
5. Are the VET qualifications in the school listed on the website?*
• Yes • No

VETDSS School Website Audit

Figure 1: Sample page from Microsoft Forms website audit collection tool

Yes but embedded in a doc on the website

The Microsoft Forms questionnaire was based upon the six phases of the *Multimodal* Framework for Analysing Websites (Pauwels, 2012), where the six phases are:

- 1. Preservation of first impressions and reactions;
- 2. Inventory of salient features and topics;
- 3. In-depth analysis of content and formal choices;
- 4. Embedded points of view or voice and implied audiences and purpose;
- 5. Analysis of information organisation and spatial priming strategies;
- 6. Contextual analysis, provenance, and inference.

The responses were then exported into a *Microsoft Excel* worksheet for further analysis. Pauwels framework was designed to be flexible, with adaptations for changing contexts possible. Therefore, in customising the framework, we focused our questions and initial analysis on phases one through to five, with our subsequent discussion focusing on the contextual analysis identified in the sixth phase.

Results

Our study comprised two components: an analysis of the Department of Education's website, and then an analysis of individual school websites. Findings from both components show that information about VET programs in secondary schools is largely absent. The WA DoE website provides no capacity to search for schools that offer a particular VET program (e.g., auto mechanics, hospitality). To find this information, interested parties must investigate individual schools. This is clearly not a feasible approach in a state with over one hundred secondary schools.

Department of Education website analysis

Our findings suggest that VET is largely invisible and that information that would guide school choice decisions based on VET programs in secondary schools is non-existent or very difficult to find. We base this conclusion by analysing various pages of the Department's website, specifically the "choose a school" and "learning programs" webpages. The WA DoE's webpages "Choose a school / Primary and secondary schools" (https://www.education.wa.edu.au/primary-and-secondary-schools) provides only general information about typical learning opportunities available in all primary schools or secondary schools. To find specific information about a school, readers are advised to select the "schools online" link. This page is a directory of all public schools in the state. Schools can be searched in this directory by either typing in the name of the school, or by entering a residential area, which then brings up all nearby schools. In metropolitan Perth, where 80% of the state population resides, the radius of school boundaries is approximately five kilometres. However, these search options do not provide an overview of all schools available to families and obtaining a larger "birds eye view" using this approach would require multiple searches and knowledge of the local urban geography such as the names of schools and suburbs.

The "schools online" directory provides general information about each school returned from the initial search. This information consists of the boundaries of the local intake area each school as well as general information about the school. Information about specific programs is not provided. For example, the "school overview" on the "schools online" website for one college states:

Multiple educational pathways provide direct connection and opportunity for further study at University, TAFE or other Training Organisations and Employment once students leave our college... The high quality academic and vocational curriculum is supported by a large variety of cultural, artistic and sporting extracurricular programs and activities to enhance the educational experience for all students. https://www.det.wa.edu.au/schoolsonline/overview.do?schoolID=4184&pageID=SO01

The "learning programs" page (https://www.education.wa.edu.au/learning-programs) specifically mentions school choice as a rationale for providing information about school learning programs. As noted on this page,

Choosing a school is a really important decision involving many factors including the needs and aspirations of your children, and the learning style and programs offered at the school. (https://www.education.wa.edu.au/learning-programs).

The page then lists five learning programs, each of which has further information on subpages: languages, STEM, gifted and talented; approved specialist programs; and instrumental music. We further analysed these five sub-pages to determine whether information about VET programs exist. Under STEM, a sub-page lists options for choosing STEM pathways (https://www.education.wa.edu.au/choosing-stem-pathways) which list both academic (ATAR) and vocational subjects. Some of the ATAR subjects are vocationally oriented but not linked with a VET qualification *per se* (e.g., aviation, automotive engineering, and technology). This page lists five VET subjects (automotive, construction, engineering, ICT, and primary industries). None of these STEM pathways – either academic/ATAR or VET – are identified with specific schools. Viewers are advised to go to the *School Curriculum and Standards Authority* for more information (https://seniorsecondary.scsa.wa.edu.au/syllabus-and-support-materials) but this site simply provides curricular information, not information about where these curricular programs are offered. Nowhere on the "learning programs" pages is there information about specific VET programs offered in particular schools.

Finally, the search option on the WA DoE main page is similarly limited. Searching for "vocational education" leads to 81 hits listed in alphabetical order. Searching for specific fields is even more difficult; for example, our search for "building trades" led to a search result of 416 hits. Most of these search returns are general in nature, with no information about specific pathways or offerings in specific schools.

In summary, specific information about specific VET programs in specific schools is largely non-existent on the Department of Education's website. While the WA DoE expresses support for families to choose a school on its website, it only provides information about selective academic programs. VET is not even mentioned on its "learning programs" page. Based on this review of the WA DoE's website, we then turned to the individual school websites for further examination.

School websites

School websites have evolved in recent years to now be a place where schools showcase their physical layout, curricular offerings, and cultural values to their school populations, and the broader community. Text, images and in some cases audio elements are used to engage a visitor in the site, promoting the school generally, and highlighting school and student achievements. Website budget and quality can vary significantly, from websites published using free website software templates through to high-end customised sites incorporating complex animations and interactive elements.

Using Pauwels (2012) multimodal framework, the first step, preservation of first impressions and reactions of the 82 school websites, reveals only 59.8% (n=49) of schools appeared at first glance to offer a VET program at their school. The evidence to support this first impression included the presence of images or digital media of students in VET environments; clear menu headings and signposting for VET links; and information about VET programs prominently located on (or near to) the home page of the website.

Analysis revealed information gaps on the secondary schools' websites regarding their VET programs. For example, the presence or absence of a VET drop down menu made a significant difference to how 'deep' a search needed to go to find evidence of VET offerings. Some school websites provided minimal information about their VET program, simply listing the names of the VET qualifications offered with no further details. These gaps are revealing in terms of the value placed on VET offerings by secondary schools. Descriptive statistics were also used to highlight the way VET is promoted in schools.

Step two, the inventory of salient features and topics revealed that the actual VET qualifications delivered at the school were provided on 87.8% (n=72) websites. The total number of qualifications were listed in a range of ways, often with inconsistent uses of correct qualification codes, Australian Qualifications Framework. (AQF; https://www.aqf.edu.au/) levelling and qualification titles. Auspicing (third party) Registered Training Organisations (RTOs) were mentioned on 46 (56%) occasions but none of these were hyperlinked to the school website. A wide range of private and Technical and Further Education (TAFE) RTOs were listed as auspicing RTOs across the 46 websites. Qualification codes and titles were cross referenced with the register of national qualifications, Training.gov.au (https://training.gov.au/), to determine accuracy in terms of course codes and determining if the most up to date versions were being advertised, however the following errors/inconsistencies were identified.

The information deemed out of date or incorrect has been categorised into the following areas as described in Table 1.

Current and correct code listed	226	44.4%
No qualification code entered	92	18.1%
Qualification superseded (pre-2021)	66	12.9%
Qualification on teach out* and in transition from 2021	60	11.8%
Qualification on teach out* and in transition from 2022	37	7.3%
Incorrect code listed	28	5.5%

Table 1: Qualification code accuracy (N=509)

Notes: * Teach out refers to situations where students may have been enrolled in a version of a qualification which has subsequently been superseded and the training provider has a set time in which to complete teaching and assessment.

Incorrect advertising of VET qualifications due to errors or inaccuracies can have significant ramifications for both the school and the auspicing RTO. The *Standards for RTOs* (ASQA, 2015) state clearly all qualifications and courses delivered by RTOs must be accurately represented and furthermore third-party arrangements (i.e. auspicing) must also include clear, current and accurate information about the course and RTO. Fines for misleading advertising of courses and qualifications are significant.

The inaccurate information on these school websites may be due to several reasons. These reasons could include a lack of understanding about the differences in courses or consequences of misinformation relating to VET course advertising and offerings, or VET programs not being a priority to update on school websites.

Step three, the in-depth analysis of content and formal choices at the intra-modal level, where the focus is on separate stylistic features (Pauwels, 2012) revealed that VET jargon and specific acronyms were used in 34 of the websites. Explanations of jargon and acronyms were generally brief and included popular acronyms such as PaiS (Pre-Apprenticeship in Schools), ADWL (Authority Developed Workplace Learning), and SBTs (School-Based Traineeships). Only 39 schools appeared to celebrate the VET success of students on their websites, with small news articles and content regarding work placements, awards and events supported by VET students in the school community. The amount of content communicated regarding VET program and student success was often difficult to locate on websites, at times embedded in promotional documents or newsletters.

The cross-modal interplay, where two or more website elements work in harmony or not (Pauwels, 2012) revealed visual images (including photographs of students engaged in VET programs or images related to products or processes associated with the VET qualification) appeared in 58.5% (n=48) websites. These photographs ranged in quality and professionalism, with the visual interest of the photograph sometimes lost in the construction of the image or lacking a title to give the image context. A smaller number of schools (n=8) offered video content with VET imagery/students. Only eight of the schools had a specific VET flyer available for public download on their websites. Overall, there was limited visual imagery on these websites to support the VET programs on offer.

Analysis using the limited imagery revealed commercial kitchens, trade training centres and other specialist workplaces which school students could access as part of their VET courses. The ways in which these purpose-built facilities were promoted and celebrated in these schools varied considerably. Many of the purpose-built facilities were not mentioned or visible in text or visual outward facing web pages and social media accounts. It proved difficult for the researchers to uncover the existence of these purpose-built facilities and were often stumbled upon in minor documents and attachments available deep in the websites. Further investigation of these purpose-built facilities revealed external funding initiatives from both Australian and state governments. In two other instances, schools promoted newly constructed purpose-built facilities, however there was no mention or reference to the educational use of these facilities and therefore no links were made between the new facility and the VET qualification/s being offered.

The fourth step in the multi-modal analysis sought to examine the embedded points of view of the provided website information (Pauwels, 2012). Critically, but not surprisingly, the intended audience for these school websites were parents and to a lesser extent students. Overwhelmingly, (n=68) school websites were written in the third person, the language was formal, often jargonistic, and not written in a way to entice a student to choose that study option.

Step five, analysis of information organisation and spatial priming strategies (Pauwels, 2012), revealed VET was included within the menu and heading structure of the website, either as a main heading or sub-heading in 74.4% (n=61) of school websites. Social media links to websites were located on 82.9% (n=68) websites, with *Facebook* being the most frequently linked social media platform (n=67). However, only 43.5% (n=27) schools had posted more than five social media posts about their VET programs or students in the past six months.

Discussion

Our contextual analysis and inferences made found that VET is largely invisible on the state's Department of Education and Western Australian secondary school websites. Even schools that have purpose-built, well-resourced VET facilities rarely showcased the positive features of their VET programs on their websites. Similarly, even though school choice is widely encouraged in Australia, including Western Australia, providing information about school curricular offerings is largely limited to academic offerings on the Western Australian DoE website. For young people and their families who are seeking to choose a school based on its VET offerings, navigating the information desert is likely to be frustrating and possibly even fruitless.

Schools who do hero their VET offerings are isolated and are largely heterogeneous in character. As part of the content analysis of VET websites of the 82 school websites analysed, 11 (13.4%) were considered to 'hero' their VET program offerings. These schools can be considered an 'oasis' in an otherwise VET desert land. Figure 2 identifies the elements required of a 'VET Oasis High School' program.



Figure 2: Features of VET Oasis High School

The features of a VET Oasis High School included: (a) at an initial first glance VET appeared to be offered at the school; (b) VET qualifications clearly listed on the school website; (c) clear navigational signposts (i.e. headings, subheadings, buttons or hyperlinks) to VET content; (d) written content and news (via website content or social media accounts) related to VET programs, students and VET related initiatives is included and uses positive language; and (e) visual content (including photos, videos or other multimedia formats) include VET students or VET processes at the school.

Interestingly, of the 11 VET Oasis High Schools identified in this study, five of these were specialist agricultural colleges in regional Western Australia. These schools hold their own RTO status and are specialist schools for students seeking to pursue a career in agriculture related industries. The remaining six high schools were from a cross section of metropolitan, regional, and socioeconomic contexts. An example of one of the VET Oasis High Schools is summarised below.

School 090 is considered a VET Oasis High School. It has a socially advantaged school and has a range of Approved Specialist programs in sports, academic and arts areas. Observations were recorded relating to the 'first impressions' of the website. At first glance, the scrolling multimedia content features students engaged in VET programs, particularly hospitality and construction. A total of 25 different VET qualifications are listed as being available to students at this school to choose from. Several key industry and organisational partners are named and highlighted as being supporters of the programs on offer. Recent VET award winners are equally recognised and celebrated by the school community and are visible throughout the school's website, social media sites and newsletters. A range of visual prompts including photographs and video footage clearly show students engaged in a range of VET courses and workplaces. The VET pages and content related to VET are easily located and navigable in the menus and headings within the website's architecture. Of note, the navigation elements related to VET included five sub-headings under the VET heading. These headings categorised content into the specific VET specialisations which School 090 offered.

We hypothesise that the main reason behind the invisibility of VET from the DoE and school websites is that VET is widely considered to have a lower status compared to academic education pathways in Australia (Teese & Polesel, 2003; Wheelahan, 2015). In a marketised system, where schools are incentivised to compete for students, our findings suggest that VET is not effectively utilised as a platform on which to compete for 'desirable' students who will enhance a school's reputation. In such contexts, schools tend to focus their marketing efforts, including their websites, on attracting students who will improve the academic status of the school (Greaves et al., 2023). Marketisation has been shown to have a homogenising influence on curricular offerings, with schools incentivised to adopt the same academic model used by winners in the education marketplace rather than promote curricular innovation and diversity (Lubienski, 2005; Lubienski & Perry, 2019). This marketisation impulse is likely to remain unless actively countered. In the information space, this means VET offerings will become visible and perhaps even celebrated only with deliberate commitment, action, and resourcing.

Limitations

Our study has several limitations. First, we analysed only government school websites. Future research could extend our findings by analysing VET offerings in non-government schools. Second, we acknowledge that schools market themselves in many ways beyond website and social media, so there could be other sources of information to prospective students and families which were not included as part of this study (e.g., information nights or printed flyers). Third, our findings are limited to Western Australia. Future research could extend our findings by comparing the Western Australian experience with other contexts.

Recommendations

We recommend that more detailed and accurate information about VET offerings in schools needs to be provided, in the interest of informing young people's choice of a school that will support their interests and aspirations. We agree with Greaves et al. (2023) that education authorities need to take an active role in providing information to young people and their families about school offerings. The WA DoE website should provide clear information about VET offerings in schools to assist families choose a school based on its VET offerings. Providing comprehensive information will be a long-term process,

so in the short term, priority could be given to providing information about schools that have long-standing VET specialisations and/or specialist facilities. The WA DoE should also encourage schools to provide information about their VET offerings on their websites and provide resources and support to enable this to happen. As argued by Haxton and Neild (2012), official information should be provided by schools and education authorities to ensure that all families can make informed decisions about school choice.

More long-term, we recommend that schools and education authorities find ways to make VET something they want to showcase. The first step is to commit to changing the discourse and mindset about the attractiveness and relevance of VET. Starting with language and symbolism is an important first step in making VET visible. Once it is visible and hopefully even celebrated, it will have a chance to flourish and overcome its lower status, as has occurred in other contexts such as Massachusetts (Ansel et al., 2022).

Second, we agree with Wheelahan (2015) that VET should be more broadly conceptualised than is commonly done. Specifically, we recommend that VET in secondary schools, and its promotion to the public, not be limited to VET qualifications as students are more interested in VET sectors and jobs than in qualifications *per se* (Gore et al., 2017). Some schools are enacting this notion by offering broad curriculum around sectors such as marine science or space. These types of programs are attractive to students because they provide a point of focus on a multi-disciplinary area of interest without pigeonholing students into a narrow pathway. These programs can provide a solid general foundation in lower secondary (Years 7-10) and then branch into various pathways, both academic and vocational, in senior secondary (Years 11-12).

Another component to this broadening is explicitly embedding in VET the key generic skills that are in high demand and that will become even more important in this new era of artificial intelligence, namely the skills of creativity, analytical reasoning, and technological literacy (World Economic Forum, 2023). Again, we recommend that this embedding of key skills be celebrated and promoted on school websites and other sources of information about schools' learning programs.

Conclusion

Information about VET secondary school offerings is largely non-existent on school and education authority websites in our case study site of Western Australia. Young people and their families who are seeking to choose a school based on its VET offerings operate in an information desert, relying on anecdotal word-of-mouth from their social networks. This presents a major lost opportunity for promoting VET offerings in secondary schools, which in turn leads to another lost opportunity to leverage VET as a pathway for improving student engagement and life opportunities, reducing unemployment, and addressing skills shortages in the labour market. All major political parties support the same high value-added manufacturing priorities, which are in exciting emerging industries with huge growth potential and societal benefit. To be successful, governments need to leverage every level of the education system – secondary schools, technical tertiary institutions and universities – to address the very large skills shortages that challenge realisation of these priorities. VET in secondary schools can play a large role but it needs to be promoted to meet its potential.

References

- ACARA (Australian Curriculum Assessment Reporting Authority) (2023). My School. https://www.myschool.edu.au/
- ASQA (Australian Skills Quality Authority) (2015). *Standards for RTOs 2015*. Australian Government. https://www.asqa.gov.au/about-us/asqa-overview/key-legislation/standards-rtos-2015
- Ansel, D., Dougherty, S., Ecton, W., Holden, K. & Theobald, R. (2022). Student interest and equitable access to career and technical education high schools of choice. *Journal of School Choice*, 16(4), 588-622. https://doi.org/10.1080/15582159.2022.2039427
- Campbell, C., Proctor, H. & Sherington, G. (2009). School choice: How parents negotiate the new school market in Australia. Allen & Unwin.
- Chubb, J. E. & Moe, T. M. (1990). Politics, markets, and America's schools. Brookings Institution Press. https://www.brookings.edu/books/politics-markets-and-americas-schools/
- Dalley-Trim, L., Alloway, N. & Walker K. (2008). Secondary school students' perceptions of, and the factors influencing their decision-making in relation to, VET in schools. *The Australian Educational Researcher*, 35, 55-69. https://doi.org/10.1007/BF03216883
- Dean, J., Roberts, P. & Perry, L. B. (2023). School equity, marketisation and access to the Australian senior secondary curriculum. *Educational Review*, 75(2), 243-263. https://doi.org/10.1080/00131911.2021.1909537
- Department of Education WA (n.d.). Government of Western Australia. https://www.education.wa.edu.au/
- Department of Education WA (n.d.). *Approved specialist programs*. https://www.education.wa.edu.au/approved-specialist-programs
- Department of Industry, Science, Energy and Resources (2020). *Make it happen: The Australian Government's modern manufacturing strategy*. Department of Industry, Science and Resources, Australian Government. https://www.industry.gov.au/data-andpublications/make-it-happen-the-australian-governments-modern-manufacturing-strategy
- Fernández Benavides, A. (2019). Intercultural components in the multimodal structure of a language learning website. *Profile: Issues in Teachers' Professional Development*, 21(1), 59-74. https://doi.org/10.15446/profile.v21n1.69951
- Fernández-Vázquez, J.-S. (2021). Analysing the environmental websites of the world's greatest polluters: A multimodal ecolinguistic approach. *Economic Research-Ekonomska Istraživanja*, 34(1), 2692-2711. https://doi.org/10.1080/1331677X.2020.1836993
- Fogelgarn, R., Weller, J. & O'Reilly-Briggs, K. (2024). Permission to teach VET: Enabling a vicious circle that maintains the low status of VET education. *Issues in Educational Research*, 34(1), 37-57. http://www.iier.org.au/iier34/fogelgarn.pdf

- Gonski, D. (2018). Through growth to achievement: Report of the review to achieve educational excellence in Australian schools. Department of Education and Training, Australian Government. https://www.education.gov.au/quality-schools-package/resources/through-growth-achievement-report-review-achieve-educational-excellence-australian-schools
- Gore, J., Ellis, H., Fray, L., Smith, M., Lloyd, A., Berrigan, C., Lyell, A., Weaver, N. & Holmes, K. (2017). *Choosing VET: Investigating the VET aspirations of school students*. National Centre for Vocational Education Research. https://www.ncver.edu.au/__data/assets/pdf_file/0028/1142749/Choosing-VETinvestigating-the-VET-aspirations-of-school-students.pdf
- Greaves, E., Wilson, D. & Nairn, A. (2023). Marketing and school choice: A systematic literature review. *Review of Educational Research*, 93(6), 825-861. https://doi.org/10.3102/00346543221141658
- Haxton, C. L. & Neild, R. C. (2012). Parents' "hard" knowledge of admission criteria and acceptance in Philadelphia's high school choice process. *Journal of School Choice*, 6(4), 483-503. https://doi.org/10.1080/15582159.2012.733226
- Hull, G. A. & Nelson, M. E. (2005). Locating the semiotic power of multimodality. *Written Communication*, 22(2), 224-261. https://doi.org/10.1177/0741088304274170
- Joyce, S. (2019). Strengthening skills: Expert review of Australia's vocational education and training system. Department of the Prime Minister and Cabinet. https://pmc.gov.au/resource-centre/domestic-policy/vet-review/strengthening-skills-expert-review-australias-vocational-education-and-training-system
- Liu, X., Zheng, D. & Wu, S. (2022). Across the islands: A multimodal discourse analysis of government homepages. *Visual Studies*, 38(3-4), 663-680. https://doi.org/10.1080/1472586X.2022.2062443
- Lubienski, C. (2005). Public schools in marketized environments: Shifting incentives and unintended consequences of competition-based educational reforms. *American Journal of Education*, 111(4), 464-486. https://doi.org/10.1086/431180
- Lubienski, C. & Perry, L. B. (2019). The third-sector and innovation: Competitive strategies, incentives, and impediments to change. *Journal of Educational Administration*, 57(4), 329-344. https://doi.org/10.1108/JEA-10-2018-0193
- Maiorani, A. & Christie, C. (2014). Introduction. In A. Maiorani & C. Christie (Eds.), *Multimodal epistemologies: Towards an integrated framework* (pp. 1-10). Routledge. https://doi.org/10.4324/9780203766538
- National Skills Commission (2022). 2022 skills priority list: Key findings report. https://www.jobsandskills.gov.au/sites/default/files/2023-12/2022%20Skills%20Priority%20List%20Key%20Findings%20Report_0.pdf
- Ochowicz, A. (2018). Multimodal rhetorical analysis of Amnesty International's website. *Res Rhetorica*, 5(3). https://doi.org/10.29107/rr2018.3.3
- Pauwels, L. (2012). A multimodal framework for analyzing websites as cultural expressions. *Journal of Computer-Mediated Communication*, 17(3), 247-265. https://doi.org/10.1111/j.1083-6101.2012.01572.x

544

- Perry, L. B. & Lubienski, C. (2020). Between-school stratification of academic curricular offerings in upper secondary education: School decision-making, curriculum policy context, and the educational marketplace. Oxford Review of Education, 46(5), 582-600. https://doi.org/10.1080/03054985.2020.1739012
- Perry, L. B. & Southwell, L. (2014). Access to academic curriculum in Australian secondary schools: A case study of a highly marketised education system. *Journal of Education Policy*, 29(4), 467-485. https://doi.org/10.1080/02680939.2013.846414
- Polesel, J., Helme, S., Davies, M., Teese, R., Nicholas, T. & Vickers, M. (2004). VET in schools: A post-compulsory education perspective. National Centre for Vocational Education Research. https://www.ncver.edu.au/__data/assets/file/0028/4897/nr1029.pdf
- Polesel, J. (2008). Democratising the curriculum or training the children of the poor: School-based vocational training in Australia. *Journal of Education Policy*, 23(6), 615-632. https://doi.org/10.1080/02680930802054420
- Teese, R. & Polesel, J. (2003). Undemocratic schooling: Equity and quality in mass secondary education in Australia. Melbourne University.
- Van Dyke, N. & Jackson, J. (2019). Unlocking the value of VET for school students: Submission to the Review of VET for School Students in South Australia. Melbourne: Mitchell Institute. https://vuir.vu.edu.au/40810/1/value-of-vet-for-school-students-submissionmitchell-institute.pdf
- Wheelahan, L. (2015). The future of Australian vocational education qualifications depends on a new social settlement. *Journal of Education and Work*, 28(2), 126-146. https://doi.org/10.1080/13639080.2014.1001333
- Whitty, G. & Power, S. (2000). Marketization and privatization in mass education systems. *International Journal of Educational Development*, 20(2), 93-107. https://doi.org/10.1016/S0738-0593(99)00061-9
- Windle, J. A. (2015). Making sense of school choice: Politics, policies, and practice under conditions of cultural diversity. Palgrave Macmillan. https://link.springer.com/book/10.1057/9781137483539
- World Economic Forum (2023). *The future of jobs report.* https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf
- Xing, X. & Gordon, H. R. D. (2021). Mediating effects of school engagement between high school on-time completion and career and technical education. *Vocations and Learning*, 14, 1-21. https://doi.org/10.1007/s12186-020-09252-2

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Declaration of interest statement

The authors report there are no competing interests to declare.

Dr Alison Hilton (corresponding author) is a Lecturer in Education at Murdoch University. Her areas of expertise are secondary education and vocational education and training (VET). Her research interests include teacher education focusing on student experience in higher education, pre-service teacher professional experience, and VET. ORCID: https://orcid.org/0000-0002-1242-0577 Email: a.hilton@murdoch.edu.au

Dr Sian Chapman is a Senior Lecturer in Education at Murdoch University. Her research interests include education policy and practice, teacher agency and change, and understanding systemic difference through complexity theory. Sian explores these concepts across a range of topics including arts education, teacher education and school diversity.

ORCID: https://orcid.org/0000-0002-7474-0277 Email: sian.chapman@murdoch.edu.au

Professor Laura Perry is Professor of Education at Murdoch University. She draws on the fields of education policy, comparative education, and sociology of education to examine inequalities of educational opportunities and outcomes, especially as they occur between secondary schools. Her research interests include educational marketisation, school segregation, school stratification, school funding, and opportunity to learn. ORCID: https://orcid.org/0000-0003-4252-2379 Email: l.perry@murdoch.edu.au

Please cite as: Hilton, A., Chapman, S. & Perry, L. B. (2024). School choice in an information desert: A multimodal website analysis of vocational education offerings. *Issues in Educational Research*, 34(2), 529-546. http://www.iier.org.au/iier34/hilton.pdf