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VET in Higher Education: A future for regional Australia?

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The need to connect Vocational Education and Training (VET) and Higher Education (HE) systems is widely acknowledged (e.g. Bradley et al. 2008, AQF 2010, and DIUS 2008). Governance structures supporting cross-sectoral pathways in Australia include co-located dual-sector institutions, degree program offerings in TAFE colleges (HE in VET) and MoU-driven partnerships that guarantee articulation and credit transfer for students from a vocational institution to a University or vice versa. The qualities of each system have been broadly debated (e.g. Beddie & Curtin 2010; Moodie et al. 2009, Wheelahan 2010) and existing structures provide neither seamless nor transparent mobility to students wanting to extend their studies beyond VET. This paper offers a critical perspective on the potential for cross-sectoral models to raise higher education access, participation and achievement levels for young and mature aged people living in regional Australia. Data is presented to demonstrate how collaboratively designed credit arrangements can enhance access and increase retention in education, create meaningful pathways and promote student success and retention. Provision of professional development for teaching staff and academic support for students is also important for successful delivery in regional and low socioeconomic status contexts. The paper presents a cross-sectoral model for the design of courses and pathways between school, VET, HE and employment. The model values the role of VET in HE and promotes joint delivery of Diplomas in regional locations. The author proposes that the model offers a viable approach to the delivery of tertiary education that promotes access to higher education for under-represented groups in non-metropolitan centres.

Keywords: VET in higher education, widening participation, regional education

Background

The need to connect Vocational Education and Training (VET) and Higher Education (HE) systems has been widely acknowledged, especially as a means of enhancing student progression and addressing skills shortages (e.g. Bradley et al. 2008; DIUS 2008). The Review of Australian Higher Education noted that:

... although distinct sectors are important, it is also vital that that there should be better connections across tertiary education and training to meet economic and social needs which are dynamic and not readily defined by sectoral boundaries (Bradley et al. 2008, p. 180).

In 2009, over 289,000 Australians commenced undergraduate studies in a higher education institution (DEEWR 2010). Of these, around 10% would have been admitted to university on the basis of a TAFE qualification (Karmel 2008, p. 14). However, not all will have been granted credit for their VET studies.

Perceptions of interconnectedness between VET and HE in Australia vary between sectors, institutions and researchers. The characteristics of a ‘tertiary sector’ that unites aspects of VET training with HE study have been debated (e.g. Karmel 2008; Beddie & Curtin 2010),
with agreement only that the Diploma forms a ‘point of intersection’ as the only common credential in the Australian Qualifications Framework (AQF).

Collaboration between vocational and HE institutions in Australia occurs on a number of levels. A majority of universities have created articulation and credit transfer arrangements with VET providers through MoU-driven partnerships; these commonly link single sector awards delivered sequentially to create ‘pathways’. Greater collaboration has been achieved through co-located dual-sector institutions that operate independently within a joint management structure. Degree program offerings in vocational institutions are also becoming popular, although students enrolled in HE in VET programs represented only 0.2% of vocational students in 2009 (NCVER 2010). Combined Diploma/Advanced Diploma and degree programs are also being taught on VET campuses, typically through a fixed academic program auspiced by a university; in these cases, TAFE typically delivers the majority of first year subjects and the university increases its delivery in Years 2 and 3.

Barriers to more intensive cross-sectoral collaboration arise from the multiplicity of funding sources, governance structures, curriculum and student characteristics (Karmel 2008). While public TAFE Colleges are funded and evaluated through state and territory education departments, the qualification types they deliver are specified through the AQF and curriculum is drawn from national skills-based Training Packages. In regional areas, communities express a desire for local TAFE campuses to respond to local skill and innovation needs. However, traditional employment conditions, workloads, classroom management and assessment practices often limit an Institute’s ability to respond locally. Universities and registered training providers (RTOs) operate more ‘autonomously’ within a national centralised system, but still operate within centralised funding, standards, evaluation and reward mechanisms. Already familiar with the contestable funding environment, HE institutions and RTOs tend to be flexible, creative and business focused organisations.

Cross-sectoral pathways can contribute to regional access and participation in tertiary education by aligning the courses taught in one sector with those taught in another. However, in regional areas with small populations, each sector is concerned with keeping its market share, and the arrival of a university may be viewed as an unwelcome intrusion.

Social and community drivers

Many students are considered ‘educationally disadvantaged’ and these students are often from low socio-economic backgrounds, Indigenous groups, outer-metropolitan areas and regional locations (DEEWR 2009; Vinson 2007). Noting that people from these groups are under-represented in HE compared to the general population, the Review of Australian Higher Education highlighted ‘real challenges in ensuring equity of provision across vast distances’ and introduced the term ‘thin markets’ to represent educational delivery in regional Australia (Bradley et al. 2008 p.2). In recognition of these challenges, the Review proposed a national target of 20% of regional populations to achieve a bachelor degree by 2020, in comparison with a national target of 40 per cent.

Early intervention and the development of cross-sectoral pathways between education and work can support participation and achievement rates for educationally disadvantaged groups (DEEWR 2009). However, those living in regional towns face limited choice and are not able to access dual-sector or HE in VET programs. Even when articulation and credit arrangements are available, students from low socioeconomic status (SES) backgrounds are
less likely than others to complete a Diploma and thus to transition from VET studies to HE (Wheelahan 2009; Moodie 2010). Communities report that when regional school leavers leave home to study, the community suffers from the loss of its brightest young people and families face significant financial and emotional costs.

The involvement of regional communities in the design of educational courses and pathways is important for addressing educational disadvantage in Australia. Again, the Review of Australian Higher Education proposed:

Providers in regional and remote areas need to be encouraged and supported to build upon partnerships with local communities, providers in other sectors of education, businesses and industry. Such arrangements will involve institutional cross-collaboration and partnerships, including sharing the use of facilities and resources (Bradley et al. 2008, p.111).

Healthy community partnerships are characterised by shared goals, values, responsibilities, communication channels, governance, leadership and a building of trust (Seddon et al. 2008). Long-term engagement activities aim to create mutual benefit, build community trust and manage community expectations while ensuring program sustainability. Communities gain from new knowledge, inclusion of local perspectives and enhancement of existing skills and infrastructure. Communities also develop an appreciation of education as relevant, useful and a pathway to better employment. In turn, the University can gain from a demand driven approach that builds on local strengths and opportunities to design new teaching and learning programs. Community-based research opportunities are also created through this engagement.

The research and/or issue under consideration

This paper offers a critical perspective on the potential for an expanded cross-sectoral approach to raise higher education access, participation and achievement levels for regional residents. The research draws from the University of Canberra (UC) program ‘Pathways to enhance regional participation in HE’ (Regional Pathways), which commenced in 2009 with funding from the Australian Government Department of Education, Employment and Workplace Relations. The program is investigating the educational participation of low SES groups in the Bega Valley, Eurobodalla, Snowy River, Cooma-Monaro, Goulburn-Mulwaree and Shoalhaven shires of S-E NSW.

The extent of educational disadvantage in this region is illustrated in Figure 1. In the city of Canberra in 2006, for example, 25% of people aged 15 and over reported achievement of a bachelor degree or above. In comparison, only 5 - 7% of regional residents had attained bachelor level and few had gained post-graduate qualifications. The most common qualification for residents of regional Local Government Areas (LGAs) is at Certificate or trade level (17%), compared with 11% for those in Canberra (ABS 2006).
Figure 1: Highest qualification level by percentage of persons aged 15 years+ (ABS 2006)

Earlier research (Cram 2010) has established that the most commonly reported barriers to regional participation are poor retention rates at school, high levels of underemployment, limited access to professional experiences, a restricted range of locally delivered post-tertiary programs, limited local access to educational technologies and academic resources, poor (or non-existent) transport services and additional costs associated with leaving home to study.

Ongoing community-based research is investigating community views on educational priorities and strategies to improve tertiary education access and participation within separate LGAs. The research presented in this paper focuses on the design of courses and pathways that combine vocational and HE studies to support regional tertiary education for low SES groups.

Method(s) of data collection and analysis

The overarching research question under investigated is:
What would cross-sectoral development of programs in the S-E NSW region entail?

Four sub-questions also emerge:
* What have we learned from credit arrangements?
* How could regional students benefit from the ‘Beyond Articulation’ model?
* How does cross-sectoral design work?
* How would cross-sectoral designs for regional delivery be structured?

Concepts and data from several disciplines inform the methodology

- Research into perspectives on the value of VET, HE and educational pathways (Skills Australia 2009; Karmel 2009; Universities Australia 2008; DEEWR 2010)
- University-community engagement principles and practice (e.g. Garlick 2000; HEFCE 2002) and community-based participatory research into regional strengths and opportunities (Seifer and Greene-Moton 2007)
- Educational quality (Skelton 2005) and educational design for regional delivery (e.g. Lefoe, 2003).
Areas of concept overlap are established through integrative research principles (e.g. Bammer 2006). In addition to literature analysis and data collection, evidence and ideas are collected through community forums, many of which are instigated by the community, as well as from reflective conversations with key players from government, business, education and community groups.

**Discussion**

**What have we learned from credit arrangements?**

National guidelines for the design and management of credit arrangements derive from research by Harris et al. (2005) and PhillipsKPA Pty Ltd (2006); in addition, best practice principles for the provision of information enable students to make well-informed choices about where and what they should study (MCEECDYA 2006). Cross-sectoral partnerships that follow these guidelines can benefit both students and institutions. The *Beyond Articulation* project involving the University of Canberra (UC) and Canberra Institute of Technology (CIT) created: collaborative governance arrangements that aligned articulation and credit transfer policy with national guidelines; structured procedures for determining credit through curriculum alignment; information management processes to supply current, consistent information to a variety of stakeholders; regular cross-sectoral meetings to evaluate articulation agreements and suggest improvements; and industry-linked workplace practice.

Cross-sectoral activities can be resource intensive and may take a number of years for collaborative programs to achieve their goals. However, UC and CIT institutions have concluded that cross-sectoral pathways pay off for both students and institutions (Cram 2008), and they have continued to develop and promote articulation and credit pathways beyond the 2006-2008 project. To ease student transition to university, CIT incorporates academic skills training into Diploma-level courses.

Talented students continue to enrol in CIT Diplomas as part of their plan to articulate to university. Agreed credit arrangements have increased the number of articulating students commencing at UC (194 in 2010) and improved conversion rates from offer to acceptance. Students entering UC with a CIT qualification also achieve high success and retention rates.

![Figure 2: Unit success rate (%) of commencing UC Bachelor students, 2007-2009](image-url)
In the period 2007-2009, articulating students achieved consistently higher unit success rates than non-CIT students (Figure 2). Non-articulating students who gained entry with a CIT qualification without credit being granted also appeared to gain from institutional collaboration, maintaining a success rate of around 87% (University of Canberra 2010).

Figure 3 demonstrates that retention rates for CIT students are also higher than for non-CIT students. The retention rate reflects the percentage of students who commenced a course in Semester 1 and are still enrolled in Semester 1 of the following year, less the effect of course completers within the period (University of Canberra 2010). The most highly articulated courses have not only been the most popular with CIT students but have also achieved the highest rates of student success and retention.

How could regional students benefit from the Beyond Articulation model?

People from disadvantaged backgrounds who graduate with a university degree report educational and occupational outcomes “equal to their relatively less disadvantaged contemporaries. It appears that university education helps ameliorate the differences seen in socioeconomic disadvantage on entry into the system” (Coates & Edwards 2008, p.94). However, low levels of participation in HE are perpetuated through limited regional capacity to tertiary studies. For example, while 8.46 UAC offers were made per 1000 Australian Capital Territory (ACT) residents in 2010, only 5.27 offers per 1000 population were made to residents of S-E NSW (University of Canberra 2010).
Of 606 S-E NSW students who attained an ATAR score of 75 or below in 2010 and were offered entry into an undergraduate degree program, 470 obtained offers from Charles Sturt University (CSU), University of Western Sydney (UWS), University of Wollongong (UoW) and UC (Figure 4). Increased offers to UoW reflect the availability of University Education Centres in Bega and Batemans Bay. For UC, the recent rise in offers reflects a range of initiatives including the Regional Bonus Scheme and Entry Pathways with a Smart Study Program of academic and information literacy skills for students in the ATAR range 65-75.

With over 800 students in the S-E Region also enrolled in VET Diploma courses and a greater number completing Certificate IV qualifications (NCVER 2009), the concept of creating combined VET-HE Diplomas for delivery in regional towns holds promise. The Diplomas would not only capture school leavers in the lower ATAR ranges – the group with the lowest chance of success at university – but would also reduce HECS and accommodation fees for this group. As jointly developed cross-sectoral programs can include progressive academic skills development, these programs also have the potential to maintain high success and retention rates for students.

**How does cross-sectoral design work?**

Cross-sectoral design aims to optimise equivalence between qualifications at different levels and to formalise pathways between educational studies and employment. The Diploma qualification, as the intersection between VET and HE, provides a good starting point.

When students move from VET to HE without formal articulation arrangements in place, there may be little or no credit granted. However, when institutions work collaboratively to map their curriculum and identify equivalence, a full year’s credit can be offered to Diploma graduates articulating into a Bachelor degree in the same field (Figure 5). Note that it is not uncommon for credit arrangements to relate VET subjects with both Year 1 and Year 2 university units, as this practice increases students’ choice of major and minor streams.

![Figure 5: Cross-sectoral pathways between collaborating institutions](image)

Articulating students benefit from a broad range of curriculum pathways. At UC, for example, a Nursing Diploma with specified electives articulates with a full year’s credit into the Bachelor of Nursing. Students gaining a Diploma of Remedial Massage or Advanced Diploma of Health Sciences (Soft Tissue Therapy) may also articulate with credit into a Nursing degree; alternatively, these students could choose to articulate into Bachelor degrees in Science, Medical Science or Applied Science in Human Biology.

To ensure that all students benefit from these pathways, it is also important to facilitate transition between certificate level courses. For example, students in Years 11 and 12 at
school can be offered an entry-level Human Services program which is able to articulate into higher level programs in Aged Care or Health Services Assistance and ultimately increase enrolments in nursing diplomas. Many students will undertake traineeships and apprenticeships and transition into the workplace; of these, some will return later to higher level studies. Community engagement between universities, schools, TAFE and partnership brokers can ensure that subjects offered in a Certificate II are transferable to Certificate III and Certificate IV courses and ultimately to Diploma level. The development and promotion of these pathways is an important community activity.

How would cross-sectoral designs for regional delivery be structured?

At the tertiary level, VET in HE pathways are designed to enable students to study the first year of their degree while obtaining a Diploma. Figure 6 illustrates combinations for a Diploma of Business taught concurrently by a university and a vocational provider in a regional location. Business Diplomas traditionally provide a high level of curriculum overlap and most courses may be delivered by either institution; the major task is to determine how cross-credit will be managed. When students are provided with relevant pathways through Certificate IV, the cross-sectoral Diploma can provide identified pathways with credit into Year 2 of a range of undergraduate programs.

![Figure 6: Cross-sectoral model for regional Diploma](image_url)

For teachers and lecturers, curriculum alignment between learning outcomes optimises comparability between cross-sectoral components and identifies gaps that might require additional training. Faculty directors can then align teaching, learning and assessment approaches. Finally, work integrated learning components can be designed to build on local links with business and industry. Courses can be structured part-time or full-time. For students, programs are supported with educational technologies and electronic access to library resources. Most importantly, students can learn in a supportive environment in their own region. At the completion of the Diploma, they can be awarded both a VET and a HE Diploma that guarantees entry into the host institution.
Sustainability

The sustainability of cross-sectoral programs and pathways in regional areas requires institutional commitment and shared processes. A Framework for the design of regional courses has been developed with four interconnecting components:

- Stakeholder engagement: with Shire Councils; TAFE Institutes, Department of Education & Training, local high schools; state and federal government agencies, partnership brokers and the Indigenous Education Office; employers, business councils, Aboriginal Elders, Regional Development Agencies (RDAs) and work-placement officers; and non-government organisations (NGOs) and members of the public.
- Identification of pilot course proposals based on priorities determined through community consultations. Public and private educational institutions meet with government representatives to consider gaps and assess the feasibility of proposed courses and pathways, which should aim to optimise mutual benefit to educational providers, students, employers, community, government agencies and funding bodies.
- Development of shared governance and delivery processes to manage the design and implementation of courses: for example through a Memorandum of Understanding.
- Design of regional teaching and learning strategies which:
  - include content and tasks that are relevant to students’ backgrounds and abilities
  - ensure that learning outcomes link directly to assessment tasks
  - provide contact with course convenors and include at least one visit to the host campus
  - include local work-based learning opportunities
  - use blended delivery methods and provide varied learning experiences
  - adopt appropriate educational technologies and provide computer and internet access if required
  - link to the local library, which can create a local learning hub and support development of knowledge management skills (Lefoe 2003, MCEECDYA 2006, DIUS 2008).

In addition, academic skills development should be offered locally, especially for Indigenous students and learners with interrupted educational experience. Additional enabling and access programs may be required to support student transition between Certificate, Diploma and HE courses. Professional development for academics teaching across sectors or off-site should also be provided by the host institution.

Conclusion

Partnerships between vocational and HE providers can generate courses and pathways for people who do not currently participate in tertiary education. When courses are designed to promote pathways from school to VET to HE in regional areas, new opportunities can be created for young school leavers and mature age students to access both education and employment in professions, trades and community development work.

The model illustrated in this paper may come with additional costs: for curriculum mapping, special enrolment, professional development of regional tutors, additional learning resources, transport and accommodation for lecturers and tutors and overall management of off-campus programs. Collaboration between providers is essential to ensure mutual benefit between
institutions as well as for communities. The overall cost of regional education can be reduced when institutions share policies, programs, facilities and resources – and this requires institutional trust and commitment. In the long run, courses and pathways built on curriculum alignment and cross-credit not only promote student motivation, participation and program viability, but also provide sequenced development of skills and knowledge to build confidence and success for disadvantaged students.

As educational sectors, frameworks and qualification types undergo continuous transition, it is vital that providers also embrace change and adapt their practices to address access and equity disparity in regional communities. Well constructed regional VET-HE delivery can support local communities, respond to local needs and demonstrate innovation in delivery to thin markets.

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