Crediting vocational education and training for learner mobility

BOX HILL INSTITUTE OF TAFE

Sandra Walls
John Pardy

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John Pardy

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Publisher's note

About the research

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Sandra Walls and John Pardy, Box Hill Institute of TAFE

Despite the rhetoric that encourages 'seamless pathways' from vocational education and training (VET) to higher education, many barriers exist for VET students who wish to undertake further study at university.

Movement from VET to higher education takes place on a spectrum ranging from well organised to haphazard. Students are not always granted full credit for their previous learning, and there is a lack of clarity between institutions about what counts as credit transfer or exemption.

This project investigates the concept of learning pathways, using as an example the localised credit arrangements that exist in degree structures at Deakin University and the partnerships between Deakin and three TAFE institutes—Box Hill, South West and the Gordon Institute.

By way of comparison, the authors also explore pathway arrangements available to individuals who have undertaken training through enterprise-based registered training organisations.

Key findings

- Different VET qualifications result in different pathways with varying credit transfer arrangements and outcomes.
- Students who are perceptive and well informed show that they are adept at forging pathways for themselves, in spite of systemic and cultural impediments.
- TAFE and university personnel identify improved pathway negotiations, a database of credits, and mutual respect as important for efficient credit transfer processes.
- The majority of employment and context-related training delivered by enterprise registered training organisations goes unrecognised in broader credit transfer and articulation policy discussions.

A short publication, *A guide to credit transfer*, has also been developed to assist students with VET qualifications who seek articulation into higher education programs.

Tom Karmel
Managing Director, NCVER

Informing policy and practice in Australia's training system …

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Executive summary

In an era of lifelong learning, pathways to tertiary education have become increasingly diverse. Individuals commencing university learning come from education contexts that reflect a multitude of individual career and learning aspirations. Learning pathways, as students move to higher education, are facilitated when they are granted some credit for previous tertiary study. The credit transfer experiences of vocational education and training (VET) and higher education students and those of the academics and administrators involved in facilitating credit transfer shape the ways in which institutions support or impede learning pathways for students.

This research report investigates learner mobility and credit transfer from VET to higher education. The data analysis, findings and ensuing discussion respond to three research questions:

✧ What are the core elements required for negotiating pathway arrangements between VET and higher education?

✧ How does VET learning interface with higher education? What are the implications for curriculum content, teaching practices, learning processes and assessment arrangements?

✧ What strategies have the potential to enable learner mobility in the wider VET sector, considering local pathway arrangements between VET and higher education providers and between enterprise-based learning arrangements and higher education providers?

Information was collected from two discrete VET learning environments—technical and further education (TAFE) institutes and enterprise registered training organisations (ERTOs). The methodology employed a descriptive analysis and interpretation of both credit transfer policy documents and developments and ethnographic material gathered from focus groups; a survey with follow-up interviews that addressed institutional organisation was also undertaken.

The project investigates existing collaborative partnerships and learning contexts, namely:

✧ a 2008 alliance between a Victorian university (Deakin) and three Victorian TAFE institutes (Box Hill, South West and the Gordon Institute); members of this alliance have recently completed the Credit Matrix trial project for the Victorian Registration and Qualifications Authority (VRQA)

✧ local degree credit structures and nested VET qualification structures

✧ students and staff from a university–TAFE alliance

✧ pathway arrangements that are available through enterprise training organisations represented by Enterprise Registered Training Organisation Association (ERTOA) members.

The research was conducted against the background of the Australian Qualifications Framework (AQF) guidelines and recent reforms, the Victorian Qualifications and Registration Authority's Credit Matrix and Deakin University's institutional credit transfer policy.

Institutional arrangements determine credit transfer and articulation between providers. According to Harris, Rainey and Sumner (2006), the complexities of these arrangements are better described as 'crazy paving' than as a seamless pathway, and the causes of this are as much cultural as they are systems weaknesses. The data suggest that many credit transfer determinations are based on individual subjective judgments of the learning achieved and, in particular, relate to the differing

positions of those involved in granting credit. The hierarchy of the Australian tertiary education system, reinforced in policy structures such as the AQF, is another cultural consideration. Equivalence of content and pedagogy can only be established if perceived hierarchies and vested interests are set aside.

We find further complexity in the blurring, in some instances, of the sectoral boundaries between VET and higher education. This places the educational sector as secondary to the qualification itself, with learner mobility achieved purely through the attainment of a higher-level qualification, irrespective of whether it is from a VET or higher education institution. In addition, qualifications are not pure-bred, with many differing formats of training package qualifications existing at the diploma level. Another complexity results from the tertiary education sector's now being more strongly organised according to market principles, meaning that providers in both parts of the sector are potentially competing for the same students. All of these factors contribute to the problems arising with credit transfer and articulation and to understanding the VET–higher education interface.

The issue of reconciling the skills-based competencies of VET with the codified knowledge of higher education in order to more clearly navigate the boundaries—or the crazy paving—remains complicated. In practice it is learning equivalence that remains the point of impasse for achieving equitable credit transfer arrangements. A means for establishing equivalence is imperative to ensuring that credit is recognised and awarded without prejudice.

The consistency of available policies, guidelines and regulations on credit transfer has not yet been fully evaluated. Policies for achieving equitable credit transfer are provided in the guidelines from both the AQF and Universities Australia. While there are also local university and registered training organisation regulations and policies on credit transfer, articulation and credit transfer in VET are not covered in curriculum design and training package development. These complications have impacts on learner mobility and underpin uneven and inconsistent approaches to credit transfer. Accordingly, it is important to ensure that educational qualifications—their curriculum content, teaching practices, learning processes and assessment arrangements—are assigned their due worth.

This research into credit transfer identifies ideas for enabling learner mobility for VET students, whether from TAFE or an enterprise or private provider. One of the key enabling features is that of the ability and motivation of providers and individual students to shape the pathways for positive credit transfer outcomes.

More efficient credit transfer arrangements for future VET students in Australia will require the resolution of differences in educational purpose, governance, knowledge and skill. Credit transfer represents the fairness of articulation experiences to support learner mobility. When education attained is not recognised equitably or without prejudice, a student's potential learning career is compromised, as is the purpose of credit transfer. The differences surrounding knowledge acquisition and skills development represent a further area for resolution, as does the issue of theory versus practice, which has troubled some VET–higher education discussions. A more holistic approach, which enables students to build learning careers, is necessary.

Policies and processes covering credit transfer, including institutional agreements and tools such as the Victorian Credit Matrix, are premised on learners having access to all relevant information. Seamless movement from VET to higher education learning contexts will only be achieved through the adaptability of educators, administrators and institutions and by VET providers describing and explaining the detail of the learning content to higher education staff. A strengthening of the AQF may also redress issues of parity in credit transfer and articulation. In future AQF policy the volume of learning required for specific qualifications will be defined and a credit point formula established (Australian Qualifications Framework Council 2009b). An initiative such as this would allocate students a certain value of credit for their learning and facilitate student mobility.

In general, policy and organisational processes lag behind the patterns of learning careers. Student mobility between qualifications and across sectors is not linear. Student mobility will always be characterised by lateral shifts from one qualification type to another concurrent study, or by shifts to other qualifications at different levels.

In conclusion, a multitude of factors affect the development of credit transfer and articulation, ranging from differences across the sectors in systemic goals and governance and to goals for knowledge and skills, to individual qualities of commitment, motivation, understanding and respect.

Context

Tertiary education in Australia is organised through the vocational education and training (VET) and higher education sectors. The VET learning experiences occur in technical and further education (TAFE) institutes and private registered training organisations (RTOs), with enterprise providers who educate their own employees in accordance with nationally endorsed VET qualifications, and in the adult and community education (ACE) sector.

In addition to these VET learning options, students gain admission to Australian universities on the basis of studies completed from tertiary institutions around the world. Higher education is mainly provided through public universities, as well as through non-self-accrediting private higher education providers.

The last decade has shown a marked increase in participation levels by young people (approximated at 20 years of age) in tertiary education in both VET and higher education. Today, more than 50 per cent of school leavers enter tertiary education (Young 2007).

In addition, the boundaries between the VET and higher education sectors are becoming blurred, especially in the delivery of qualifications. The delivery of VET in Schools has expanded, higher education delivers VET diploma qualifications and VET organisations now deliver degrees.

Learner mobility is most prevalent at the diploma levels and above, which represent the traditional sectoral boundaries between VET and higher education and where differences in curriculum philosophy are amplified. Australian tertiary students who seek learning pathways that cross these sectoral boundaries have often participated in learning that has been organised through the different curricular formats of VET and higher education, as well as through different delivery contexts (including workplace learning and flexible delivery). It is in the crossing of these sectoral boundaries that the determination of credit transfer takes place.

Although the granting of credit can be centrally encouraged, its implementation inevitably falls to local alliances, partnerships and devolved processes through course credit negotiations or institutional arrangements to make it a reality.

> The issue of credit transfer is important not just to the students but also to governments and post-secondary institutions. For institutions, credit transferability is a key issue given quality assurance arrangements within the post-secondary education system. For governments … an improved system of credit transfers could result in net savings by enabling more students to complete their studies in a timely manner; it would also increase a student's ability to study anything, anywhere at any time. (Junor & Usher 2008, p.20)

The drivers for improving credit transfer arrangements are to increase student mobility and promote efficiencies in both time and cost to students, institutions, and government. Over the past three decades Australian federal, state and territory governments have sought to make it easier for students to enter higher education from a diversity of backgrounds and experiences, including those students moving from VET into higher education. The Council of Australian Governments (COAG) has a goal of 90 per cent of 19-year-olds achieving Year 12 or its equivalent by 2020 and the Commonwealth Government has announced an increased participation goal for tertiary

education: 'Our ambition is that by 2025, 40 per cent of all 25–34 year olds will have a qualification at bachelor level or above' (Gillard 2009). Today's undergraduate degree completion rate is 32 per cent (2009).

An enabling policy in Australian tertiary education is the Australian Qualifications Framework. As a national framework, the AQF underpins local agreements and arrangements for credit transfer. The AQF emphasises the importance of qualifications in Australian postsecondary education.

Implemented in 1995, the AQF comprises 15 qualification types and provides the structural basis to a linear progression for the attainment of qualifications. It is a descriptor framework that outlines the distinctive characteristics of different types of qualifications in different sectors. AQF descriptor guidelines are used for negotiating articulation pathways for VET learners who are seeking credit transfer into a higher education program. However, the task of determining credit is unclear because of the diverse characteristics of qualifications in the various vocational domains, industry contexts and disciplinary fields of study.

Demands for change are being voiced. In 2005 the Ministerial Council for Education, Employment, Training and Youth Affairs (MCEETYA) adopted a series of principles for credit transfer and articulation, *Good practice principles for credit transfer and articulation from VET to higher education*. This guide included the requirement (Principle 2) that:

> All individual institutions and providers should include formal vertical and lateral pathways for credit and articulation, both in the design of new courses and programs of study and when upgrading existing courses and programs of study, and that these pathways should be widely publicised to existing students and potential applicants.

Concerns from others at the time about the ambiguity surrounding the AQF descriptors as bases for credit transfer were more direct. Keating et al.'s (2005) view was that the AQF is minimalist and subsequently has very little role in cross-sectoral articulation or integration and that multiple factors exist which are placing new pressures on the AQF, the most recent being new participation demands (Keating 2008).

In the past year the focus on the AQF has come more directly from government through several major policy reviews of the Australian education system; these resources all have significant implications for credit transfer and articulation:

✧ The Commonwealth Government's *Australian higher education review (Bradley Review)*

✧ The Australian Qualifications Framework Council's Strengthening the AQF Project (ongoing)

✧ The Australian Qualifications Framework Council's Credit Transfer Terminology Project.

The *Bradley Review* (2008) argues for improved connections between VET and higher education:

> Implementing the recommendations set out earlier in this chapter to better align responsibility, funding and regulation for VET and higher education and to improve systems governance will establish much stronger connections between VET and higher education. Low rates of credit transfer between sectors are a symptom of these structural barriers and, by addressing the underlying issues, rates of credit transfer will be driven up over time (p.191).

The Bradley Review used the Organisation for Economic Cooperation and Development (OECD) definition of tertiary education—namely that tertiary education applies to programs at International Standard Classification of Education (ISCED) levels 5B, 5A and 6. In Australia, ISCED level 5 tertiary education represents diploma and above level qualifications delivered by both universities and VET providers. ISCED 5B is for more practically oriented and labour market qualifications, while ISCED 5A covers more theoretically based, research-oriented programs (OECD 1999). It is the diploma and above level qualifications, where articulation from VET to higher levels of education takes place, that principally concerns credit transfer.

The Australian Qualifications Framework Council provides policy advice to the Ministerial Council for Education, Employment, Training and Youth Affairs on:

◇ Strategic strengthening of the AQF required to meet identified needs such as improving national consistency and contemporary relevance, including national and international portability, and

◇ Improving flexible qualification linkages and pathways in education and training within and across all sectors, including recognition of non-formal and informal learning.

(Australian Qualifications Framework Council 2008)

The Australian Qualifications Framework Council is responding to the need for improved sector connections, particularly in the area of credit transfer, with the council's Strengthening the AQF Project the key reform in this area. It is a project designed to create new national policies on credit arrangements that include principles, guidelines and terminology (Australian Qualifications Framework Council 2009).

The context is the federal government's desire to improve the connectivity between the university and VET sectors to meet the needs of students rather than to satisfy institutional requirements (Australian Qualifications Framework Council 2009), the challenge being to increase levels of educational attainment. The Australian Qualifications Framework Council has a key role and has been asked by the Deputy Prime Minister to prepare recommendations to improve qualifications and recognition arrangements that will lead to more seamless pathways between the VET and higher education sectors and which will benefit students. The motivation is to make it easy for individuals to upgrade their qualifications.

In Victoria, where the present research was carried out, a skills reform agenda is in the first stages of implementation (the Victorian Government's *Skills Victoria – skills reform, securing jobs for your future* 2009). These reforms seek to increase participation in VET, with a focus on diploma and above level qualifications, which has implications for articulation between VET and higher education.

Victoria's three dual-sector higher education institutions responded to the *Securing jobs for the future* policy document, as did numerous VET providers. Swinburne University of Technology (2008) and the University of Ballarat (2008) focused on the importance of workforce participation and aligning skills training to workforce needs rather than on creating a culture of lifelong skills development. Victoria University's (2008) response focused on governance and funding-related issues, in particular those surrounding the delivery of TAFE courses, as well as the need for a non-linear approach to funding, given the frequent non-linear approach to learning.

Another Victorian initiative is the Credit Matrix (Victorian Registration and Qualifications Authority 2008). The Credit Matrix aims to promote a common currency of learning for the education sectors to improve credit arrangements between schools, the VET sector and the higher education sector. The Credit Matrix assigns levels of learning according to an internationally recognised credit standard by focusing on the complexity of learning; points based upon volume of learning are also allocated. In the Credit Matrix, one credit point is equal to ten hours of average designated learning time. However, this goal proves unwieldy for the purposes of credit transfer, as quantifying learning time according to unit of competency conflicts with units of competency being a qualitative construct. For the organisations participating in this research, an assumed learning time for the basis of credit transfer was the learning time required for the completion of the whole qualification.

As a policy intervention the Credit Matrix is attractive; however, it is limited to Victoria and, as reported in the Victorian Registration and Qualifications Authority's own analysis (2008), it does not reduce the workload involved in determining credit. The Credit Matrix is as time-consuming as other credit transfer processes, as a consequence of having to calculate the content detail of educational achievements that informs the load attached to awards.

In all focus groups in this research project, awareness and knowledge of the Credit Matrix was vague. Many participants were attracted to the idea of the matrix if it was going to make credit transfer less onerous. The overwhelming sentiment was that a Credit Matrix type arrangement was needed to assist students and to produce a more consistent approach to credit transfer. However, the variability of VET packaging of qualifications was raised as potentially affecting consistency in a Credit Matrix approach.

Barriers to credit transfer arrangements

A national study of credit transfer, commissioned by the former Australian National Training Authority (ANTA) and Universities Australia, *Pathways to partnerships* (Carnegie 2001), identifies three common barriers to credit transfer—sectoral, organisational and external.

Sectoral barriers

Sectoral barriers include concerns over losing sector identity and the cultural and pedagogical barriers that exist between VET and higher education. Higher education constraints to credit transfer relate to autonomy and the diversity of content of qualifications (Carnegie 2001). Historically, the fundamental feature of an autonomous university system is the diversity of the content of its qualifications (Carnegie 2001). This is seen as an essential educational and competitive strength; however, the effect is that:

> no two educational awards from different universities, bearing the same title and covering the same discipline, will contain the same content except at the most generic of levels (p.176).

In addition, institutions are driven to strategically differentiate themselves by diversifying their qualifications to compete for students: 'maintenance of market share is determined by difference not sameness' (p.178). Carnegie makes a further point regarding the VET–higher education divide that 'institutions willing to recast the dichotomy first may well establish a market edge' (p.171).

Cultural and pedagogical barriers are interpreted by Keating (2008) as the contrasts between the governance of the two systems—VET and higher education—in terms of their purpose and knowledge characteristics. Both characteristics are strongly differentiated in the sectors in terms of knowledge capital and for the policy agendas of social inclusion. The consequence is that credit transfer involves comparing industry standards of expected workplace performance with the standards of higher education subject disciplines (disciplinary knowledge).

For Keating (2008), VET addresses human capital needs of competencies and applied skills, while higher education attends to the social and cultural needs of knowledge mastery and conceptual understandings (p.5). Knowledge characteristics are cultural capital 'built through cultural activities and scholarship and are passed on through the core constructs of the subject disciplines' (p.2). In turn, pathways are lifelong learning capital, representing social and economic participation and inclusion:

> This purpose requires generalist or platform qualities of qualifications as well as linkages between qualifications. Qualifications that meet this purpose need to have broad recognition and links with other qualifications at the entry levels and as a bonus through credit. They gain their currency through their platform of general learning or through their capacity to discriminate or create hierarchies, depending upon the nature of and their relationship with their users. There is an obvious tension here (p.2).

In relation to pedagogical barriers, Carnegie (2001) believes that the difference between the sectors is the extent to which graduates are expected to achieve a critical awareness of both theory and practice. The majority of VET delivery operates through training packages, which require a high degree of expertise to shape into meaningful learning experiences. Training packages place units of

competency at the centre of VET pedagogy. Universities are required to make sense of these units when entering into dialogues about credit transfer. The large number of units that comprise each VET qualification adds to the complexity of credit transfer and articulation arrangements. Electives and training package rules vary from each VET learning setting, according to whether the organisation is a TAFE institute, an enterprise provider or a private or community provider. These packaging arrangements provide flexibility within training packages, but that flexibility adds to the difficulty of credit transfer determinations.

Carnegie claims that the National Training Framework has had little impact on cross-sectoral qualifications linkages between VET and higher education in terms of a definition of knowledge. Knowledge is presented as an underpinning construct but is never defined, nor are how knowledge is acquired, what we know and how we know what we know; the lack of all of these makes the development of linkages more difficult (2001, p.xviii). Second- and third-generation training packages have sought to address the issue of defining knowledge within competency standards through the inclusion of 'Required Knowledge' listed alongside 'Required Skills' in unit of competency descriptors.

Organisational barriers

In the past decade within Australia, 'seamless pathways' have received emphasis in various policy documents (Harris, Rainey & Summer 2006). They are a basic tenet of national policy as espoused by the Ministerial Council for Education, Employment, Training and Youth Affairs (2005). But 'seamlessness' remains an opaque set of processes. After completing VET learning and applying for credit transfer, there is no single system-wide approach to the university granting of credit. Rather, there is a range of arrangements that facilitates articulation for VET learners into higher education—from personalised arrangements through to formal inter-institutional agreements. In Victoria, the devolved character of the VET provider system has contributed to the diffuse and localised approaches to credit transfer and articulation arrangements.

No quantitative data at a state or national level are available to indicate how credit is calculated or awarded. The most comprehensive set of data comes from the 2006 case study report of PhillipsKPA, undertaken as a national study to improve credit transfer outcomes for VET articulation to higher education. Similarly, until recently there has been surprisingly little written about student experiences of transitioning from VET to higher education (Wheelahan 2008). Wheelahan highlights difficulties experienced by students in negotiating pathways and dealing with the consequences of credit transfer.

External barriers

External barriers to credit transfer include 'competition and other government policies, current funding arrangements, differing industrial relations systems, other regulations and the role of professional associations' (Carnegie 2001, p.xvii).

Professional and industry bodies with considerable hold over the design, content and structure of courses and who 'preside over formal professional accreditation procedures enabling practice' (p.179) were impediments to credit transfer in the university system. The national competition policy in the training and education market is correspondingly seen to be counterproductive in the development of cross-sectoral linkages that facilitate student mobility.

TAFE funding arrangements in Victoria are premised on a purchaser–provider model. The state government has historically purchased training on the basis of industry intelligence about skill needs. Higher education funding on the other hand is premised on Commonwealth funding that is indexed according to traditional institutional offerings. This results in a disconnect in the planning of institutional course offerings by the different sectors and results in problems with access to credit transfer into comparable destination programs.

Roles and responsibilities for credit transfer in the sectors are ambiguous and involve differing industrial relations approaches. To date credit transfer has involved skills, as well as commitment and good will, from academics, teachers, department heads, customer relationship managers and administrators.

In terms of policy, Wheelahan (2008) believes that Australia lacks a cross-sectoral policy body beyond the AQF Advisory Board that could enable student mobility, advise government or frame a cogent lifelong learning policy.

Summing up

There is a range of drivers for institutions and policy-makers to progress learning pathways premised on credit and credit transfer. 'Seamlessness' is the key driver. Seamless pathways are systems and processes that accommodate all qualification articulations and credit transfers at a national level and represent the ideal outcomes of an agenda to improve access and equity to better manage physical, human and educational resources and to better coordinate government policy at state and national levels. Seamless pathways would also support market drivers to develop linkages between the sectors as a strategy to attract students.

Raffe (2003) suggests that seamless pathways are an attractive metaphor for policy-makers. The reality however suggests that a learning career is more aligned to patterns of 'crazy paving'—a term coined by Harris, Rainey and Sumner (2006)—in particular for students who seek to move between VET and higher education. This crazy paving metaphor can be applied to non-linear choices made by students, despite the barriers. A crazy paving metaphor can also be applied to the dissonances between the sectors of Australian tertiary education, to divergent policy intentions across state and national jurisdictions, and to the multiple institutional practices that both enable and inhibit credit transfer and student mobility.

Increasingly, Australian tertiary provider institutions are responding to the greater demand for learner mobility and to the increasing variety of VET student motivations for both university admission and for credit transfer. Universities are extending credit transfer arrangements to provide learners with improved articulation opportunities and to increase participation in higher-level tertiary education programs.

Findings

The findings of this research project are based on a descriptive analysis and interpretation of credit transfer policy documents and developments.

The credit transfer experiences of students were explored in three semi-structured focus groups in metropolitan and regional locations (described in the report as Regional 1 and Regional 2—comprising 74 university and TAFE personnel and students.

Table 1   Composition of focus groups

Focus group location	Participant numbers	Participants
Metropolitan	26	19 students attending TAFE and university
		4 university students
		3 TAFE teachers
Regional 1	32	15 TAFE teachers
		4 TAFE senior managers
		5 university administration staff
		8 university advanced standing officers and faculty project administration staff
Regional 2	16	13 TAFE teachers and managers
		3 university lecturers

An online survey, linked to the Enterprise Registered Training Organisation Association's website, was used to collect data on the partnership arrangements used by enterprise registered training organisations to achieve credit transfer and articulation pathway arrangements. With 18 responses from 25 members, follow-up interviews were conducted with four training managers of the enterprise registered training organisations who identified as having a significant interest in issues of credit transfer and articulation in their survey responses.

Refer to appendix 2 for more details on the methodology.

University credit transfer and articulation policy

Achieving credit for TAFE qualifications before commencing university studies depends on inter-institutional dialogue, student effort and an awareness of university regulations. The academic board of Deakin University has produced an advanced standing and credit transfer policy, *Credit for prior learning,* which is implemented by each of the university's faculties. The university's policy, developed in accordance with Universities Australia's *Credit transfer principles and guidelines* (2004), stipulates that any student must complete a minimum of one-third of their course at the university in order for an award to be conferred.

Table 2 sets out maximum credit available under the university regulations. This table is the basis for credit transfer negotiations and determinations by the university when VET qualifications are being considered. The certificate and diploma awards referred to in the table are university awards.

Table 2   University credit determinations

Maximum credit (points)	University award
2	Certificate (4 credit points total)
4	Diploma (8 credit points total)
10	Associate degree (16 credit points total)
16	Bachelor degree (24 credit points total)
21	Bachelor degree (32 credit points total)

Credit is either specified, unspecified or a preclusion. Specified credit is granted when there is an overlap of content at a similar standard and, to avoid duplication in learning, the student is given credit for a specific subject. Content equivalence is recognised. The university identified specified credit as the preferred approach to credit transfer. Unspecified credit involves the granting of credit for achieved learning where no comparable university subjects exist. The learning achieved is generally recognised as related to the course for which the student is seeking credit transfer. Preclusion operates on a discretionary basis, such that a faculty can provide credit by precluding a student from the requirement to study a particular subject. Preclusion is normally based on education achievement, employment history or other relevant achievements. As a Regional 1 focus group participant reported, it is about:

> recognising a candidate's background as fulfilling the objectives of what the university is
> trying to teach them in the course at the introductory level.

The credit arrangements awarded by the university follow the AQF definitions of specified and unspecified credit. The AQF definitions also include block credit being 'granted towards whole stages or components of a qualification' (Australian Qualifications Framework Council 2009a, p.8).

The university policy is implemented through an academic board and faculty committees. Each faculty has an 'advanced standing officer' who processes credit transfer applications. Credit transfer applications are judged on the achieved education level of applicants. A focus group participant reported that each decision entails:

> judging the equivalence of complementary knowledge and skill requirements and the
> information details from another award (either from another sector or the same sector) that
> are assessed against the learning objectives and descriptions of the relevant university units.
>
> (Regional 1)

However, the credit transfer and articulation outcomes are complicated by the variability in units of competency that can be packaged together to form a VET qualification, especially when including electives.

The university does not grant credit towards a higher education award for VET certificates I, II and III; certificate IV qualifications are considered as meeting requirements for admission rather than for credit transfer. Where the certificate IV has dual VET–higher education award status, advanced standing may be granted. The most common example of this is Certificate IV in Nursing, where all holders are eligible for articulation into a bachelor-level nursing program. Focus group respondents in Regional 1 stated that, in practice, credit transfer arrangements from the Certificate IV in Nursing vary between universities and depend on the sequencing of subjects in the relevant Bachelor of Nursing program. TAFE respondents engaged in nurse education confirmed that having the right subjects and sequencing, together with university acceptance of VET learning and assessment, were the key determinants in the credit transfer achieved. In the negotiations for credit transfer and articulation, the university award is used as the benchmark.

Compliance with university policies is an important component in any credit transfer application, and the role of the advanced standing officer is central to achieving a process that can be quality-assured. In this university–TAFE context the advanced standing officer has the responsibility for

considering the details of each unit of competency that a prospective student has achieved in their VET qualification. Several focus group participants stated that credit transfer arrangements, rather than being a precise process, were approximations based upon the professional judgments of advanced standing officers.

Once credit transfer determinations are processed by advanced standing officers and the decisions are endorsed at a faculty level, they are uploaded onto a university information system that is used for future credit transfer decisions. Thus each credit transfer decision sets a precedent for future credit transfer applications.

Example: Accounting for credit

Focus group discussions in Regional 1 revealed that one TAFE institute had developed a comprehensive credit transfer and articulation arrangement pathway for its accounting programs. By nesting certificate III and certificate IV qualifications within diploma and advanced diploma qualifications, the TAFE institute had created a seamless learning pathway into the university's Bachelor of Commerce (Accounting). To achieve their accounting degree, students are required to undertake two years of full-time study at the TAFE institute, followed by a further 18 months of full-time study at university. Appendix 4 provides the units of competency in the nested accounting qualifications, and the list represents the typical output of a TAFE student's academic transcript for this pathway arrangement. The two other TAFE institutions in the university–TAFE alliance do not nest their accounting qualifications in the same manner but separately deliver the entire advanced diploma qualification.

This comprehensive nested qualification pathway is an example of the complexity of course designs where a response is required in credit transfer and articulation arrangements. The course was developed by the TAFE accounting coordinator. To create continuity in learning from a beginning-level certificate III to an advanced diploma level requires a strong understanding of the relevant VET training package rules. Using the Financial Services Training Package, the coordinator included all compulsory units and took a flexible approach to the elective requirements of each qualification.

To achieve the articulation arrangement with the university, the coordinator initiated direct contact with her university faculty counterpart. In this way she could explain the different aspects of the TAFE accounting program and limit any potential misunderstanding from the university about the TAFE approach to accounting education. As the coordinator reported in the Regional 1 focus groups, working with training packages is hard enough for TAFE personnel and it would be unreasonable to expect the same level of understanding from university counterparts. In her negotiations she sought to consolidate the 39 units of the accounting qualification to achieve an equitable credit transfer arrangement.

Accounting students in this university–TAFE alliance now have a seamless pathway to a compatible university award as a result of the time and effort invested in assessing 39 units of competency and explaining the TAFE delivery method and its substantive content; confidence in the rigour of the VET learning was also a factor. The coordinator stressed the importance of having 'graded assessment' in gaining university acceptance in the level and quality of the TAFE accounting program. Graded assessment was used in VET assignments and examinations and, although it is inconsistent with competency-based assessment, it makes student achievement more readily understood by university counterparts. This TAFE course coordinator claimed that implementing a graded assessment strategy in this nested pathway was essential for achieving an articulation agreement since universities understand grades, whereas competency-based training is not well understood and is often not well regarded. The efforts of this TAFE institute in securing seamlessness were not limited to the arrangements of the course coordinator; they included personal communications from the TAFE teaching department to the university faculty and between other organisational levels. A good practice guide for credit transfer by another department of the institute was also developed.

Institutional crediting strategies

The participating university's commitment to credit transfer occurs as a whole-of-organisation approach. Credit transfer outcomes form the basis for future credit transfer decisions and also provide the ongoing information for the university's web-based portal, the advanced standing database.

There were other joint delivery programs by the participating organisations reported in this research which provided guaranteed credit and articulation arrangements based upon completed qualifications. These included arrangements in building and architecture, tourism and management, children's services to early childhood education, and sports and recreation to sports development management.

Example: Credit transfer database

In 2005 the university established the advanced standing (credit transfer) database with a view to increasing opportunities for prospective students to gain credit for their education achievements. The database allows prospective students to enquire about possible course credit that may be awarded in a university course, based on completed studies at an Australian or international tertiary institution. The database includes four fields: country of origin of education, institution, course or qualification achieved and the university course the candidate is enquiring about. Some entries on courses achieved require a year range to accommodate the changing nature of curricula and training packages. The database is accessible for anyone to submit an education qualification from which a determination of credit is provided. The database is built around units and qualifications and includes information on institutional agreements nationally and internationally. An example of the participating university's advanced standing database is provided in appendix 5.

The parties in the university–TAFE alliance participating in this project engage in institutional credit transfer agreements. However, the university is also committed to providing articulation and credit transfer outside the university–TAFE alliance on a national and international basis. The university operates with the view that the granting of credit transfer is strategic for the organisation in that it ensures healthy student participation levels and forms the basis for inter-organisational alliances and partnerships. The institutional credit transfer arrangements allow students from other institutions to achieve an agreed level of credit for their studies and undertake a degree-level award at the university.

The regular requests from organisations for institutional advanced standing create their own pressure. As a Regional 1 focus group participant explained, at an organisation level the university has involvement from other course, curriculum and government staff who are familiar with curriculum developments within the faculty—they know what units are on offer in what courses. It is very fluid, with the university curriculum changing constantly. Staff make an assessment of advanced standing against certain units and then find that those units change six months or a year later. So it is necessary to have a device for maintaining currency to enable the database to be adjusted accordingly.

The university, through its advanced standing officers, can negotiate credit transfer on a case-by-case basis. The advanced standing database is used to provide a starting point for such negotiations. The negotiations can result in additional unspecified credit being achieved or preclusion being granted because of employment and career achievements. In the Regional 1 focus group it was revealed that students on occasions would provide additional education and career-related resources when seeking to achieve credit and admission into a particular course. Both Regional 1 and Regional 2 focus groups recognised the benefit of negotiations between individual staff in order to gain further credit for individuals.

The assessment of equivalence on the basis of existing university curricula and subjects is an ongoing activity in all of the university's faculties. Equivalence is determined by identifying similar content, or complementary knowledge or skill requirements. The process becomes complex when it is undertaken across two distinct education cultures. The process involves VET and university personnel representing differing educational and disciplinary territories. To achieve common understandings and determine equivalence between a VET diploma and a university degree depends upon a willingness to speak across educational contexts and a generosity on the part of those involved.

Determining credit is difficult when there are no direct equivalences or clear relativities between a VET qualification and a university award. Comparability centres on course content, assessment procedures and pedagogic approaches. According to the university, equivalence should be based upon the relevant components of a training package and/or accredited course curriculum that can be related to the learning objectives and/or descriptions of the relevant university subjects or awards. These assessments of equivalence form the basis for what is termed 'institutional determinations' and are ratified by the relevant faculty committees. This process places the university award as the benchmark for equivalence.

Student credit transfer experiences

For the 19 students in the Metropolitan focus group (see table A1) there was the opportunity to study concurrently an Advanced Diploma of Tourism Management at TAFE and subjects in the Bachelor of Management at university. The features of the Advanced Diploma of Tourism Management/Bachelor of Management course is outlined in appendix 6.

However, in most cases a completed educational qualification is central to credit transfer and articulation. Irrespective, not all qualifications in all fields attract credit, and universities award credit for the achievement of a qualification differently. This variability was identified in the PhillipsKPA (2006) study:

> Credit is awarded in different combinations (block, specified and unspecified) according to the structure and focus of matched and unmatched qualifications (p.113).

Students who participated in this research were aware of these differences and actively sought information from other students, teachers and lecturers on how best to achieve credit transfer and articulation pathways that would meet their individual needs and aspirations. Even though the participating university's advanced standing database provides common minimum awards of credit transfer, the students all recounted stories of individual credit transfer negotiations and of navigating learning pathways. Of credit transfer between VET and higher education, their common experience was that different VET qualifications resulted in different pathways with varying credit transfer arrangements and outcomes. While most students who had completed a diploma or above qualification were granted credit transfer, there were students who reported that their comparable VET education achievements did not attract any credit. This was explained as being the result of studying in a niche vocational field.

Two students in the Metropolitan focus group had completed TAFE diploma-level qualifications in jewellery making and, upon moving into a related university program, were required to start in the first year of the three-year degree. One of these students had previously completed an undergraduate arts degree and had been granted admission into a master's degree program in jewellery design and yet no part of her diploma of jewellery qualification attracted credit for the bachelor degree.

The credit transfer process was stressful and difficult for a student in the Metropolitan focus group who had completed a Diploma of Conservation and Land Management and who had gained a place in a Bachelor of Environmental Management. According to this student, not one person had all the information needed to give advanced standing into the course. In the end someone brought all of the relevant information to the faculty administration officer and that person gave all students who had completed the Diploma of Conservation and Land Management the same amount of credit.

Seeking credit transfer is not always the preferred option. One student who completed a Diploma in Laboratory Operations articulated into a Bachelor of Biological Sciences and while they were aware they could get credits for their VET education achievements, they chose not to because they did not want to miss out on anything; they subsequently completed all of the subjects required for the degree.

From the regions—a staff focus

In Regional 2 focus group, 13 of the 16 participants were TAFE personnel; the other three were university staff (see table A1). All participants were definite that most credit transfer arrangements they engaged in were organised informally through TAFE and university course academics and administrators. They explained that, given their small and remote regional context, credit transfer agreements based on personalised arrangements were inevitable.

All Regional 2 participants recognised that there were differences in how education is provided by TAFE and university but that VET learning should be valued when trying to achieve equitable credit transfer and articulation agreements. The focus group participants felt that the perceptions of TAFE as being not as rigorous as university study prejudiced credit transfer negotiation and agreements. The university participants believed that rigour was understood differently in the two sectors. All participants believed that for effective credit transfer to occur—to ensure good outcomes for students—there needed to be more impartial exchanges and more of a meeting in the middle.

One TAFE teacher relayed a situation that involved negotiating a credit transfer and articulation pathway agreement. They had attended a meeting to organise a credit transfer agreement and had brought along outlines of the units of competency, course content and examples of assessment; their university counterpart brought nothing. They interpreted this as the university being uncooperative and arrogant. It was seen as a lack of commitment to credit transfer and an unwillingness to recognise the value and worth of TAFE education.

Both the university and TAFE participants were committed to ensuring that local students were supported with credit transfer and articulation opportunities to enable them to continue studying in their home region. The disincentives faced by students who were required to travel out of the region to pursue further studies, such as additional expense and potential isolation, signalled the need for extra credit transfer support for those students who were comfortable with 'country culture'.

The issue of 'metro-mentality' and 'city-centricity' was raised by both university and TAFE staff participants who believed that policy-makers often overlooked issues affecting country students and tertiary institutions in country areas. The university participants related examples where advanced standing officers were often not available at this regional campus, nor did they always have accurate information about the local delivery contexts.

All of the participants identified the following elements as important for increasing credit transfer agreements: improved pathways negotiations, a database of credits, and mutual incentives for intersectoral cooperation.

The enterprise provider experience

Enterprise registered training organisations operate differently from other registered training organisations, in that they do not build training pathways directly from industry training packages. Instead, these organisations structure training according to the enterprise's immediate business needs. This is followed by a mapping of skills to training package assessment requirements. Many enterprise registered training organisations have a limited registration scope, scope being closely linked to the workforce composition of the respective enterprise (Enterprise Registered Training Organisation Association 2009b). Most enterprise provider qualifications are at certificates II to IV, qualifications with a lower likelihood of credit transfer. Employees in Australian retail and fast food enterprises in particular routinely complete enterprise training at the operator level of certificates II and III. The leadership roles of the enterprises represent a workforce development approach to skills development, with titles for these roles including Director of Education and Learning, RTO Manager, Learning and Development Manager, Organisation Development Consultant or Employee Relations Director.

The Enterprise Registered Training Organisation Association is the association for enterprise registered training organisations. Appendix 3 provides information on the association's aims and objectives, which at the time of the survey had 25 members, with 18 surveys being returned. Of the 18 surveys returned, 13 indicated that they had no formal arrangements with higher education providers for credit transfer purposes or interest in credit transfer, although they had collaborative arrangements with other VET providers. Of the five survey respondents who did have formal arrangements with higher education providers, all identified the need for comprehensive credit arrangements as important structural and contractual elements necessary for entering into mutually beneficial partnership arrangements. Four of these five indicated that they had an ongoing partnership arrangement with universities for credit transfer purposes; two indicated the existence of a memorandum of understanding.

The survey responses indicated that in the majority of instances there are no formal relationships with higher education providers, but that for building informal relationships, personal liaison and communication with students was essential; in particular employees who have achieved qualifications were central to determining such liaisons and future partnerships.

Administrative issues, funding, accountability issues and curriculum and qualification design were identified as the main impediments to credit transfer, in that order. Administrative issues involve the development of student testamurs and negotiation with higher education institutions to explain enterprise-based educational achievement. Enterprise registered training organisations deliver a great deal of education and training related to employment which often goes unrecognised in broader credit transfer and articulation policy discussions. In an enterprise context the student identity is secondary to being a paid employee who is required to undertake certain employment-related education and training.

In order to extend the insights into enterprise provision, interviews were conducted with four enterprise training managers who had indicated in their survey responses a strong interest in credit transfer. An enterprise training manager has responsibility for the quality assurance associated with education and training; negotiating credit transfer and articulation is a related responsibility.

IBM

This enterprise registered training organisation delivers certificate IV and diploma qualifications in frontline management. The company has a long-term partnership with a regionally based Victorian dual-sector university and has established pathways with credit transfer and articulation arrangements with this university. The registered training organisation is co-located on the campus of the same dual-sector university. The registered training organisation manager views the company employees as clients of the organisation and stated that credit transfer was an important component in developing ongoing learning opportunities for present employees and for future employment situations.

The manager believed that it was through patience and persistence that credit transfer and articulation arrangements were achieved to meet their needs as an enterprise and those of the university. The partnership has evolved over a ten-year period and much effort has been made to ensure that the higher education provider understands their business. The manager further stated that providing quality information was central to achieving good credit transfer arrangements for the organisation's employees. The sort of credit transfer agreement achieved also depended upon the university personnel involved in the process, the knowledge they had of the business and the VET qualifications involved. Accordingly, it was this manager's view that these arrangements are not secure but are dependent upon the cooperation of the existing university staff and that something as simple as a staff change could undermine hard-won credit transfer arrangements.

Defence

The Australian Defence Force's Director of Education and Learning is responsible for workforce development in all of the defence forces. Within Defence there are four registered training

organisations, with 580 qualifications on their scope of registration. The Australian Army RTO delivers 185 training package qualifications and 44 accredited courses. The four registered training organisations are:

1   The Royal Australian Navy RTO

2   The Australian Army RTO

3   Royal Australian Air Force RTO

4   Defence Learning Services Network

The interview revealed that the Director of Education and Learning provides leadership and quality assurance support for all four registered training organisations. A dedicated officer is employed to negotiate pathways, including credit transfer and articulation arrangements. Credit transfer arrangements with receiving tertiary institutions leading to articulation pathways are centrally organised by Defence for service and ex-service personnel. Defence has formal relationships with 25 different universities for credit transfer and articulation purposes.

In addition to the officer who organises credit transfer, Defence has established an advanced standing database, the Australian Defence Forces Higher Education Advanced Standing (ADFHEAS). The database is available for both serving members and civilians who achieve a qualification through the forces. The database provides information and advice about different university courses and the credit transfer available for the VET qualification completed.

QANTAS

QANTAS has three partnership arrangements with universities for credit transfer and articulation purposes. Two university partnerships focus on executive leadership and development, while the third partnership is with a dual-sector institution that provides VET and higher education diploma-level qualifications. The diversity of qualifications held within the organisation's workforce, including a range from engineering to management, makes the negotiation for credit transfer and articulation for these qualifications complex.

The partnership arrangements that QANTAS has developed with the three tertiary institutions provide opportunities for ensuring that full credit transfer arrangements and entitlements are achieved for their workforce. In securing credit transfer and articulation, the manager of this registered training organisation believes that there is a need for universities to recognise not only education achievements but also employment histories and career-related achievements.

DP World

The National Learning and Development Manager at DP (Dubai Ports) is responsible for the management of its registered training organisations. In attending to DP World's workforce development processes the manager maps the corporation's training material to Australian qualifications. The majority of the qualifications available to the DP World workforce come from the Transport and Logistics Training Package.

DP World has an established relationship with the Australian Maritime College in Tasmania for diploma level and higher qualifications. DP World aims to develop its workforce to higher qualification levels to address both the transport and logistics context and the abilities needed in frontline and strategic management. The enterprise seeks customised education and training products for its workforce when negotiating education services from universities. The learning and development manager described how the company's enterprise education and training needs were competitively addressed by different tertiary providers in a request-for-tender process.

The manager was firm that it was important to both tailor the education to the enterprise need, as well as maintain the rigour of the qualification at diploma or degree level. The manager suggested that DP World works most productively with tertiary providers who are prepared to move beyond

an off-the-shelf approach. A customised approach recognises and builds on the existing workforce knowledge and skills; it is underpinned by dedicated staff who immerse themselves in the business of providing high-quality education. Central in this relationship for delivering higher education is the provision of credit transfer for education already achieved. The learning and development manager was definite that for this enterprise a carbon-copy approach to education, where the training material is similar to that of other providers, is not attractive or useful to the development and productivity of its workforce.

Discussion

This section discusses key points of the research project with reference to the findings from the data analysis. It is structured according to the three research themes: determining core elements required for negotiating pathway arrangements between VET and higher education; the VET learning interface with higher education with implications for curriculum content, teaching practices, learning processes and assessment arrangements; and future strategies for enabling learner mobility in the wider VET sector.

Core elements for negotiating VET and higher education pathways

This research shows that the institutional arrangements between providers constitute a significant component of successful credit transfer and articulation. However, these institutional arrangements are far removed from an experience of effective and efficient credit transfer policy arrangements between VET and higher education. The formal structuring of articulation between VET and higher education occurs on a spectrum ranging from well organised to haphazard. Formal alliances, partnerships and institutional agreements are unique occurrences; they may provide effective credit transfer arrangements that can be quality-assured and systemically reviewed, but only for the duration and conditions of the arrangement.

Similarly, in the university–TAFE alliance context, the advanced standing database has been established to achieve equitable and consistent credit transfer and articulation practices but, in most circumstances, this database is only a useful starting point. The Department of Defence enterprise training context likewise has a credit transfer database to support and enable credit transfer and articulation for graduates from its registered training organisations to their partner universities, although a dedicated officer is required for the actual credit transfer negotiations.

The reasons for the complexity of the processes are as much cultural as they relate to systems weaknesses. The data suggest that many credit transfer determinations are based on individual subjective values of the learning achieved and in particular relate to the differing positions of those involved in granting credit. These differences impact on the granting of credit. When student movement between VET and higher education is based on individual assessments of content and pedagogy and dependent on localised agreements and negotiations, the outcomes are likely to be inconsistent.

Australian tertiary education systems operate hierarchically, with university learning deemed to have more value than VET learning. This hierarchy is reinforced in policy structures such as the AQF. Accordingly, while universities may engage in equitable credit transfer processes, they may act to privilege their own approach to education as qualitatively superior. The research highlighted criticism of competency-based training and a refusal to recognise comparable VET learning. As an increasing number of institutional and individual achievements of credit transfer illustrate, such instances are becoming the exception. The differences between the sectors remain as potential hindrances to dialogue. Equivalence of content and pedagogy can only be established if perceived hierarchies and vested interests are set aside.

Most of the complexities that surround the VET–higher education learning interface impact directly or indirectly on credit transfer and contribute to the notion of a 'crazy paving' for learners. As the

sectoral boundaries between VET and higher education blur, the qualification gains prominence. Learning mobility is achieved through the attainment of a higher-level qualification; to some extent the educational sector is secondary. A degree program offered by a non-accrediting higher education provider is likely to be more valued for its degree status and less associated with the sector from which it is awarded. This is especially true for accredited higher education courses from the VET sector, which are not yet developed enough to influence credit and articulation patterns.

Qualifications are not pure-bred. Most VET diplomas and above provide a basis for credit transfer and articulation into a degree-level program. However, the different types of training package qualifications these diplomas can encompass add further complexity to credit transfer and articulation negotiations and particularly to understanding the VET–higher education interface.

The issue of reconciling the skills-based competencies of VET with the codified knowledge of higher education in order to more clearly navigate the boundaries remains complicated. As the complications have real and existing impacts on learner mobility and underpin uneven and inconsistent approaches to credit transfer, it is important to ensure that educational qualifications— their curriculum content, teaching practices, learning processes and assessment arrangements—are accorded due worth, irrespective of the awarding institution.

Another complexity in achieving equity for credit transfer results from the tertiary sector's being now more strongly organised on market principles.

The consistency of available policies, guidelines and regulations on credit transfer has not yet been fully evaluated. Policies on achieving equitable credit transfer are provided in the AQF and Universities Australia guidelines. There are also local university and registered training organisations regulations and policies on credit transfer.

The Credit Matrix itself is a retrofit to training packages, with no application in the development of the AQF qualifications. The Credit Matrix remains in its infancy in terms of its acceptance and understanding by the sectors, except for pilot or demonstration projects. It is the practice of learning equivalence that remains the point of impasse for achieving equitable credit transfer arrangements. The Ministerial Council on Education, Employment, Training and Youth Affairs (2005) definition affirms this:

> Credit is the value assigned for the recognition of equivalence in content between different types of learning and/or qualifications, which reduces the volume of learning required to achieve a qualification.

A means for establishing equivalence is imperative to ensuring that credit is recognised and awarded without prejudice. How this occurs remains an intractable issue while different tertiary education providers have different resources available to them. Making credit arrangements universal for all tertiary education providers is essential and welcome. Evidence-based credit decisions are imperative but this requires an ongoing systemic need to clarify the 'rules of evidence'—of how equivalence is arrived at—and to articulate equivalence in terms of content (the learnings), outcomes (the qualification) and contexts (employment history and life experience).

Enabling learner mobility

This research into credit transfer identifies methods for enabling mobility for future VET students, whether from a TAFE institute or from an enterprise or private provider. While this research project was undertaken in a Victorian context, the context for delivery for enterprise providers at the VET–higher education interface is national and involves credit transfer across state and territory jurisdictions. In these varied policy landscapes across jurisdictions, enterprise providers look for comprehensive structures and systems as they and other educational institutions demonstrate increasing interest in attracting and creating new articulation pathways. In addition, students continue to negotiate the crazy paving to create the necessary pathways for their learning

careers. Perceptive and well-informed students show that they are adept at forging pathways for themselves from VET to higher education in spite of systemic and structural impediments, also becoming successful completers by adjusting to the required learning and assessment cultures in time. Students can shape their own learning careers.

More efficient credit transfer arrangements for future VET students in Australia will require resolution of differences in educational purpose, governance, knowledge and skill. Credit transfer represents the fairness of articulation experiences to support learner mobility. When education attained is not recognised equitably or without prejudice, a student's potential learning career is compromised, as is the purpose of credit transfer. The differences surrounding knowledge acquisition and skills development represent a further area for resolution. In the issue of theory versus practice, which has troubled some VET–higher education discussions, a rapprochement must be achieved to enable students to build learning careers. A more holistic approach is required.

Educational governance relating to agreements, matrices, policies and processes are premised on full information and understanding. Seamlessness of movement from VET to higher education learning contexts will only be achieved through the adaptability of educators, administrators and institutions and by VET providers describing and explaining the detail of the learning content to higher education staff. Learning mobility will also be enhanced as TAFE institutes work together to develop courses with a similar format, making it easier for a university to manage credit transfer arrangements—an anticipated future benefit of the university–TAFE alliance involved in this research. The same alliance aims to simplify processes to enable TAFE graduates to enter university, with all four alliance institutions being actively engaged in building credit transfer and articulation pathways.

A strengthening of the AQF may also redress issues of parity in credit transfer and articulation. The AQF proposes to develop a definition for the volume of learning required for particular qualifications as well as a credit point formula (Australian Qualifications Framework Council 2009b). This is significant for credit transfer; it is an indication of an emerging post-Bradley tertiary education system that requires all providers to ensure a systematic approach to credit arrangements for the full spectrum of AQF qualifications. An AQF initiative such as this would guarantee a certain value of credit to students for their learning; it would increase student mobility. More importantly, as coming from a national framework and a body independent of universities and VET colleges, it would provide a basis for fairer credit determinations; specifically it would circumvent potential conflicts of interest in credit transfer determinations of which Junor and Usher (2008) warn. New Zealand and South Africa have such a central agency.

Conclusion

In general, policy and organisational processes lag behind the patterns of learning careers. Student mobility between qualifications and across sectors is not linear. Student mobility will always be characterised by lateral shifts between qualification types as much as by shifts to other qualifications at different levels. Student mobility is not static and, correspondingly, as PhillipsKPA state, 'the development of credit transfer and articulation arrangements is not static' (2006, p.103).

> No single factor is more important than any other in assisting the development of credit transfer and articulation … Rather, there is a complex inter-play of many factors that provides the support for success in this area. (PhillipsKPA 2006, p.103)

The PhillipsKPA position is applicable to this research. A multitude of factors are revealed as affecting the development of credit transfer and articulation, and range from differences between the sectors in goals of purpose and governance and goals for knowledge and skills, to individual qualities of commitment, motivation, understanding and respect.

While national reform in both credit transfer policy and practices may be anticipated, the key qualities that will support equitable credit transfer and articulation arrangements in the interim,

irrespective of the multitude of complexities, are understanding and respect. These two qualities will continue for successful credit transfer, regardless of changes in policies.

VET practitioners and university personnel, to ensure the mobility of students across sector boundaries, have long shown respect for each other's fields. For this to continue the parallel challenge in Australia is to increase opportunities for discussions on credit transfer and articulation and therefore create a more unified tertiary education experience for students. Credit transfer is not wholly concerned with equivalence and assessment; rather, it is concerned with dialogue and partnerships that further the understanding of VET qualifications and their part in the learning mobility of our students.

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Appendix 1

Glossary and definition of terms

Advanced standing—the term 'advanced standing' is used extensively by the university in this project. Advanced standing describes a credit transfer outcome where students who enter a university program at a stage after first year are not required to undertake studies in the earlier parts of a course, based on their completion of education at a lower level. The Australian Qualifications Framework Council (2009a) uses the terms 'credit transfer' and 'articulation' rather than 'advanced standing'.

Block credit—granted towards whole stages or components of a qualification.

Course—a structured and integrated program of education or training, usually consisting of a number of subjects and leading to the award of a qualification.

Enterprise provider—a business that provides education and training to their own staff, linked directly to the workforce demands of the enterprise and embedded within business operations.

Preclusion—a faculty provides credit on a discretionary basis by precluding a student from the requirement to study a particular subject; normally based on education achievement, employment history or other relevant achievements.

Program—a set of education and training activities designed to achieve a specific vocational outcome, e.g. a course, a subject, a learning and assessment strategy, on-the-job training etc.

Recognition of prior learning—recognition of prior learning (RPL) is a recognition and assessment process based on diverse evidence that a candidate has fulfilled the requirements of a subject for which they are then given credit. In the policy of the university participating in this project, advanced standing is understood and defined as credit transfer, while RPL is graded towards a course, based upon relevant study completed at the university or elsewhere. In the participating university's policy and practices, discussions on RPL are more about practices of credit transfer and articulation. The policy demarcations between credit transfer and RPL are not clear, although the university indicates that it would rather provide credit for learning achieved rather than on the basis of RPL. This position was identified in one of the focus groups and is identifiable in the broader Australian tertiary education context in policy discourses, institutional policies and in debates on pathways, credit transfer and articulation (see AQF Implementation Handbook.)

Specified credit—granted when there is an overlap of content at a similar standard; to avoid duplication in learning, the student is given credit for a specific subject.

Subject—a discrete portion of a course, identified by a code, title and credit point value.

Unspecified credit—credit is granted for achieved learning where no comparable university subjects exist. The learning achieved is generally recognised as related to the course for which the student is seeking credit transfer.

Appendix 2

Methodology

Research questions

This research project into credit transfer and articulation aims to address the following three questions:

1　What are the core elements required for negotiating pathway arrangements between VET and higher education?

2　How does VET learning interface with higher education? What are the implications for curriculum content, teaching practices, learning processes and assessment arrangements?

3　What strategies have the potential to enable learner mobility in the wider VET sector, considering local pathway arrangements and enterprise learning arrangements?

Methods

This research uses a qualitative methodology to capture the understandings of participants, authors and institutions who are engaged in or responding to the area of credit transfer and articulation. The research project capitalises on existing collaborative partnerships and learning contexts, namely:

✧ a 2008 Alliance between a Victorian university and three Victorian TAFE institutes that have recently completed the Credit Matrix trial project for the Victorian Registration and Qualifications Authority

✧ local degree credit structures and nested VET qualification structures

✧ students and staff from the university–TAFE alliance

✧ pathway arrangements that are available through enterprise training organisations represented by Enterprise Registered Training Organisation Association (ERTOA) members.

The method employed is a descriptive analysis and interpretation of credit transfer policy documents and developments and of ethnographic material gathered from focus groups and a survey with follow-up interviews that address institutional organisation.

Terminology

Within this research the term 'advanced standing' was used by the research participants and accordingly is maintained in the reporting, despite policy documents promoting 'credit transfer' and 'articulation'.

Ethics

The Research Ethics Office of Deakin University approved the conduct of this project in October 2008.

Data sources

Document analysis

The document analysis for this research project involved the examination of policy sources relevant to the movement of students between VET and higher education, in particular the AQF implementation guidelines. At a state level the Victorian Qualifications and Registration Authority's Credit Matrix was considered in terms of its potential to benefit learner mobility between VET and higher education. In the higher education context the participating university's institutional credit transfer policy was examined to gain an understanding of institutional factors that make credit transfer possible.

Two VET learning environments

The research project required collecting data from two discrete VET learning environments. The first context was that of public TAFE institutes; the second context was that of VET as provided by enterprise registered training organisations. The purpose of having two settings for data collection was to gain a broad insight into how credit transfer is achieved by VET graduates who undertake their studies through either a public provider or an enterprise provider. Gaining insight into the strategic dimensions of a university–TAFE alliance as well as of the challenges encountered by enterprise RTOs in negotiating credit transfer and articulation will help to determine the level of need for more universal, streamlined approaches.

VET learners in an enterprise context achieve their qualification through employment-based training in contrast to the institution-based learning that occurs through TAFE VET provision. Enterprise provision of VET is generally less well recognised than private provision of VET. The issues of credit transfer for enterprise providers are under-researched and remain largely invisible at a systemic level, even though enterprise RTOs can access available government funding for traineeships (Enterprise Registered Training Organisation Association 2009a).

Focus groups

The patterns of credit transfer and the experiences of TAFE students from three TAFE institutes wishing to gain credit transfer to a Victorian university with whom there is a strategic relationship were explored through a series of three focus groups comprised of university and TAFE personnel and students. The focus group meetings were conducted in metropolitan and regional locations of the TAFE institutes and at metropolitan and regional campuses of the university. Participants in these focus groups included course administrators and coordinators from TAFE and university, together with teachers, lecturers, managers and students.

Online survey—the questionnaire

The second VET learning context was the enterprise registered training organisations. With participation by the membership of the Enterprise Registered Training Organisation Association, an online survey, linked to ERTOA's website, was used to collect data on the partnership arrangements used by enterprise RTOs to achieve credit transfer and articulation pathways arrangements. The survey was available on the website for a six-week period from February to March 2009.

Online survey—four interviews

Four training managers of enterprise RTOs were identified in their survey responses as having a significant interest in issues of credit transfer and articulation. Follow-up interviews were conducted with these four training managers.

Procedures

Document analysis

An analysis of policies and practices of credit transfer was undertaken, firstly, to clarify understandings, terminology and current operations and, secondly, to determine optimal future pathway policies and practices for VET and higher education. The documents and processes examined were those of the participating institutions in this research project and included interpretations of advanced standing, credit transfer and recognition of prior learning (RPL) terms, a cross-institutional credit transfer pathway arrangement, a credit transfer database and individual program activities involving credit transfer.

Focus groups

Data collection

Each of the three focus groups was structured to generate responses to the research questions by exploring issues of learner mobility—of how students move between TAFE and university—and in particular, issues surrounding credit transfer. The proceedings of the three focus groups were recorded and the discussions were transcribed or paraphrased.

Participants

The 74 participants in the three focus groups were drawn from the four VET and higher education organisations with a strategic institutional alliance. In November 2008 a university–TAFE alliance was formalised between one Victorian university and three Victorian TAFE institutes with a memorandum of understanding (MOU) that identified the intentions of all parties to work towards developing and strengthening cooperative links. The alliance's MOU is underpinned by the mission that each institution can achieve more by working together than by working separately. The alliance represents a further level of cooperation between institutions that are already working together in areas such as dual delivery, articulation and pathways.

Composition and structure

Table 1 presents the composition of the three focus groups, including their location, the number of attendees in each and the participants' roles. The students were recruited to participate in the focus groups through information provided to the University–TAFE Alliance members.

Table A1   Focus groups

Focus group location	Participant numbers	Participants
Metropolitan	26	19 students attending TAFE and university
		4 university students
		3 TAFE teachers
Regional 1	32	15 TAFE teachers
		4 TAFE senior managers
		5 university administration staff
		8 university advanced standing officers and faculty project administration staff
Regional 2	16	13 TAFE teachers and managers
		3 university lecturers

Metropolitan

The TAFE students in the Metropolitan focus group were from the regional and metropolitan TAFE institutes. All of the students had studied or were currently studying both at TAFE and at university. Two of the university students attended the alliance's university, with two students attending a different university.

The focus group was semi-structured and sought from the students in the course of the open discussion their experiences of studying in TAFE and university, the different expectations placed upon them in each institution and their experiences of credit transfer.

Regional 1

This focus group was organised as a workshop, with three presentations being included to stimulate discussion about credit transfer and to form a basis for engagement.

The first presentation was on the credit transfer and advanced standing policies and practices of the university, prepared and presented by a faculty dean from the university. The second presentation, prepared by the AQFC secretariat and presented by the focus group facilitator, was on the AQF, credit transfer and qualifications as indicators of educational achievements. The third presentation was on the Credit Matrix provided by a policy official from the Victorian Qualifications and Registration Authority. It outlined how the 'Credit Matrix' seeks to better ensure credit transfer by attributing a credit value to VET units of competency. Each of the presentations provided a different insight into credit transfer.

There were 32 participants in this focus group and who represented all organisations in the university–TAFE alliance. This focus group was semi-structured but required all participants to contribute stories about the issues, barriers and frustrations of the practice of credit transfer.

Regional 2

The 16 participants in this focus group were mostly from one of the regional TAFE institutes, with three participants coming from the regional campus of the university; both campuses are over 300 km from metropolitan Melbourne. The TAFE participants were course coordinators, managers and teachers who had been involved in developing credit transfer and articulation pathway arrangements for students into higher education.

This focus group was semi-structured according to themes, the major theme being credit transfer issues relating to regional delivery.

Enterprise registered training organisation providers

The Enterprise Registered Training Organisation Association, incorporated in October 2006, is a peak provider body representing Australian businesses and industries that are engaged with the national training agenda to build workforce capability and to skill and re-skill their employees. Appendix 3 provides information on ERTOA's aims and activities.

The Enterprise Registered Training Organisation Association members are from enterprises whose main focus is the provision of goods and services and who operate internal training programs for their own staff that are linked to their business needs and embedded within their business operations. The VET learning carried out by member enterprises are nationally endorsed training package qualifications organised through the National Training Framework. Enterprise RTO delivery of training embodies the principles and practices of workforce development at an authentic organisational learning level.

Online survey—questionnaire and follow-up interviews

An online survey was developed to gain an understanding of the issues relating to credit transfer for enterprise providers. It aimed to capture the views, practices and the significance of credit transfer for the Enterprise Registered Training Organisation Association members. The survey explored the arrangements that enterprise providers have with other education providers for the purposes of credit transfer and further learning pathways.

The online survey was in effect a screening tool for identifying those enterprise providers who had partnerships with higher education providers and who were involved in credit transfer. The survey consisted of 26 questions grouped around the themes of the enterprise credit transfer context, of the formal relationships of enterprise providers with higher education providers, and of the enabling and constraining factors in establishing credit transfer and articulation arrangements. The questions included two identifier questions, 14 open response questions, two closed response questions, four scaled response questions and four selected response questions. The following table provides data on question type and the number of useable responses to each question.

Table A2   Useable responses for enterprise providers online survey

Question	Type	Number of responses
14	Closed	5
20	Closed	5
1	Identifier data	18
2	Identifier data	18
5	Open	3
7	Open	1
9	Open	0
11	Open	1
13	Open	2
15	Open	1
16	Open	3
17	Open	3
18	Open	3
19	Open	3
21	Open	3
22	Open	3
24	Open	0
26	Open	0
3	Scaled	15
10	Scaled	5
23	Scaled	5
25	Scaled	5
4	Selected response	5
6	Selected response	5
8	Selected response	5
12	Selected response	5

Most non-responses occurred as a result of the screening effect; namely, of many enterprise managers having limited or no data about actual partnerships with higher education providers for staff to gain qualifications. However, there was clearly significant credit transfer activity being undertaken with the four identified enterprise providers. Accordingly, interviews with the learning and development managers of these four enterprise providers were undertaken to allow them to expand on their experiences of credit transfer.

Appendix 3

Enterprise Registered Training Organisation Association (ERTOA)

The aim of ERTOA is to provide member enterprises, whose principal business is not education and training, with a formal organisation that is both supportive and representative of their interests as registered training organisations (RTOs).

ERTOA supports and assists the member enterprise RTOs and their staff to operate effectively and efficiently by enabling members to:

✧ seek advice, exchange ideas and experiences with colleagues from other organisations on all aspects of setting-up and running an enterprise RTO

✧ participate in regular meetings with colleagues from other enterprises to discuss issues of concern, exchange ideas and give and take advice

✧ participate in and contribute to an association that has a mandate to commission and publish research on specific issues facing enterprise RTO.

ERTOA provides formal representation and promotes the interests of member enterprise RTOs by:

✧ interacting as an association, and in a coordinated way, with state training authorities, industry skills councils, Department of Education, Employment and Workplace Relations and other education players, on the issues faced by enterprise RTOs in order to promote greater recognition of enterprise RTO activities and interests

✧ participating as a formal association with a 'seat at the table' whenever discussions occur and decisions are made affecting enterprise RTOs

✧ influencing the Australian VET sector regarding enterprise RTO issues.

Appendix 4

A TAFE pathway of nested qualifications leading to an Advanced Diploma in Accounting

This table lists the units of competency under each level of VET qualification from certificate III to advanced diploma that make up the TAFE nested accounting qualification pathway.

Certificate III in Financial Services (Accounting /Clerical)

Work within the financial services industry

Communicate in the workplace

Use technology in the workplace

Apply health and safety practices in the workplace

Prepare and bank receipts

Process journal entries

Create and use simple spreadsheets

Set up and operate a computerised accounting system

Reconcile and monitor accounts receivable

Certificate IV in Financial Services (Accounting)

Prepare financial statements

Prepare operational budgets

Process business tax requirements

Make decisions within a legal context

Maintain asset and inventory records

Create electronic presentations

Analyse and present research information

Apply principles of professional practice in work in the financial services industry

Prepare financial forecasts and projections

Diploma of Accounting

Prepare income tax returns

Prepare financial reports for a report entity

Manage budgets and forecasts

Provide management accounting information

Implement and maintain internal control procedures

Provide financial and business performance information

Implement and monitor marketing activities

Develop and implement financial strategies

Advanced Diploma of Accounting

Monitor corporate governance activities

Prepare complex tax returns and lodgments

Implement tax plans and evaluate tax compliance

Audit and report on financial systems and records

Evaluate business performance

Develop and use complex spreadsheets

Prepare and analyse management accounting information

Prepare complex corporate financial reports

Appendix 5

Example of participating university's advanced standing database

For a student who has completed an Advanced Diploma in Accounting and seeks articulation into a Bachelor of Commerce, the following information is provided from the Advanced Standing Database.

✧ Total credit points required for university course: 24

✧ Credit points granted: Up to a maximum of 8 out of 24

✧ Total credit points required to complete course: Minimum of 16 out of 24

✧ University course duration (in years, based on full-time enrolment): 3

✧ Years to complete university course (based on full-time enrolment and depends on to subject offering): 2

Students who complete an Advanced Diploma of Accounting are granted credit for the following university subjects:

✧ Business Law

✧ Business Information Systems

✧ Business Data Analysis

✧ Accounting for Decision Making

✧ Accounting for Planning and Control

✧ Accounting Concepts and Systems

✧ 2 Unspecified credits at level one

✧ 1 Unspecified credit at level two

✧ Total of 9 credit points.

As shown in the list above, the units of competency (see appendix 4) are consolidated into six specified credits that relate to university subjects, with an additional three unspecified credits awarded. The TAFE course coordinator who developed the nested advanced diploma accounting pathway described the large number of training packages units to be broadly equivalent to nine university subjects. In this example of determining credit for VET learning, the atomistic character of training package qualifications, with their large number of units of competency, are consolidated down to an equivalent nominal number of nine university subjects. Once such a credit allocation is established, the database provides consistency for future identical credit transfer arrangements.
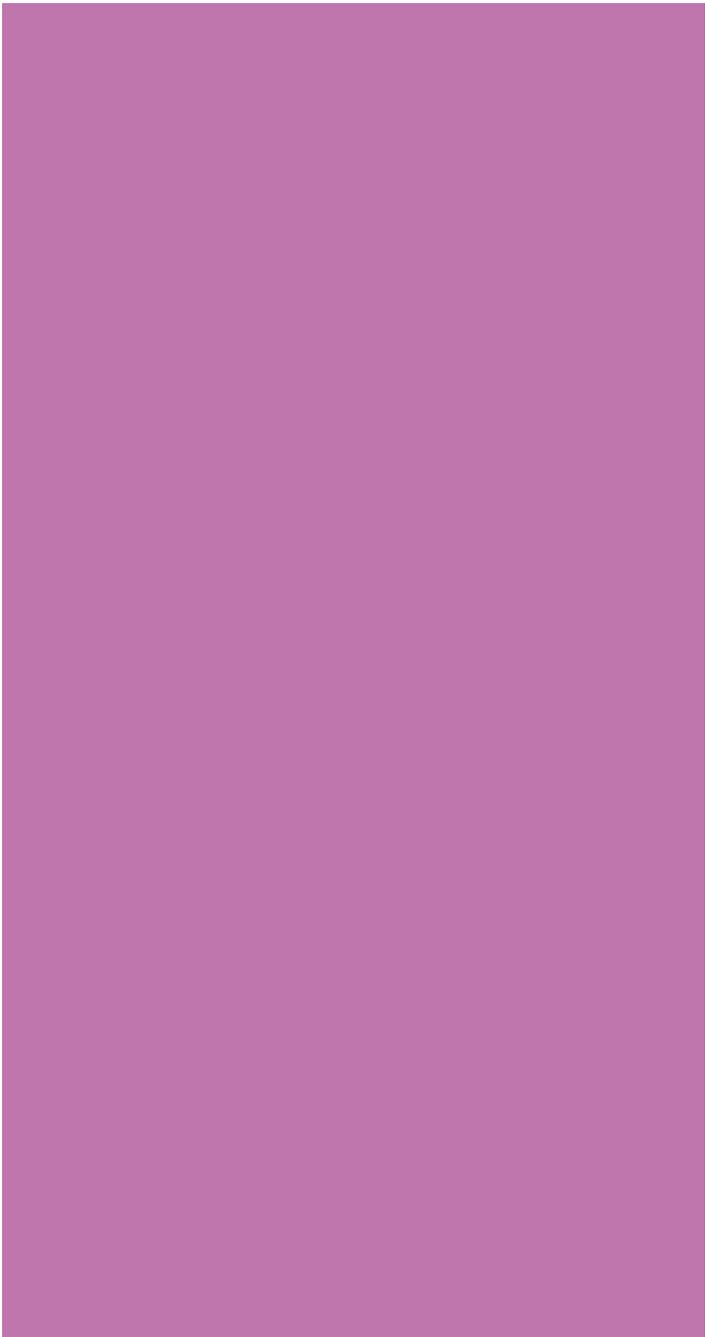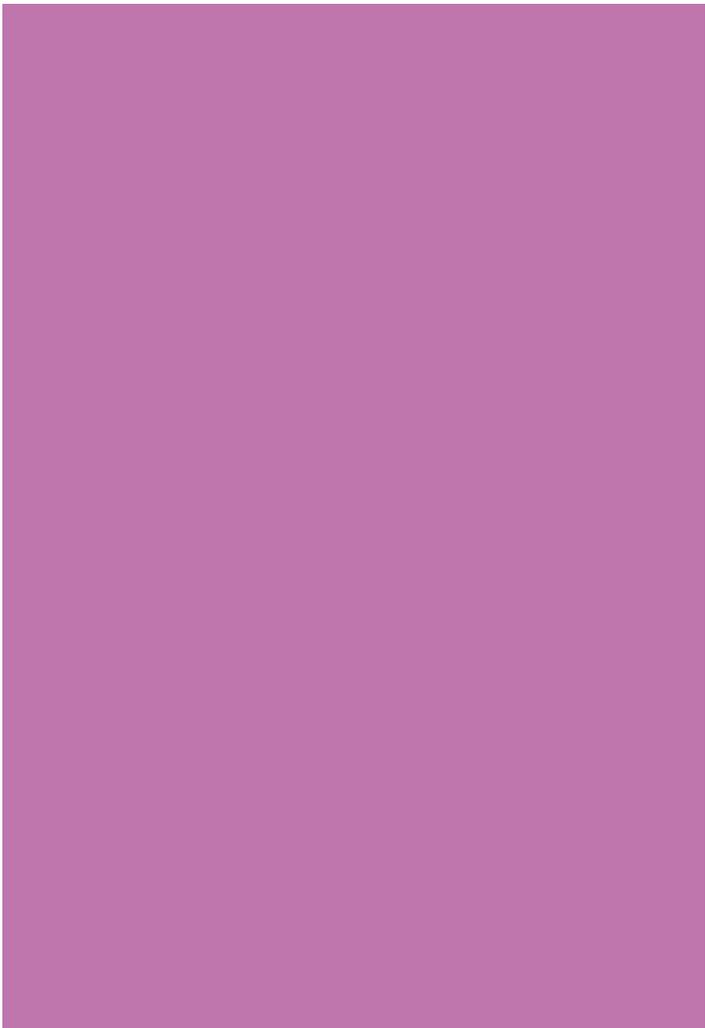
Appendix 6

A joint TAFE and university course: Advanced Diploma of Tourism Management/Bachelor of Management

The joint Advanced Diploma of Tourism Management and the Bachelor of Management course combines TAFE and university studies to give students the opportunity to acquire practical tourism training with higher-order business management knowledge. The course is designed to support a range of career choices within the tourism industry and associated fields, such as sales and marketing. The course is studied concurrently at the participating university and at two of the TAFE institutes (as featured in the Metropolitan and Regional 2 focus groups in this research study; see table A1).

The university subjects concentrate on core management knowledge and skills in a business context, while the TAFE units aim to develop applied skills by providing students with a range of vocational training in work environments that have strong links to industry. In their second year, tourism students select a major stream of either marketing or human resource management from the university program. The marketing stream focuses on marketing research, consumer behaviour, strategic marketing and business communications. The human resource management stream focuses on industrial relations, organisational behaviour, business communications and comparative human resource management. Flexible delivery options enable students to complete this award through on- or off-campus modes.

A typical student experience involves the following study pattern for the Advanced Diploma of Tourism Management and Bachelor of Management program:

✧ Year 1 Semester 1—all at TAFE

✧ Year 1 Semester 2—classes at TAFE with an online university unit

✧ Year 2—classes occur at TAFE and university

✧ Year 3—all classes at university.

NCVER