National training packages: a new curriculum framework for vocational education and training in Australia

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Keywords

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Abstract

National training packages have become the mandated framework for course delivery in Australia's vocational education and training sector. Each training package contains: qualifications that can be issued, industry-derived competencies, and assessment guidelines but do not contain an endorsed curriculum component or learning outcomes. All public and private vocational education and training providers must use training packages, or industryendorsed competencies in cases where they do not exist, if they are to receive public funding for their programs. This article describes the operation of Australia's national training packages and considers some of their strengths and weaknesses, many of which may be shared by similar systems elsewhere. Argues that training packages may result in poorer student learning outcomes, and that they may threaten the end of effective credit transfer between the vocational education and training and higher education sectors. Suggests that national training packages are not a good model for other countries and that Australia's current vocational education and training policy needs to be reviewed.

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Introduction

The "new orthodoxy" in post-industrialised countries views education as the foundation for economic policy. Ball (1998) cites five key elements shaping school education policy in these countries. These elements apply with equal force to post-compulsory vocational education and training (VET):

- Improving national economics by tightening the connection between schooling, employment, productivity and trade.
- (2) Enhancing student outcomes in employment-related skills and competencies.
- (3) Attaining more direct control over curriculum content and assessment.
- (4) Reducing the costs to government of education.
- (5) Increasing community input to education by more direct involvement in school decision making and pressure of market choice.

Australia has constructed a VET system that tightly links all five elements into a comprehensive and pervasive national infrastructure. The result is a rigid system that is narrowly focussed on work-related competencies to the exclusion of broader education that is able to equip students to respond to rapidly changing technological, economic, and social developments.

National training packages are now the basic framework for course delivery in the vocational education and training sector in Australia. This paper argues that training packages are deeply flawed, and will adversely affect both student learning outcomes and collaboration between the VET and higher education sector at a time when this collaboration is increasingly important. This paper will:

- explain the origin of training packages;
- describe their structure and components;
- examine the impact they will have on student learning;
- explore the implications that they have for course administration; and
- explore the impact they will have on relations between the VET and higher education sectors.

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Background: establishing a training market

Australia has been both a pioneer and a follower in innovation in VET. The dominant drivers have been attempts to make the system more industry driven, to make the system one in which a competitive market operates and to ensure some national consistency and coherence. The first two of these drivers of change have been pursued further in Australia than in most comparable countries. In comparison with the UK, Australia has become a system in which the Australian equivalent of NVQs are mandated with no possible recourse to anything like a GNVO and in which competition by private providers of training is not only encouraged but funded by governments as a matter of policy.

Australia is a federated system with a federal government, and eight state and territory governments. Funding for education is shared between the two levels of government. The states and territories have principal responsibility for school education and VET, and the federal government has responsibility for funding higher education. An elaborate system of ministerial councils with membership of the education and training ministers from each jurisdiction exists to promote national consistency and collaboration. While most money for school education and VET comes from state governments, the federal government does contribute, and it uses this as a lever to influence national policy.

Since the 1980s Australian federal governments have attempted to establish a national tertiary education system that has a clear divide between two sectors: a higher education and a vocational education and training sector. The first step in this process, taken in 1987 was to unify the then 47 colleges of advanced education and 19 universities into 36 publicly funded universities (now 37 universities) (Marginson, 1998). As the higher education system was funded by and accountable to the federal government this reform was achieved with little direct involvement of the state and territory governments.

Creating a consistent and coherent national vocational education and training system has been a longer term project but has been pursued assiduously by both Conservative and Labor national governments. The federal government has had to secure the agreement of the state and territory governments in introducing each reform. For most of its history vocational education and training consisted of publicly funded Technical and Further Education (TAFE) colleges. The TAFE system's recent history has been shaped by its dramatic expansion following the release of the federal government's Kangan report in 1974, which created a distinctive identity and purpose for TAFE in Australia (Anderson, 1997) and was the start of significant but by no means dominant federal funding of the sector.

The TAFE sector has undergone continual change since then. A central policy objective since the early 1990s has been to develop an "effective and competitive training market, with both public and private provision of training ... This has meant a shift from delivering training almost exclusively by TAFE, to TAFE being one type of provider, albeit the dominant one, in the market" (Greer, 1998, p. 9). These changes have resulted in the inclusion of private for profit providers in the VET sector, which can compete for public training funds along with publicly funded TAFE colleges. It is estimated that there are now over 3,000 private and industry providers registered as training organisations in Australia (ANTA, 1998, p. 8). While this is so, the great majority of VET students (75 percent) continue to study through TAFE institutes, and their student contact hours (a measure of student load) comprise 85 percent of all VET student contact hours (NCVER, 2000).

The VET system is managed differently in each of the Australian states and territories. The portfolio sits with different ministers, in differing configurations with other ministerial responsibilities. For example, in Victoria, one minister has responsibility for higher education, VET, senior secondary school and employment; while in Western Australia one minister has responsibility for VET and employment, heritage and planning. TAFE institutes are structured differently across the states and territories and have significantly different levels of autonomy. The state and territory VET systems have different priorities for collaboration with the higher education and school sectors. Before recent reforms the states and territories had differing accreditation processes and the qualifications issued in one state or territory were not necessarily recognised in another. Indeed a

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qualification from one state with an identical name to a qualification from another state may have resulted from quite different courses, or programs of study.

The creation of a national training market was seen to require a national qualifications framework, nationally portable qualifications, and recognition of those qualifications in all jurisdictions. The first has been achieved through the creation of the Australian Qualifications Framework, while the latter two are the key features of the National Training Framework, the framework which covers the VET sector and which has been in place since 1996. The framework is the result of an agreement of the state, territory and federal governments over strategic directions for the VET sector, and includes mechanisms to ensure the development of the system.

Australian Qualifications Framework

The Australian Qualifications Framework was established in 1995 to rank all existing qualifications in relation to each other, and to render qualifications more transparent and transportable (Marginson, 1997, p. 215). It ranks qualification levels from entry level at senior secondary school through to doctorates, and designates which qualifications are generally offered in the secondary, vocational education and training and the higher education sectors.

The Australian National Training Authority (ANTA) describes the AQF as follows:

The Australian Qualifications Framework (AQF) is a nationally consistent framework that allows for credit transfer and articulation between qualifications. The comprehensive framework spans all education sectors – schools, VET, and higher education. It covers all qualifications recognised in post-compulsory education, and consists of guidelines that define each qualification along with principles and protocols covering articulation, issuing of qualifications and transition arrangements (ANTA, 1999a, p. 4).

The AQF is presented in Table I. It shows the sector in which each qualification level is generally offered. There is some overlap, with higher education institutions able to offer diplomas and advanced diplomas, and schools able to offer lower level certificates. "Where the same qualifications are issued in more than one sector but authorised

Table I Australian Qualifications Framework

Schools sector	Vocational education and training sector	Higher education sector
Senior secondary certificates of education	Advanced diploma Diploma Certificate IV Certificate III Certificate II Certificate I	Doctoral degrees Masters degrees Graduate diplomas Graduate certificate Bachelor degree Advanced diploma Diploma
Source: AQFAB (1998)		

differently by each sector (i.e. Diploma, Advanced Diploma) they are equivalent qualifications, although sector-differentiated" (AQFAB, 1998, p. 1).

The AQF does not prohibit one sector from offering a course that is generally offered by the other, provided they can adhere to the accreditation and other requirements that accompany the issuing of that qualification. Generally though, they do not receive public funding for offering courses in this way. However, the distinctions between the sectors according to who offers what is becoming increasingly blurred, with schools incorporating a greater range and level of VET certificates as part of the senior secondary curriculum and qualifications and VET now authorised to issue graduate certificates and diplomas (but not degrees).

National Training Framework

The Australian National Training Authority (ANTA) was mandated by an Act of the Commonwealth Parliament in 1992, and was established in 1994 to oversee the strategic directions of the VET system nationally. It answers to a ministerial council comprising all training ministers in the Commonwealth (federal), state and territory governments (ANTA, 1999c). The National Training Framework is the framework in which ANTA and the state and territory training authorities oversee the VET system (HRSCEET 1998).

The National Training Framework has two key components: the Australian Recognition Framework and the National Training Packages. The first guarantees the national recognition of qualifications, while the second comprises nationally portable qualifications. The National Training Framework is presented in Figure 1.

Australian Recognition Framework

Each state or territory has legislative responsibility for issuing qualifications. This power is delegated to Registered Training Organisations (RTOs), which are registered according to nationally agreed principles contained within the Australian Recognition Framework. RTOs may be public providers (usually TAFE) or private for profit providers. RTOs receive differing levels of accreditation, with some able to provide only assessment, while others may provide assessment and training (AQFAB, 1998). Under the Australian Recognition Framework, a qualification issued by one RTO must be recognised by all other RTOs in Australia, with full credit granted. In this way all qualifications are nationally recognised. This national recognition agreement is entitled the Mutual Recognition Framework.

Training packages

All publicly funded course delivery in the VET system in Australia must be based on training packages where they exist, and industry endorsed standards where they do not. Training packages comprise sets of industry competencies designed to support a

Figure 1 National Training Framework

competency based training and assessment model (CBT).

The ANTA Training Packages Development Handbook (ANTA, 1999b, p. 3) defines competencies as follows:

A competency comprises the specification of knowledge and skill and the application of that knowledge and skill to the standard of performance required in the workplace. This definition of competency encompasses a range of features:

- The concept of competency focuses on what is expected of an employee in the workplace rather than on the learning process, and embodies the ability to transfer and apply skills and knowledge to new situations and environments.
- In competency standards the emphasis is on outcomes and on the application of skills and knowledge, not just specification.
- Competency standards are therefore concerned with what people are able to do (e.g. maintain and use networks), and also with the ability to do this in a range of contexts (e.g. maintain and use networks of suppliers, government agencies, etc.).

Training packages are mainly developed by national Industry Training Advisory Bodies (ITABs), with considerable involvement by employers, government and employee organisations. Teachers and other educators are not included in this process (indeed it has been ANTA policy that they ought to be excluded). Training packages have three endorsed components: the industry endorsed competency standards; the qualifications that can be awarded within the package; and the assessment guidelines.



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Training packages, once developed must be endorsed by the ANTA National Training Framework Committee and by all Commonwealth, state and territory training ministers.

Competencies and qualifications

Each training package contains a number of competencies. These competencies are grouped in different ways to make up qualifications. For example, the Community Services Training Package covers the following nine qualification areas (ANTA, 1999g):

- (1) aged care work;
- (2) alcohol and other drugs work;
- (3) children's services;
- (4) child protection, statutory supervision, juvenile justice;
- (5) community housing work;
- (6) community work;
- (7) disability work;
- (8) mental health work (non-clinical);
- (9) youth work.

There are common competencies that are contained within all nine qualifications, while there are also specialist competencies for individual qualifications. There are rules on how the competencies can be grouped to make up each qualification. Within each qualification there are a number of levels, usually ranging from Certificate 2, up to Advanced Diploma. Each qualification level is consistent with the Australian Qualifications Framework requirements for that level.

Units of competency

A single unit of competency is the smallest unit that can be nationally recognised and recorded. Each unit of competency contains elements. Elements of competence:

are the basic building blocks of the unit and continue the description of the key purpose of the unit itself. They describe, in outcome terms, functions that a person who works in a particular area of work is able to perform. Elements must describe actions or outcomes which are demonstrable and assessable.

The elements combined, build up the unit (ANTA, 1999b, p. 16).

For example, the competency Advocate for Clients, drawn from common competencies

in the Community Services Training Package, has the following three elements:

- (1) Assist clients to identify their rights and represent their own needs.
- (2) Advocate on behalf of clients on request.
- (3) Advocate for client (ANTA, 1999e).

Each unit of competency also has performance criteria. Performance criteria "are evaluative statements which specify what is to be assessed and the required level of performance" (ANTA, 1999b, p. 19). For example, in the above competency Advocate for Clients, the following is an example of a performance criterion attached to each element (there are often several performance criteria attached to each element):

- (1) Assist clients to identify their rights and represent their own needs:
 - client is assisted to identify their own needs and rights and to determine if their rights are being infringed or are not being met.
- (2) Advocate on behalf of clients on request:
 - on request from the client, the most appropriate individuals or organisations are identified and contacted and the client's point of view is represented clearly to optimise outcomes for the client.
- (3) Advocate for clients:
 - issues are raised with the most appropriate person/people in a way that upholds the rights and supports the reasonable expectations of the client (ANTA, 1999e).

A range of variables is also included in each competency, and this refers to the context within which the competency can be assessed and is likely to be performed. This is drawn from the workplace. The range of variables for the competency unit Advocate for Clients includes: advocating on behalf of the client with other workers, management, other agencies/organisations; discussions with key people within the community; interviews; questionnaires; and, court appearances.

The final component of each competency is the evidence guide. This:

relates directly to the performance criteria and range of variables. Its purpose is to guide assessment of the unit of competency in the workplace and/or training program (ANTA, 1999b, p. 25).

Assessment

Assessment must be directly against the competencies and must use the evidence guides contained within them. Assessment must take place in the workplace, or in a simulated work environment. Unlike earlier models of competency based training which pre-existed training packages, competency cannot be inferred from assessment developed to measure mastery over learning outcomes. Furthermore, in some instances training packages stipulate who may undertake the assessments, and the qualifications they must have.

Training package support materials

Training packages usually also contain training package support materials, which are not endorsed, and their use is not compulsory. Support materials include learning strategies, assessment support materials and professional development materials (ANTA, 1999c). Training package materials that meet required criteria may be quality endorsed by ANTA, and labelled as such. There is no accredited curriculum, or indeed nothing that is readily recognisable as curriculum contained in national training packages. Nevertheless these are the specification of what must be taught and assessed by the training provider.

Advantages and disadvantages of training packages

Training packages have generated controversy and debate in the Australian tertiary education sector. They were viewed as relatively unproblematic in the early stages of their implementation, merely an extension of competency based training that characterised most courses in VET. However, they have attracted increasing and widespread criticism in a range of forums as they have been implemented. The national industry paper *Campus Review* featured a debate on training packages throughout 2000, and they were the subject of much complaint in submissions and evidence given to the federal Senate Inquiry into the Quality of Vocational Education and Training in Australia (Senate, 2000).

TAFE cannot opt out of the National Training Framework, nor can higher education avoid it if it wishes to collaborate with VET. It is a pervasive and encompassing system, and demands engagement whether one is for or against. Unlike systems in which providers have some discretion to choose the most appropriate curriculum for learners and for enterprises who may request training, in Australia there is no freedom if the expenditure of government funding is involved in the delivery of the training.

Advantages of training packages

Advantages of training packages can include the following:

- while teachers have no say in determining learning outcomes, or units of competence (as these are determined by industry) they have considerable discretion in constructing programs of study and choosing learning resources to meet the requirements of nationally endorsed qualifications. This is because there is no prescriptive national or state curriculum that teachers are required to follow;
- VET is able to develop new courses and adapt existing courses very quickly provided the course fits within nationally endorsed qualifications and comprises nationally endorsed competencies;
- qualifications are nationally recognised and portable throughout Australia;
- full credit is available for studies undertaken, and training packages contain sequential pathways that enable students to articulate from one qualification level to another, regardless of whether this takes place in the same or another institution;
- training packages have been designed to facilitate the recognition of prior learning, whether this has occurred informally at work or in another context, and enable students to be assessed before commencing study to ensure they do not have to study in areas where they are already competent;
- assessment of competency directly against observed performance in the workplace or simulated work environment has the potential to be a far more accurate and appropriate assessment of vocational skills. New graduates do not need to be "trained again" in the workplace. Employers can rely on the qualification as a clear specification of the skills of a potential employee.
- training packages will allow for the development of quality management and

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institutional audit systems that can focus on the outputs of education, the achievement of competency, rather than just on the inputs, dollars and student contact hours;

there are some stakeholder groups who feel that competencies should be developed by industry, and that teachers should have no role in helping to formulate them. This is said to ensure that the outcomes meet the needs of industry. The VET system is consequently deemed to be "driven" by industry - that is, the putative end-users of the VET system, and has therefore escaped "capture" by teachers (the producers of education) who are more interested in serving their own interests rather than those of industry (Marginson, 1997). This view is underpinned by a range of assumptions, not the least of which is that the principal stakeholder of the VET system is industry, not students or the community more broadly.

Disadvantages of training packages

The disadvantages of training packages can include the following:

- Assessing competencies directly against observed performance in the workplace is problematic for many teachers. It is argued that this is reductive, as it assesses atomistic competencies or clusters of competencies in specific situations. Assessing isolated performances does not reveal the extent to which students are competent overall and whether they have been able to integrate various aspects of their learning into a coherent framework, and their capacity to apply their knowledge and skills in a range of contexts. It suggests that quite a lot of knowing and skill can be reduced to one measurable performance.
- Stripping learning outcomes and the specification of knowledge from VET courses (as has been done with training packages) and replacing them with competencies that are measured directly against specified tasks in the workplace may lead to deskilling and not upgrading the skills of the workforce. Assessing students against competencies that have been specified by industry for use in the

workforce today does not equip them with the skills and knowledge needed to participate in a workforce that must respond to rapid technological development. Skills-based and taskfocussed learning is no longer appropriate even if it ever were, as skills learnt today are quickly outdated. Rather, students need to learn to learn. That is, they need to be able to learn throughout their lives, so they can learn new skills as needed. This requires broad "generic" skills those of literacy, numeracy, problem solving, critical and analytical thinking and team work. Rather than narrow skills training, employers say they want graduates with "generic" skills (ACNielsen ResearchServices, 2000).

- Grouping a number of occupations in a single package, which has been done to ensure portability of qualifications across an industry sector, leads to some critically difficult, and as yet unresolved, issues of skills recognition. Achievement of a competency within a package is for the whole package, not just for the specific occupation. Consequently a trained aged care worker could receive a high level child care qualification with minimal study. The common competencies are viewed as being already achieved by the training package rules and yet common sense, and the feeling of most educators, is that the "core competencies" are far more context specific than has been acknowledged by Industry Training Advisory Boards.
- Teachers are deskilled, because they are required to teach to outcomes that they have had no role in formulating. TAFE teachers are required to have experience in the industry for which they are preparing students. Very often, at least in the past in TAFE, they have been expected to have a tertiary qualification in their discipline as well as a teaching qualification. Rather than draw on their professional expertise both as teachers and as practitioners from industry in developing learning outcomes designed to ensure students are work ready, they are required to teach to and assess tightly defined and often prescriptive and narrowly focused competencies. There may be variability in the quality of

student outcomes, despite the common

definition of competency standards, because of the varying approaches and content in designing courses around training packages at different providers. Current VET market and user choice policies impel providers to keep delivery costs to a minimum, particularly in tendered programs[1]. The result can and often is minimalist approaches being implemented by some, with little concern paid to ensuring students acquire the knowledge base they require.

- Training packages assume work-based learning when in fact many VET students are undertaking studies to enter work, particularly younger students. The training package model is especially unsuited to school-leavers and other young people, particularly at certificate 4 and diploma level. This is because these courses focus on supervisory and managerial skills, whereas young students (as well as many older students) are undertaking them to enter the workforce. These students have more in common with students entering degrees, as most degrees are entry level qualifications. The Australian Bureau of Statistics (1998) reports that of "wage and salary earners in 1997 who completed a training course in the previous 12 months, more persons across all age groups did so for the purposes of retraining than promotion". That is, they were seeking entry level qualifications.
- The National Training Framework and training packages are based on the assumption that the principal role of the VET sector is to meet industry needs, and that industry is the principal "client" of the system. Historically VET has played a broader role, including that of "second chance" for those who have not had the opportunity to participate in education previously (HRSCEET, 1998). Arguably, meeting industry needs is one role of the VET sector, as it is of the higher education sector. It also can be seen to have a responsibility to provide education to a range of students for a range of purposes, including general education, and including assisting students to acquire skills needed for lifelong learning and participation in society as a contributing citizen.

Reductive effect on the learning process

Above all, the specification of assessment within training packages can have a reductive effect on the learning process. Assessment drives learning and teaching and is a key structuring principle of both. Assessment is a tool for learning, rather than simply a summation of learning, and this understanding has accompanied the development of learner-centred approaches in both the higher education and TAFE sectors (Boud, 1995; Nightingale *et al.*, 1996; Kearney, 1992).

However, under the current Australian arrangements, TAFE teachers are required to assess students against the competencies contained in training packages using the assessment guidelines and evidence guides contained within them. The emphasis is on summative assessment, that is assessing the outcome of learning, rather than on formative assessment, that is, using assessment as a tool for learning.

This marks a substantial shift in assessment practices within previous competency-based training frameworks that assessed against learning outcomes based on competency standards, rather than directly against competency standards (Foster, 1998). Learning outcomes specify the intended result of learning rather than workplace competency (ACTRAC, 1994, p. 2.30). Teaching staff were able to infer competency, based on learning outcomes, rather than directly assessing against the competencies themselves. This gave staff considerable freedom in designing integrated learning programs and assessment that were broadly based, and extended beyond the specifications in training packages. The danger now exists that teaching staff will "teach to the competencies". If the competencies are expressed as behaviours, and the underpinning knowledge is insufficiently specified, then the teaching and learning to jump through the assessment hoops is likely to be reductive.

Further emphasising the summative role of assessment in training packages is the fact that teaching and assessment are becoming increasingly divorced, as they have become decoupled. Teachers are not necessarily the ones who undertake assessment. This has the potential to give rise to the "tick and flick" approach to assessment, whereby competencies are ticked off and "... involves negligible, inadequate or non-existent training of New Apprentices. It also involves congruent [sic], irresponsible, deficient or non-existent assessment of Trainee competencies" (TAFE Institute cited in Schofield, 2000, p. 63). While this quote went on to say that fortunately "tick and flick' training does not generally pervade the Apprenticeship system", Kaye Schofield (2000, p. 63), chair of the Victorian government review into the quality of training in Victoria's apprenticeship and traineeship system reported that[2]:

Consultations with employers suggest that this may be a widespread practice, particularly in regional areas where RTO costs of travel between workplaces is high and the number of small businesses to be served by RTOs is also high.

Where an employer is not a partner in the training, the problems can be exacerbated.

There are two remaining disadvantages with training packages that require discussion. The first is the administrative difficulties associated with implementing training packages, and the second discusses the problems that arise for articulation pathways to and from TAFE and higher education.

Administration of courses based on training packages

Training package support materials have been included with many of the training packages. These support materials contain learning strategies, assessment materials and professional development materials and provided they have been evaluated as meeting the specified standards and quality criteria stipulated by the National Training Framework Committee, can be made available on the National Training Information Service (NTIS) (ANTA, 1999d)[3].

The use of training package support materials is optional. In theory providers are free to construct whatever delivery strategy they deem appropriate to meet the learning needs of students. This includes clustering units of competency, aggregating and disaggregating competencies into study units, determining study sequence and so on[4]. If the competencies are to be regarded as outcomes, then teachers are free to construct whatever inputs they feel will best meet these outcomes, hence the putative freedom to construct "delivery strategies" in whatever way thought best.

The reality is far less straightforward. In Victoria the Office of Post-compulsory Education and Training (PETE) has allocated "nominal" hours to each of the competencies in each of the training packages. The nominal hours are the funded hours that providers receive to deliver courses. Providers will not receive more funds than is allocated for the nominal hours.

PETE audits the courses run by providers each year. Providers are required to demonstrate that they have used funded hours for specified competencies in the training packages: no more or no less for each competency. For example, if 30 hours have been allocated to deliver a basic computer competency to 20 students, then the provider must show that 30 hours have indeed been expended against the computer competency. If, for example, there were another competency in the same course that had 110 hours allocated, staff cannot take another 50 hours from this allocation and combine it with the 30 hours allocated to the computer competency. The only way they could get around this problem would be to combine the two competencies and teach them concurrently, as long as 140 hours (30 + 110)hours) were expended against the two competencies.

While it is possible to combine two competencies in this way, it is not as easy to split elements of competency and combine various elements of competency from different competencies and group them as subjects or modules. The problem arises because many teachers want to aggregate and disaggregate competencies and elements of competency and to do the same with the funded hours for each competency. In theory this should be possible. In practice it is a logistical nightmare of almost insuperable proportions.

The only way around this problem is to have a dual reporting system: one system that has the subjects that students enrol in, and the assessment for each, and another that disentangles all this and reports competencies and hours to PETE. The margin for error is extremely wide.

This problem arises chiefly because a system that has been designed on the basis of

outputs is being imposed on a system that functions bureaucratically on the basis of inputs. State and territory training bureaucracies are baffled by a system that is not designed to account for the traditional ways of funding and holding providers accountable. Consequently the elaborate systems of the allocation and accounting for nominal hours have been imposed on training packages despite the fact that they are designed to allow for a training system that is rewarded for the quantity and quality of the outputs; the assessed competencies of participants.

Structuring and running student information systems at tertiary education institutions costs millions of dollars and requires significant staff allocation to student administration. Student administration staff see their first obligation as assisting the institution to fulfil its legislative obligations in reporting and auditing. Upgrading student information systems to accommodate a dual reporting system would cost millions. Teaching staff are thereby pressured to construct learning programs that are based on competencies, allocated hours and atomised assessment, based on each individual competency. Aggregating and disaggregating competencies and elements of competency will be very difficult. The institution will be able to fulfil reporting requirements, but may not be able to deliver a quality learning program. It is bureaucratically simpler to just treat training packages as if they are curriculum. Already this results in a tension that leads to pressures to make training packages more like curriculum, which they explicitly are not.

Training packages and articulation with higher education

The introduction of training packages will potentially have far-reaching consequences for student articulation between the sectors: for TAFE students articulating to higher education, and for higher education students articulating to TAFE.

TAFE to higher education articulation

The introduction of training packages will end generic credit transfer between TAFE and higher education, whereby a TAFE student receives the same level of credit based on a completed TAFE qualification at a range of higher education institutions throughout the nation. This is because training packages do not stipulate curriculum, or even learning outcomes. They contain only the competencies deemed to be required in the workplace by the relevant Industry Training Advisory Board. There is no requirement on any VET provider to say how they support students to become ready to be assessed as competent, they need only certify that they are competent, as measured against the endorsed assessment guidelines contained within the package.

As higher education courses are based on a curriculum model, this poses significant problems in determining the extent to which articulating students share the same knowledge base. The inevitable result will be credit transfer arrangements negotiated individually at the course, department and institution levels, rather than systemic credit transfer arrangements at a state or federal level.

Higher education to TAFE articulation

Higher education students moving to TAFE may find it difficult to obtain credit transfer, even if their studies have been in the same discipline. This is because they have not been assessed directly against the competencies in the training package. Nor have they necessarily been assessed by a person with appropriate skills as specified in many training packages. These are requirements for students to qualify for an award mapped to the Australian Qualifications Framework in the VET sector. So, a higher education student may know about something, and even have the required skills, but unless they have been observed actually demonstrating the skill in a workplace or simulated work environment by an appropriate assessor then they have not demonstrated competence.

There are several problems with this situation. First, it implies that there exists two kinds of knowing – what the higher education student knows and what the VET student knows, about the same content area. If there were not content overlap then the issue of credit transfer would not have arisen to begin with. Distinguishing between performance and knowing in this way divorces knowledge and practice.

Second, it suggests that much knowing and skill can be reduced to one measurable performance. This goes against all that industry is requiring of graduates from VET and higher education. Rather than narrow skills training, employers say they want graduates with "generic" skills. Demonstrating a competence once hardly

seems to meet this requirement.

Credit for partially complete TAFE studies

Training package competency standards are expressed as outcomes that may be applied at work. Examples from the Community Work qualification within the Community Services Training Package include (ANTA, 1999e):

- meet the information needs of the community;
- process and provide information;
- work with others; and
- communicate with people accessing the services of an organisation.

Students are assessed against these competency standards, and the name of the competency standard and the results achieved by students appear on the academic transcript. The academic transcript is a key document that higher education staff use in determining whether to grant credit for higher education subjects based on TAFE studies. This becomes an issue when students are seeking credit for incomplete TAFE studies. In these circumstances credit transfer is usually considered individually.

It is difficult for higher education courses to develop agreements on credit with TAFE courses in advance for incomplete TAFE studies, because there are so many possible variations that students can undertake. Students may have completed different modules in different sequences, all of which may have an impact on the degree of credit they can be granted in higher education.

The specification of competency standards on academic transcripts as required by the Australian Recognition Framework tells higher education staff little about the studies TAFE students have undertaken, or the academic disciplines they have been based on. The extent to which the academic foundations of competency standards are stipulated in course materials is variable. Taken together, there is often little that higher education staff can use in making decisions about credit transfer for incomplete TAFE studies. This may result in higher education staff being less willing to grant credit on the basis of incomplete TAFE studies.

Ungraded assessment in TAFE and entry to higher education

The competency model upon which training packages are based assesses students as either competent or not yet competent (NYC), rather than grading students based on the level of proficiency they have demonstrated. This is based on the premise that all students must demonstrate competence against all elements of competency in order to perform in the workplace.

Competency standards are expressed as a specification of workplace performance. Grading of results is not seen to be an appropriate approach in these circumstances. It is thought that in many circumstances there can be no levels of competence, as performance under such circumstances is too variable. For example, a doctor who was graded at 51 percent for a particular performance may not be operating at the level of competence deemed necessary. It is argued that if the competency standards are well written, they should incorporate the range of acceptable levels of performance, and that anything below that is not acceptable. In this way it is thought that the ungraded approach of competent and not yet competent may result in higher standards than an approach that relies on grading.

There is significant discomfort in both TAFE and higher education with the analysis underpinning this approach. Many feel that ungraded assessment does not allow or encourage students to demonstrate high standards or levels of excellence, thus unfairly disadvantaging them and removing a key incentive for student performance.

Moreover, the use of ungraded assessment can severely disadvantage TAFE students who are seeking entry to higher education through competitive entry. Such students require graded results to enable them to compete with school leavers for entry. It also makes it difficult for learning pathways to be developed that guarantee access to higher education courses to TAFE students contingent on a demonstration of performance at a particular standard. For example, a higher education course may offer places to TAFE students who perform at distinction or high distinction level in their TAFE course.

How far should VET go in working with higher education?

The course development and assessment approach mandated by training packages in the VET sector is defended on the basis that VET and higher education each have distinctive missions, and the purpose of VET is not to act as a feeder to higher education. Consequently, according to this argument, it would compromise the integrity, the industry driven nature of VET courses to force them to fit higher education curriculum models. The purpose of VET, it is said, is to meet the needs of industry, whereas higher education's mission is much broader, and is as much about generating knowledge as it is about meeting industry needs.

The reality is less straight forward. First, there is argument as to what the primary purpose of VET may be, and who its principal stakeholders are. If it is accepted that key stakeholders include students and the community as well as industry, then it must be accepted that the purpose of VET is broader than simply meeting the needs of industry. That is, VET, or TAFE, needs to offer a broad range of courses to meet differing needs; it needs to (and indeed does) offer general courses as well as vocationally specific ones. Moreover, the way in which VET attempts to meet industry needs and the relative balance between task-focussed and broad educational outcomes in vocational education and training may need to be reevaluated. Whilst there is considerable resistance to anything like the GNVQs, which have become a staple of FE provision in colleges in the UK in preference to NVQs, many educators in TAFE believe that this kind of development is inevitable.

Second, there are many in the VET sector who do not agree with the model of competency based training underpinning training packages. This argument does not come solely from the higher education sector. The argument is not whether VET or TAFE should adopt the model used in higher education (presuming there is one model), but whether the model used in training packages is a good one. This paper has expressed the view that it is not. Stripping learning outcomes and the specification of knowledge from VET courses and replacing them with competencies that are measured directly against specified tasks in the workplace will not result in positive student learning outcomes, for the reasons presented in this paper. At the same time employers may begin to find that the efficiencies in training offered by this narrow model are more than counterbalanced by the lack of broader transferable skills attained by workers that are increasingly required in the modern workplace. This view is rapidly becoming a part of the debate in Australia. It is somewhat ironic that senior bureaucrats and politicians are forced to defend the validity and usefulness of training packages in some forums whilst advocating for a growth in the transferable and generic skills to increase national competitiveness through a flexible workforce at other times.

Third, while it is true that the purpose of VET is to not act as a feeder to higher education, it is still, nonetheless, an important and growing role, and students who wish to take this path should be supported. Moreover, if lifelong learning is to become a reality in Australia then students should be able to gain credit for prior study, and should be able to re-enter education at different points in their lives. Increasing the scope for students to move between sectors and to be granted credit for prior studies is a condition for lifelong learning policies to become real in fact, and not just in rhetoric.

Fourth, the so-called missions of each sector need to be re-examined. There is much myth surrounding this topic. The notion that higher education does not need to meet the needs of industry is not supported by the facts. According to the Australian Bureau of Statistics (1998) 96 percent of those enrolled in higher education in 1997 were enrolled for vocational reasons – they were studying to obtain work. Higher education is increasingly required to take this into account in constructing courses, although it must be said, with mixed success. The market imperative is clearly having an impact: those courses that can guarantee entry to prestigious or desirable occupations attract high numbers of the best qualified applicants for university. What is not occurring is that the expertise of TAFE in imparting practical skills to learners is not being used by higher education. There is a growing view that the mission of VET could include the development of employment related skills as part of undergraduate degrees as well as ensuring that TAFE graduates receive an adequate education in generic skills. This would assist graduates of both sectors to survive in an environment based on the rapid growth and implementation of new technologies, together with the rapidity of change in the relative importance of various employment sectors.

Both higher education and VET meet the needs of industry, and the broader community. Both offer general courses and vocationally specific courses. The divide between the sectors is becoming increasingly blurred, particularly at certificate 4, diploma and degree levels. The differences that exist are at either end of the sectors – higher education plays a role in research, post-graduate studies and so on, while TAFE plays a greater role in providing foundation level studies.

Conclusion

There is great pressure for the TAFE and higher education sectors to collaborate. Government policy papers proclaim the need for "seamlessness" and the peak bodies in each sector - the Australian Vice-Chancellors' Committee in higher education and ANTA in VET - have collaborated on joint projects to facilitate seamlessness (see Carnegie, 2000). The ARF was developed explicitly to provide a nationally consistent framework that allows for credit transfer and articulation between qualifications in all sectors. Despite this the policy directions in the VET sector, particularly the introduction of training packages, continue to make collaboration between the two sectors more difficult. Training packages in their present form are less than helpful in facilitating the development of a "seamless" tertiary education sector in Australia and do not add anything to ensuring that Australia develops a flexible workforce, equipped to face the challenges of technological change and the need for lifelong learning.

Training packages need to be rethought in Australia. Many of the shortcomings experienced in the UK with NVQs have been replicated in Australia with training packages. While there are some advantages to them as outlined in this paper, none are intrinsic to training packages *per se*, and all can be incorporated into other models of provision. A consideration of more flexible models together with a clear reexamination of the roles and missions of the two sectors, vocational education and higher education, would suit students, industry, the broader community, and would facilitate collaboration with higher education.

With a growing debate in a significant number of nations including the UK and Australia about how to manage the interface between vocational education and higher education it is clear that a narrowly focused system of vocational education such as that represented by training packages is no longer an appropriate approach to the specification of training and ought not be adopted by other countries. A new model is needed that draws on the best from competency based training systems and from higher education. It is important to acknowledge that:

- most learners in both higher education and vocational education are chiefly motivated by the prospect of employment;
- as industry and commerce are significant stakeholders in the outcomes of education that they need to take a key role in the specification of education and training, but that must not exclude other key stakeholders from this process;
- assessing learner accomplishment is critical;
- as is the emphasis on broad transferable skills that marks much successful higher education.

What is perhaps lacking in either system but needed in any new model is a genuine accommodation to the need, necessity and inevitability of lifelong learning.

Notes

 Tendered programs are those that require different providers to "tender" for programs – that is, to be awarded the funding to deliver particular programs. One criterion, and most would maintain the major criterion, used in deciding who wins tenders and

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who does not is the price at which the provider says the program can be delivered. It is in government interests to keep this as low as possible.

- 2 The Schofield enquiry was limited to the apprenticeship and traineeship system in Victoria. Training packages are used in this area as well as in non-apprenticeship courses. That is, all VET courses, whether or not they are apprenticeships or traineeships are subsumed within training packages.
- 3 ANTA describes the role and purpose of the National Training Information Service (NTIS) as ... an internet database on vocational education and training in Australia. It provides detailed information on Training Packages (including those under development) endorsed competency standards, accredited courses, qualifications and RTOs ... All details of an endorsed Training Package must be provided to ANTA for placement on the NTIS..." (ANTA, 1999d, p. 35).
- 4 Training packages may have rules about prerequisites that stipulate successful completion of specified units of competency prior to embarking on others. However, ANTA favours approaches that do not rely on specification of prerequisites.

References

- ACNielsen ResearchServices (2000), *Employer Satisfaction* with Graduate Skills, Research Report, Evaluations and Investigations Programme, Higher Education Division, Department of Employment Education Training and Youth Affairs, Canberra, Vol. 99 No. 7, February.
- Anderson, D. (1997), Review of Melbourne TAFEs Institutional Amalgamations in Post-Secondary Education and Training: Review of Literature and Annotated Bibliography – Paper 7, Ministerial Review of the Provision of Technical and Further Education in the Melbourne Metropolitan area.
- Australian Bureau of Statistics (1998), *Education and Training Experience, Australia 1997* (Cat. No. 6268.0), ABS, Canberra.
- ACTRAC (1994), User's Guide to Course Design for Competency Based Curriculum-Second Edition, Australian Committee for Training Curriculum, Frankston.
- ANTA (Australian National Training Authority) (1999a), Providing Life-long Skill Training Through an Integrated Education and Training System: The Australian Experience, Brisbane.
- ANTA (Australian National Training Authority) (1999b), Training Packages Development Handbook, Brisbane.
- ANTA (Australian National Training Authority) (1999c), Policy for Training Packages, August, Brisbane.
- ANTA (Australian National Training Authority) (1999d), Process for Training Package Development, August, Brisbane.
- ANTA (Australian National Training Authority) (1999e), Community Services Training Package (CHC99), Community Services Common National Competency Standards, Brisbane.

- ANTA (Australian National Training Authority) (1999f), Community Services Training Package (CHC99), Assessment Guidelines, Brisbane.
- ANTA (Australian National Training Authority) (1999g), Community Services Training Package (CHC99), Qualifications Framework, Brisbane.
- ANTA (Australian National Training Authority) (1998), A Bridge to the Future: Australia's National Strategy for Vocational. Education and Training 1998-2003, Brisbane, http://www.anta.gov.au
- AQFAB (1998), Australian Qualifications Framework Implementation Handbook, 2nd ed., Australian Qualifications Framework Advisory Board to MCEETYA, Carlton.
- Ball, S. (1998), "Big policies/small world: an introduction to international perspectives in education policy", *Comparative Education*, Vol. 34 No. 2, p. 12.
- Boud, D. (1995), Enhancing *Learning Through Self* Assessment, Kogan Page, London.
- Carnegie, J. (2000), *Pathways to Partnerships*, VETASSESS, Melbourne.
- Foster, S. (1998), CBT in Victoria Office of Training and Further Education, Victoria, http://www.otfe.vic. gov.au/planning/cbt
- Greer, T. (1998), Proceedings of the Inquiry Into the Appropriate Roles of Institutes of Technical and Further Education, 1997/98, 2 April, Hansard r 1716, Canberra AGPS, Canberra.
- HRSCEET (1998), Inquiry into The Appropriate Roles of Institutes Technical and Further Education, House of Representatives Standing Committee on Employment Education and Training, 1997/1998, AGPS, Canberra.
- Kearney, P. (1992), Collaborative Assessment Techniques for Competency Based Training and Enterprise Training, Artemis Publishing Consultants, Hobart.
- Marginson, S. (1997), *Markets in Education*, Allen and Unwin, St Leonards.
- Marginson, S. (1998), "Competition and diversity in the reformed Australian higher education system", in Meek, L.V. and Wood, F.Q. (1998), Managing Higher Education Diversity in a Climate of Public Sector Reform, Evaluations and Investigations Programme Higher Education Division, Department of Employment, Education, Training and Youth Affairs, Vol. 98 No. 5, May.
- NCVER (2000), Statistics 1999 in Detail, Australian Vocational Education and Training Statistics 1999, National Centre for Vocational Education Research.
- Nightingale, P., Te Wiatia, I., Toohey, S., Ryan, G., Hughes, C. and Magin, D. (1996), *Assessing Learning in Universities*, University of New South Wales Press, Sydney.
- Schofield, K. (2000), Delivering Quality: Report of the Independent Review of the Quality of Training in Victoria's Apprenticeship and Traineeship System, Office of Post Compulsory Education, Training and Employment, Victoria.
- Senate (2000), Aspiring to Excellence: Report of the Inquiry in to the Quality of Vocational Education and Training in Australia, Senate Employment, Workplace Relations, Small Business and Education Committee, 9 November.