Foreword

This is the third and final research paper in an occasional series issued by the Victorian Qualifications Authority (VQA) on issues relating to post-compulsory qualifications. Although the VQA will soon be replaced by the Victorian Registration and Qualifications Authority (VRQA), the important task of monitoring the effectiveness of the qualifications framework and the associated pathways in Victoria will continue in the new authority.

The paper has taken a broad international perspective on recent developments and draws our attention to some emerging critical issues. Some findings are unsurprising. National qualification frameworks (NQFs) continue to gain prominence and attention across most regions of the world. And where governments have established qualifications authorities there is a tendency for the NQFs to become more robust and to play a more active role in articulation, including credit transfer. There are some important observations on the significance of the recent European agreements on qualifications and pathways in higher education, and on the credit transfer system for VET which is receiving support from the European Commission.

Such developments elsewhere provide a confirming context for our own work locally. In Victoria the emergence of the Credit Matrix persists in showing new directions and possibilities in keeping with the lessons to be gained from international developments.

Qualifications in senior secondary education continue to seek that elusive balance between competing demands. The rising chorus for minimum standards jostles for equal space alongside concerns over access and inclusiveness, and the need to recognise the many different forms and achievements of learning. The recognition of informal learning is also beginning to figure more prominently. In almost all jurisdictions the diversification and mixing of the vocational and general routes remains a goal rather than wide practice, and there is much to be learnt here from the on-going efforts both internationally and interstate.

Our thanks are once again due to the Centre for Post-compulsory Education and Lifelong Learning at Melbourne University, and especially to the report’s main author Professor Jack Keating, for identifying both those developments of interest and the pressing challenges ahead. The report contains many valuable insights into the qualifications landscape, and has rightfully taken its place in the legacy of past effort and reflection which will inform the future work of the new authority.
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Part A: A basis for analysis

Method
The report has been developed through a review of developments in qualifications and pathways over the past year. Because there are few significant initiatives in these areas over this period it was decided to try to examine some of the more significant trends, issues and debates. These developments have been observed through a review of the national and international literature. Once again it is difficult to discern developments and debates that are particular to the past year.

Therefore, to broaden the sources beyond the literature interviews were conducted with personnel from each of the ACACA (Australasian Curriculum, Assessment and Certification Authorities) authorities. Interviews were also conducted with personnel from AQFAB and from the Australian Council for Education Research (ACER) in relation to developments within the AQF and the proposed Australian Certificate of Education, respectively.

Dr Mike Coles who has been responsible for much of the development work for the European Qualifications Framework, and was one of the main authors of the recent OECD report on qualifications and lifelong learning (2006) was commissioned to provide advice on qualification issues and development in Europe and OECD countries. Professor Richard Sweet who has worked at the OECD for the past eight years also was commissioned to provide advice on recent developments and debates in transition pathways.

As part of another project, personnel from all TAFE institutes and a range of major private Registered Training Organisations (RTOs) were interviewed. The opportunity was taken to include a small number of questions on the provision of post and para school pathways in the interviews.

Introduction
Last year’s VQA Scanning Report used the analytical concept of qualifications and pathways policies and infrastructure as representing the outcomes of competing social, economic and institutional demands. These demands are never fully resolved and as a consequence the policy fields of qualifications and pathways are inherently dynamic with patterns of frequent innovation, institutional and regulatory adjustment, and occasional contestation.

In the context of major economic, labour market, demographic and social changes these demands have broadened and intensified. As a consequence these dynamic patterns have been prominent for the past two or three decades. The subsequent tensions within and across qualifications and qualifications systems were explored in the report through the four broad and sometimes competing themes of Participation and opportunities, standards and recognition, seamlessness and flexibility, and pathways and provision.

Over the past year contestation, innovation and adjustment have continued across these broad themes, both in Australia and in other countries and regions. However, most of the major themes and innovations, such as the standards debate in the USA, qualifications alignment in Europe, and enhanced pathways in the UK and Australia are continua and a report that uses the same framework would risk repetition. Furthermore, the recent OECD report on qualifications and lifelong learning (OECD, 2006) contains a detailed descriptions and analyses of national qualifications systems for a large number of OECD nations, and O’Donnell (2004) has assembled

1 Except for the NSW Board of Studies which advised that the topics were too sensitive to discuss for the purposes of this report.
a comprehensive set of comparative tables and factual summaries of national curriculum and qualifications frameworks. In the area of pathways Raffe (2003, 2006) also has undertaken some recent major descriptive analyses.

Qualifications and pathways: A conceptual framework

This report attempts to describe issues, tensions and developments across two concepts that are of different genre. Qualifications are social constructs that are composed of descriptions or specifications of learning, regulations and procedures, and which have institutional infrastructures for access, awarding and quality assurance. Pathways are metaphors (Raffe, 2003) that encompass the interactions between employment markets, education and training systems – including qualifications – and human behaviours. These interactions are most robust during the period from the end of compulsory schooling to the time when young people gain on-going and for most full time employment (OECD, 2000). This period has now become known as the education to work transition phase.

Qualifications and qualifications systems invite various descriptive typologies for descriptive purposes. Some earlier work (Finegold et al, 1992; NBEET, 1994) described groups of qualifications as ‘unified’ or ‘fragmented’. More recently the concept of qualifications systems has begun to evolve both conceptually and organisationally, and these also invite typologies such as ‘process based’ and ‘outcomes based’ systems (Young, 2001). The emergence of qualifications frameworks also has invited typologies of ‘hard’ and ‘soft’ frameworks (Young, 2005). The even more complex area of pathways has invited even more typologies, including dichotomies such as general and tracked, open and closed, flexible and rigid, etc.

We suggest that while these typologies are useful for descriptive purposes they all apply in various degrees to different national and regional qualifications systems. Furthermore, qualifications and pathways ‘systems’ are so complex, and dynamic, that these typologies are not useful as ideal types. This is because they are not ideal for either policy or analytical purposes.

Therefore, it is suggested that there is a need for a broad analytical framework to describe the concept of qualifications and pathways systems. The schema below describes the interaction between three sets of variables. There are a set of largely independent variables on the form of the labour market. The changes in industry and occupational profiles, and the consequential changes in skill needs, have been the catalysts for the increased changes and innovations in qualifications and qualifications systems over the past three decades, and for the emergence of the concepts of pathways and transition. It is useful also to factor in the different behaviours of internal and occupational labour markets (e.g. Garonna and Ryan, 1991; Maurice et al., 1986). For example, qualifications typically have a more prominent role in occupational labour markets, and typically these labour markets provide stronger direct pathways from education and training to employment (Raffe, 2006).

These behaviours are influenced by the labour market regulatory environment, which in turn is influenced by the historical patterns of industry formation and occupations and their relationships with government. All of these variables are dynamic, although not autonomous. Although industry and occupational structures and their behaviours have a high degree of independence they clearly are influenced by the regulatory environment (Gangl, 2003; Breen, 2005). However, there also is evidence that industry investment patterns are influenced by the supply of labour skills (as well as price), and there is evidence that the patterns of recruitment can be influenced by the characteristics of qualifications and their delivery (Keating et al, 2005). For example the high rate of articulation of VET in Schools (VETIS) students with full-time employment and

2 Details of curriculum and assessment frameworks can be found on the INCA (International Review of Curriculum and Assessment Frameworks) interactive website: http://www.inca.org.uk/
apprenticeships (DET, 2005; DEA, 2006) indicates this link. As well, occupational cultures have an impact upon labour markets through the characteristics of the networks within the occupations. In turn occupational cultures also have been influenced historically by the characteristics of the qualifications that have been built up to define and control occupational entry and standards.

For example, Elmore (2005) argues that teaching as an occupation has failed to establish itself as a profession. This is because it has failed to establish a set of base line knowledge, skills and procedures and because it has valued the principle of autonomy above the development of professional practices against which the occupation is accountable. As a consequence teaching is based on an industrial rather than a professional culture where the qualification is a base line entry requirement rather than a professional endorsement. In this sense teaching qualifications have a different relationship to the occupation than do those of professionals.

Education and training systems have developed and continue to mutate largely in response in a dynamic relationship with the labour market. These systems do have a degree of autonomy from the labour market, especially historically, as qualifications also have a status role which is conducive to the development of hierarchies. These hierarchies may not exactly match those within the labour market, although the historical interactions between them mean that they have become more closely aligned, especially as a range of occupations have attempted to use qualifications to gain professional and para professional status. Qualifications have been used by occupational groups to build occupational hierarchies and improve positions in these hierarchies. Ironically the push in Australia for industrial deregulation has led to the formal dilution of qualifications hierarchies through the decision in 2002 to abolish the term ‘level’ in any descriptions within the Australian Qualifications Framework (AQF). There are complex
interactions between the impact of status within qualifications systems and the economic or exchange purposes of qualifications.

The location, type, cost and quality of provision within education and training systems will have an impact upon the relationship of its qualifications and its participants with the labour market. Typically countries and regions have expanded the support services within education and training systems. Amongst the most important are information systems, which recognise the highly marketised environment for youth transition and pathways.

The extent and characteristics of the support services are influenced by the characteristics of the labour market and its relationship with the education system. Deregulated labour markets and generalised education and training systems, such as those in Australia, typically will demand more support services. Support services also are in increased demand as the transition period between the end of compulsory schooling and full-time employment continues to grow and extends into young adulthood (OECD, 2005). An important factor here is the nature of the contingent youth labour market. Australia is listed as having the second highest level (after the Netherlands) of part-time employment amongst students in initial education and training (OECD, 2006a), and Schmid (1998, 2004) has described this as a transitional labour market, which in this case has an important role in supporting the youth labour market entry. In Australia’s case this has been enhanced by its long economic boom, and by the fact that it has a ‘youth friendly’ labour market (Sweet, 2006).

The labour market and the education and training systems provide the theatre for the pathways of young people. The scholastic and employment backgrounds, demographic characteristics, and locations of these individuals influence their relative success within pathways and their labour market outcomes. These characteristics also interact in different ways with the variables in the labour market and the education and training systems. As a consequence they help to shape aspects of the education and training system, including qualifications and transition support services. VCAL is a clear example of a result of these three way interactions. To this extent education and training systems are dependent variables in these sets of relationships.

These interactions between the three sets of factors also are influenced by other factors that in turn help to shape national and regional qualification systems and pathways. Any understanding of qualifications systems needs to be based upon a governance theory or construct. This is because these systems are not purely autonomous as in an idealised market, and this is especially the case where government has assumed a more direct role in qualifications and pathways systems over the past three decades in Australia. For education and training systems governance is defined as an institutional ecology of multiple negotiated relationships between actors and between those actors and government. Provision, qualifications and associated systems (including pathways support systems) all have some relationship with government that limits their autonomy. On the other hand the authority of government is challenged by actors such as employers, media, professional associations, providers, etc., and qualifications systems are an outcome of the negotiated relationships (not all of which are through institutional infrastructure – such as media pressure) between these actors and government.

Australia, and especially Victoria, has strong traditions of institutional autonomy in education and training. This, in turn, has allowed a stronger role for other actors, such as subject networks in the

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3 See Considine (2004) for an analysis of the application of this concept to the Australian labour market.
4 The Australian labour market has high levels of part-time employment, mostly in the retail and hospitality industries that are widely distributed geographically making them accessible to full time students. There is a natural confluence between the location of tertiary education providers and these industries (OECD, 2001). As well, there are lower wages for young people and a sustained economic boom has fuelled employment growth.
year 12 certificate. This tradition of governance can explain why Victoria has always been more innovative in the establishment and use of qualifications. To demonstrate this there are historical examples such as the range of year 12 courses that existed prior to the VCE (STC, TOP, Group 2 courses, Tech Year 12), and more recent examples of degrees in TAFE (Holmesglen, Northern, Box Hill), the prevalence of the International Baccalaureate (IB) and the establishment and growth of VCAL.

The second intervention is premised upon the historical tendency of market failure in education and training. Schooling is compulsory, largely publicly funded and with goals and in some cases targets for expansion. Government intervention (funding and regulation) in training systems is premised upon the failure of industry to fully meet its own skill needs. The higher education market has proven to be more robust and this has allowed a reduction in public funding in Australia. Indeed the Melbourne University model (Davis, 2004) is a recognition of its market power and its consequential high degree of autonomy. Once again the relative strength of Victoria’s education market has allowed a higher degree of provider autonomy than in other states.

A third form of intervention has come under the broad term globalisation, and its impact upon education and training systems (Brown et Al, 2001). This is both institutional in the form of free trade agreements and behavioural in relation to labour markets and education and training markets. The influx of overseas and international qualifications is a challenge to the hegemony of local qualifications, as is the establishment of overseas educational institutions in Australia. These developments are an incentive to establish qualifications frameworks as a means of controlling the quality of these qualifications (Coles, 2006).

The emergence of an international market for skilled labour has had an impact upon qualifications systems and countries that export labour, such as the Philippines, have moved to construct qualifications frameworks as a means of certifying the quality of the qualifications of their workers who seek employment abroad. Conversely countries that import skilled labour, such as those in the European Union (EU), require consistent frameworks to align and compare qualifications.

The growth of the international market in education and training provision also has an impact upon education and qualifications systems. The implementation of the Bologna system within Europe potentially threatens the international student market in Australian higher education. It could have an impact upon undergraduate degree structures in Australia.

A fourth set of intervening influences are the social demands upon qualifications and transition systems. These demands must balance with economic demands, although there is a high degree of congruence in modern qualifications and pathways systems as there is evidence that students by and large make rational economic choices within education and training. However, social demands can extend beyond the economic, and governments will typically invest in support systems for different demographic groups, such as indigenous students. Social demands also can be influenced by ideology. For example the current Commonwealth push for an Australian Certificate of Education has led to a project conducted by ACER to compare syllabuses in three areas: mathematics, English and Australian History. It seems likely that this choice has been influenced by the Prime Minister’s personal interest in mandating Australian history in secondary schools.

Finally there is the factor of what we call institutional dependency. This is a form of path dependency (Green et al, 2002) and is located in the institutional infrastructure for education and training and qualifications systems. For example, the separate histories of the school and training sectors in Australia have ensure limited institutional (including qualifications) integration between them. There is a tendency for the institutional interests in and around the form of the
respective bureau cries – the ACACA authorities and the state training authorities – together with
the policy networks\(^5\) to strive to maintain their own autonomy and thus control over their
respective qualifications, in a Webberian sense.

Two examples of this are suggested. First is the rejection by all of the ACACA authorities of the
proposal for an Australian Certificate of Education\(^6\). Second is the impasse over the current
AQF. Apart from its set of VET descriptors the AQF is mainly used as a forum for sectoral
discussions over credit transfer and state and territory discussions over areas such as VETIS. Its
failure to advance into the broader purposes such as those of the Credit Matrix and those
identified by Cole (2006) is located in the institutional dependency of its constituents. Indeed
there is a case to be made that it acts to maintain path dependency in qualifications in Australia.
Institutional path dependencies can weaken the articulation between the education and training
system and the labour market (Raffe, 2006).

Broad lessons from cross national comparisons in qualifications and pathways.

It is apparent that cross national comparisons of the outcomes of education systems are becoming
a major feature of the policy landscape in education and training. The success of PISA
(Programme for International Student Assessment) has now prompted the OECD to initiate the
Programme for International Assessment of Adult Competencies (PIACC, OECD, 2005). Its
purpose is to gather “comparative data to explore issues concerning the development, levels and
use of competences believed to underlie personal and societal success in adults, focusing on a
broad concept of literacy skills. It will be based on a five-yearly cycle of assessments of literacy
skills among nationally representative samples of 16-64 year-olds.”

Prior to this initiative the OECD undertook comparative studies on the impact of qualifications
systems upon lifelong learning (OECD, 2006) and on education to work transition (OECD, 2000).
Each of these studies attempted some broad conclusions about the effectiveness of the respective
‘national systems’. In summary they are:

1. Qualifications and Lifelong Learning:
   - Policy responses and mechanisms
     
     Increase flexibility and responsiveness
     Motivate young people to learn
     Link education and work
     Facilitate open access to qualifications
     Diversify assessment processes
     Make qualifications progressive
     Make the qualifications system transparent
     Review funding and increase efficiency
     Better manage the qualifications system (OECD, 2006)

\(^5\) A ‘policy network’ is relatively identifiable network of individuals who exert a considerable influence
upon a study field. See McPherson and Raab (1989) for a major study of an education policy network.

\(^6\) This is based upon interviews with personnel from the authorities.
2. Effective transition systems

- A healthy economy
- Well organised pathways that connect initial education with work and further study
- Widespread opportunities to combine workplace experience with education
- Tightly knit safety nets for those at risk
- Good information and guidance; and
- Effective institutions and processes

(OECD, 2000, p16)

Given the complexity of the relationship between education systems and labour markets, and the experiences of individuals within them any broad lessons should be heavily qualified to account for national circumstances. For example, the OECD qualifications studies draw from national policy responses that are dominated by the EU countries with their strong agenda for alignment of their education and training systems and movement of students and workers across the member countries. The study also is essentially empirical, and has relied upon country background reports for its main inputs. These reports were prepared through the national government agencies (DEST in Australia) and took uncritical analyses of their ‘national qualifications systems’ and had little analyses of the challenges and limitations. Thus the question of how national or regional suites of qualifications and the relationships between them best serve the population and the economy, as in the VQA’s original remit, was not well served by the methodology. The report also provides a ranking of mechanisms, also derived from the Country Background Reports, for strengthening qualifications and qualifications systems (see Appendix 1).
Part B: Developments and issues

Introduction

The second part of the report consists of some observations on international developments in qualifications and pathways that are drawn from the literature, activities conducted by the OECD and other international organisations, and the advice of prominent researchers. These observations are then used to reflect on some of the key developments in Australia over the past year, drawn from the literature and the interviews with national and state personnel.

The observations are grouped under the following headings: harmonisation, minimum standards, qualifications types, recognition of informal learning, progression, core competencies, provision, career guidance, and vocationalism. These headings contain concepts and elements of qualifications and pathways that are difficult to separate, and there is inevitable overlap between them. The headings have been derived from a combination of recent developments in Australia and major movements at the international level, especially in Europe and the OECD, which provide the major theatres for qualifications and pathways research, debate and innovation. Australian developments include the reforms to senior secondary certificates in some states, incipient changes in the tertiary education sector, discussion related to the AQF and associated issues of credit transfer and the recognition of prior learning (RPL), and rhetorical pressure upon qualifications and curriculum from the federal government. Major international themes have been the alignment of qualifications and pathways, the recognition of informal learning, and cross country studies of patterns of educational outcomes.

Harmonisation

Harmonisation refers to the broad measures to align qualifications for the purposes of recognition for course entry and employment recruitment, and articulation between qualifications. The considerable amount of international activity is related to the mobility of workers and student, more flexible labour markets, and the emergence of regional economic blocs and labour markets, especially the EU.

Qualification frameworks

There is an extraordinary interest in and growth of qualifications frameworks across most regions of the world. After their initiation in the Anglophone countries in the mid 1990s they spread to Southern African countries (South Africa, Lesotho) and some Asian countries (Malaysia, Philippines). More recently various forms of qualifications frameworks have spread across European countries, and are now being developed in countries as disparate as Botswana, Saudi Arabia, and Chile.7

CEDEFOP (2006) identifies 31 out of 33 European nations (including the three British nations) that have either developed, are developing, intend to develop or are considering the development of national qualifications frameworks (NQF). Only Finland and Italy are not considering a NQF. The European Commission’s consultations on the development of a European Qualifications Framework (EQF) appear to locate a strong consensus for its progression, although achieving agreement on a set of descriptors will be a major challenge.8

There is enormous diversity in the characteristics and purpose of NQFs that exist or are being developed. Coles (2006) used six continua to describe the characteristics of NQFs:

- inclusive of all to some qualifications;

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7 Personnel correspondence with Dr Ian Allen 16.7.06.
8 See the following website for country responses to the draft EQF:
http://europa.eu.int/comm/education/policies/educ/eqf/resultsconsult_en.html
- centralised to organic development;
- quality regulatory mechanisms to just classification;
- legal to voluntary;
- based upon learning inputs to learning outputs;
- level descriptors to levels determined by nationally referenced qualifications (e.g. AQF);
- competency based to units or learning or achievement.

Purposes include alignment and harmonisation, regulation including funding systems, quality control, and articulation within education and training systems. The different characteristics described by Coles are shaped by their intent and the sectoral and institutional drivers. Where governments have established national qualifications authorities there is a tendency for the NQFs to become more robust and to play a more active or at least a potential role in articulation, including credit transfer (Young, 2005). However, almost all NQFs are at least in part made up of sectoral agreements, and as argued above the extent of sectoral control of the NQFs tends to be in a converse relationship with the ambitions and potential capacity of NQFs to promote flexibility and articulation between qualifications. NQFs that are accompanied by systems that promote articulation between and alignment of qualifications will typically have descriptors that are outcomes based.

Qualifications frameworks have caught the attention of the EU, OECD, ILO, UNESCO and the G8, all of which have undertaken studies in the area. Russia has proposed, and offered to fund, a top-level group to look at international qualifications transfer.9

Upon the basis of Coles’ continua the AQF is a relative limited framework: It is based upon sectoral agreements and qualification descriptors. As Byrne (2006) has noted “the second Charter (2000-2005) dispensed with the implementation role while adding new responsibilities and maintaining the functions of liaising with education and training parties and international bodies, keeping registers of authorised accreditation, registration and qualification issuing bodies and providing authoritative advice on the AQF and particularly the qualification guidelines.”(p3)

This situation appears to be a strong expression of the 'institutional dependency' that is outlined above. In Australia's case the impact of the changes in the labour market and skills demand has been concentrated heavily upon the VET sector which in its formative stage through the 1990s mostly excluded the schools sector. As a consequence Australia retains one of the most generalist of OECD school sectors (Sweet, 2005) and VET in schools retains its characteristics of complexity, inconsistency and state centricity. The AQF appears to offer little assistance in resolving this situation. In turn each of the three sectors have minimal cross over in policy networks - industry for VET; subject associations and networks for schools10, and professional networks for higher education.

It is difficult to compare the AQF with other NQFs as most are in early development stages. The European frameworks also have the challenges of aligning the different qualifications across their tracked secondary school systems, but on the other hand have the challenges of Bologna and Copenhagen (see below). Beyond Europe it also difficult to make comparisons

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9 M. Coles personnel correspondence 7.9.06.
10 These networks are currently being attacked by the Australian. Wiltshire (2006) has argued that the demise of the curriculum development capacities of the state education departments has allowed these networks to have greater influence over the senior secondary curriculum, and that one symptom of this is the influence of post structuralism.
as the ambitious architecture of many NQFs beg the question of their capacity to be managed, and the problems of excessive complexity, as appears to be the case with the South African Qualifications Framework.\textsuperscript{11}

\textbf{Credit Transfer}

The concept of qualification routes is quite strong across Europe where tracked secondary education systems have been prominent. The need for flexibility means that links between pathways is a well-discussed subject. However, while numerous countries have established formal links, such as the Nordic countries, the Netherlands, and even Germany, there is little evidence of transfer between routes, and especially transfer that carries credit.

For articulation to be possible it is necessary to have an articulation agreement (or a MOU) between the responsible bodies in the different tracks. Such agreements can lead to credit transfer for learning from one track to another. Sweden and Finland have been working on developing credit transfer between different aspects of senior schooling and have built a system where some credit can be carried forward into the next stages of learning.

The development of credit systems requires some criteria for levels of learning and these levels of learning can develop into frameworks. In the UK new descriptors have been developed that are sensitive to learning at unit level - that is for partial qualification. It may be in time that some units (such as a work experience unit) can carry currency in an academic qualification and thus articulation between different types of qualification is facilitated.

The European Commission has been working on the blueprint for a credit transfer system for VET (European Credit for VET - ECVET), which will complement the European Credit Transfer System, as part of the Bologna processes (see below).\textsuperscript{12} ECVET will be launched at the Helsinki Summit in October 2006. However, the rhetoric on and the architecture for credit transfer has consistently been ahead of the amount of credit that is realised. For example, when the English Qualifications and Curriculum Authority (QCA) did a survey (on behalf of the Commission in 2004) on plans for vocational qualifications reform only 6 countries (out of 31) mentioned credit transfer (Coles, 2006b).

Credit transfer is facilitated by the development of credit frameworks or matrices. The most prominent of these are those in Scotland, Northern Ireland, and Wales and to a lesser extent England. The unit credit basis of the New Zealand and South African qualifications frameworks also a ready basis for the development of credit arrangements. Once again data on the realisation of credit across these systems is not available.

\textit{Australia has tended to be ahead of the pack in terms of the architecture for credit transfer. Horizontal transfer has not been an issue in Australia at the secondary level, given the existence of mostly common certificates. At the tertiary level Moodie (2005) has provided some comparisons between Australia, New Zealand and North America of levels of student and credit transfer across the tertiary sectors. He concludes that the levels of transfer are higher in Australia than the formal structures of the sectors would tend to require or invite. Keating (2006) argues that this is related to unresolved tensions in and between the Australian tertiary sectors that relate to their formative histories and governance structures.}

\textsuperscript{11} M. Young, personal correspondence 20. 10.05
\textsuperscript{12} See Europa website: http://www.eurydice.org/ressources/eurydice/pdf/026EN/007chap4_026EN.pdf\#search=%22credit%20transfer%22
The Bologna process

Within Europe, and arguably at the broad international level, the Bologna process continues to be the most significant development in the area of qualifications and pathways. The Bologna process is a testament to the impact of globalisation and internationalisation upon markets for skills and labour. In essence it is a commitment to create, by 2010, a single European Higher Education Area to promote the free movement of higher education students, staff and graduates. It now involves 45 countries, extending considerably beyond the borders of the expanded European Union. The process is voluntary for participating countries, and has had a significant impact in a relatively short period of time. This is in contrast to the last occasion on which the European Union tried unsuccessfully to increase cross-border transfer of qualifications (through a project on vocational qualifications undertaken by CEDEFOP in the early 1990s).

The principal elements of the Bologna process are:

- The introduction of a three-cycle degree system in participating countries, modelled on the structure of North American higher education qualifications (bachelor, master, doctorate) and intended to replace the common European tradition of the master degree based upon a long (five-year) programme of study as an initial qualification. The framework is to include generic qualification descriptors based on learning outcomes and competences as reference points, and guidelines for the credit range typically associated with the first two cycles. These are based upon the introduction of the European Credit Transfer and Accumulation System, or ECTS, as a common system of course units. In the early stages there was uncertainty about how the common structure would accommodate the short cycle (two year) initial programmes that are common in some countries, this has now been included as part of the first cycle. There remains, however, some uncertainty about whether the generally accepted three-year length of the first cycle is adequate in some professional fields such as architecture. In some countries with a traditional five-year initial cycle, there is suspicion that the first two stages of the cycle have been created by artificially dividing the five year period into two stages, the first leading to the award of a bachelor degree and the second to the master qualification, with no real change in the total content or the relationship between the qualification and the labour market.

- The introduction of national quality assurance systems for higher education in all participating countries, together with a Europe-wide network of co-operation on quality assurance issues. The national systems are to be based upon an agreed set of standards, procedures and guidelines.

- Mutual recognition between all participating countries of degrees and study periods.

- The diploma supplement, which is a document that graduates can attach to their qualifications that provides additional details about the individual’s achievements and courses taken, the institution attended, and about the country’s higher education system. This is intended to increase the transparency and transferability of qualifications and to make them more accessible and understandable by employers. It is very similar to the notion of a skills passport that has periodically surfaced in Australia (most recently in the Queensland Certificate of Education – QCE, 2005) as a way of improving the market value and relevance of qualifications.
A major conference to review progress was held in Bergen, Norway in May 2005.\textsuperscript{13} The background report prepared for the conference (EC, 2005) is generally positive about the degree of progress achieved to that point.\textsuperscript{14} (Certainly in Norway, where I lead a review of higher education early last year, the impact of Bologna upon the system has been deep and extensive.)

Bologna has several potential ramifications for Australia. The Federal Education Minister (Bishop, 2006b) has shown considerable interest in it and has recently allocated funds to develop an Australian version of one element of the process – the diploma supplement. Various commentators have opinioned that this could threaten Australia’s international student market, with the competition from the shorter and cheaper first stage (Bachelors) degrees.

Recently Melbourne University has announced a restructure of its course and degree system to be based upon a suite of 6 three year generalist bachelor degrees to be followed by two (plus) year specialist degrees (Davis, 2004). This is not strictly the Bologna model and is more like the USA model. However, it has attracted the interest and the support of the Federal Government, which recently allocated $4 million for its implementation (University of Melbourne, 2006). Davis (2004) has argued previously that the tertiary education sector will inevitably change quite radically with the collapse of the Dawkins settlement and the mutation of universities into different genre, and similar changes in the non university VET sector with the emergence of community colleges and polytechnic types of providers.

These changes are already apparent. Apart from the ‘Melbourne University model’, there have been recent announcements of overseas universities establishing partnerships with Australian universities, and a number of TAFE institutes now offer degree level courses.\textsuperscript{15} Such developments would appear to potentially have a major impact upon the structure of qualifications in Australia, and the AQF. They are likely to bring differentiation to the high education sector, and possibly the TAFE sector and thus make the qualifications descriptor basis of the AQF inadequate for its major purposes.

\textit{The Copenhagen Process}

In large part inspired by progress in the Bologna process, a parallel process in the VET area, known initially as the Copenhagen process but increasingly as the Bruges-Copenhagen process, is under way. Its goals are similar to those that are being achieved in the higher education area:

- A single framework for transparency of competences and qualifications. The intention is to bring together into a single user friendly and more visible format the various existing transparency instruments, for example the European CV, the certificate supplements and diploma supplements.

- A system of credit transfer for VET. Inspired by the successful European Credit Transfer System in higher education, the intention is to develop a similar system for the vocational sector (the ECVET – see above).

\textsuperscript{13} The 45 country reports that formed the basis for the Background Report can be found on: [http://www.bologna-bergen2005.no/]().

\textsuperscript{14} An OECD review of Higher Education in Norway located strong support for the Bologna processes in this country.

\textsuperscript{15} Three Victorian institutes offer degrees (Holmesglen, Box Hill, Northern). Degrees are delivered in partnership with universities in South Australia, and a similar partnership has been established between Southbank TAFE and the University of Southern Queensland.
• Common criteria and principles for quality in VET. Taking forward the work of the European Forum on Quality, a core of common criteria and principles for quality assurance will be developed, which could serve as a basis for European level initiatives such as quality guidelines and checklists for VET.

• Common principles for the validation of non-formal and informal learning. The aim is to develop a set of common principles to ensure greater compatibility between approaches in different countries and at different levels.

• Lifelong guidance. The aim is to strengthen the European dimension of information guidance and counselling services, enabling citizens to have improved access to lifelong learning.

Although it was launched in 2002, to date progress in achieving these aims has not been great, with most effort devoted to developing frameworks, concepts, proposals and principles rather than to concrete action on the ground. For example the conclusions of a conference held in Maastricht in December 2004 to review progress on achieving the process’ goals were light on achievement and strong on intent (Figel, 2006). And a recent CEDEFOP study of achievements to date provides little evidence of real progress (Tessaring and Wannan, 2004). A further conference to review progress is to be held in Finland in November as part of the current Finnish Presidency. However the documentation that is being prepared for it will be based upon the standard published literature and upon divergent government reports, rather than a consistent set of national reports on progress such as was available in preparation for the 2005 Bergen conference on the Bologna process.

It is difficult to observe any direct implications of Copenhagen for the Australian context. The AQTF is a relatively stable framework, notwithstanding Davis’ (2004) arguments about the Australian tertiary sector. The only new developments have been the establishment of Vocational Graduate Certificates and Diplomas. These qualifications have caused some tensions within the AQFAB, and again indicate the basis of the AQF as sectorally defined and owned qualifications, rather than a framework that supports articulation between qualifications.

On the other hand the concept of regional qualifications framework developed in conjunction with some neighbouring countries such as Malaysia, Singapore, similar but probably not as elaborate as Bologna and Copenhagen, has attracted the interest of the Federal Minister (Bishop, 2006a). Potential precedents could be the broad objective of several Middle Eastern countries (mainly Gulf States) to align their frameworks, and the integrating role played by CINTERFOR in the development of Latin American frameworks. Once again, the absence of levels in the AQF is likely to be a barrier.

A national certificate

The ACER has reported a considerable degree of support for the broad idea of a national Australian Certificate of Education (ACE) and the recommendations contained in its report to the Federal Government (Masters, 2006). Three sets of processes have been established following its report:

16 The official web site of the Bruges-Copenhagen process largely consists of declarations of intent but provides very little in the way of substantive details:
An audit of the curricula for a group of senior certificate subjects across the states and territories: English, Mathematics, Physics, Chemistry and Australian History, being conducted by the ACER;

- An investigation of the possibility of providing common and better evidence of skills, through a project that is yet to be sent to tender; and

- An investigation of a more common reporting format, being led by Victoria through MCEETYA.

Personnel involved in the development of the ACE have noted a high degree of commonality in the mathematics and science studies but major differences in English and Australian History. Their observation that differences between the certificates seem to have grown is probably accurate when comparisons are made with the arrangements in the early 1990s. In particular the fact that VETIS arrangements are so different (see ACACA, 2005) despite the existence of the common bases of the Training Packages and the AQTF suggests a high degree of institutional dependency in upper secondary qualifications.

All of the ACACA authorities have expressed disquiet over the development of the ACE. While all would agree that borders do not have a major influence on learner needs, there is a view that the ACER report took a limited view of the multiple and complex demands upon the senior secondary certificates, and that it did not express a coherent understanding of how a national certificate could work.

All agreed that greater national alignment, especially in VETIS would be desirable, and some felt that a national general achievement test is a possible or even a likely outcome.

Minimum standards

The issue of the learning that is signalled or guaranteed through a qualification appears to have become more prominent recently. This is especially prominent in the debates over and changes to senior secondary qualifications. As most countries and regions endeavour to increase the percentage of students who stay on to the end of secondary education there has been pressures upon the certificates to act as completion certificates, potentially at the expense of user confidence in the amount and standards of the learning which the qualification signals.

Across Europe all the baccalaureate type qualifications contain some kind of criteria for minimum performance in fields of learning. The majority of countries use qualifications that are defined by time but have examinations in key areas (subjects) that define minimum standards. Weakness in one of these areas often means a repeating examination.

In some countries the school leaving is not formally recognised through certification (e.g. France). Certification is reserved for recognising qualification to minimum standards. In others the point of leaving school at the designated (legal) time is the point of completion of qualification programmes and is indistinguishable, and in such case the qualifications may be known as Leaving Certificates (Ireland). There is a point between the two where some qualifications with minimum standards are awarded as well as a completion certificate. The best example of this in Europe is Finland where there are a maximum of three levels of senior school graduation – the first is a legal completion certificate, the second an Abitur type qualification, and the third a university entrance examination in a subject area.

17 Russell (1993) describes the senior secondary certificates in some detail and Figgis (2005) describes recent changes, and together they provide some basis for comparisons.
The UK has been looking at a model of Graduation Certificate for some time. The US model of a single completion of senior schooling certificate that carries a transcript of performance is seen as useful for raising participation and broadening curricula, but is under pressure for a perceived lack of minimum standards. The Specialised Diploma in England and Wales is the latest manifestation of the quest for a US style school leaving qualification.

The specification of minimum standards in different components of a qualification (such as subject knowledge and key skills) carries with it major technical problems in awarding. The larger the number of essential components the lower the standards has to be in any one component. This is known as the ‘hurdles effect’ and appears to deter qualifications bodies from defining minimum standards across some components.

Definition of minimum standards as learning outcomes is increasingly common. Almost all UK qualifications set minimum standards and there is a growing trend across Europe where, since the notion of the European Qualifications Framework (EQF) was elaborated in terms of learning outcomes, countries are facing up to the transition from inputs to outputs. The rationale for this transition includes:

- form a comprehensive set of statements of exactly what a learner will have achieved after successful study (hence minimum standards or competence in some settings).
- benefit employers, higher education and civil society by articulating the achievement associated with particular qualifications.
- increase transparency and comparability of standards between qualifications.
- provide the capacity to link vocational educational and training and higher education
- aid curriculum design by clarifying areas of overlap between modules, programmes and qualifications.
- retain a focus on the key learning purposes of a programme and maintain a good relationship between teaching, learning and assessment.
- promote reflection on assessment, and the development of assessment criteria and more effective and varied assessment.
- play a key role nationally and internationally by acting as independent points of reference for establishing and assessing standards and facilitating mobility.

Across numerous USA states there have been moves to tighten the minimum standards that are required for the award of the high school diploma, and/or to require students who want to enter college to complete various types of minimum standards or competency tests. Some of this push has come from the impetus created by the Federal Government’s No Child Left Behind initiative and its testing regimes. Whether these moves are a factor in the major fall in USA secondary school completion rates in recent years is not clear. These changes are probably associated with the poor articulation between school level qualifications and the labour market in the USA (Rosenbaum et al, 1999) and the relatively strong youth labour market, albeit highly contingent and low paid.

Access and inclusiveness

The counterpoint of minimum standards is access and inclusiveness and in this area there is some polarisation in Europe. In some countries the standards for qualification are fixed and dilution of these standards to recognise some learning in weaker learners is not acceptable. In others new stepping-stones to full qualification are acceptable. Here comparisons can be made between
Scotland and Germany. In the latter the meaning of qualification is set to a relatively high standard and is seen as a threshold below which one is not qualified at all. In Scotland there are five levels of the Scottish framework reserved for qualification below the German minimum standard. Three of these levels are access levels and whilst they are real levels qualifications at these levels may not be seen as real qualifications. In other countries the issue is approached by the use of several qualifications for the cohort with a clear pecking order in terms of academic standards. There has been a move in recent years in several countries (France, Norway, and Sweden) to incorporate vocational and academic qualifications within common frameworks and award nomenclature. In such cases the pecking order continues to exist and there is an associated problem of academic drift (Raffe, 2007).

The tensions between the demands for standards, differentiation of students and the objectives of access and inclusiveness explain the curious fact that the senior secondary certificates have become more rather than less different over the past two decades in Australia. In some states (Qld., Tasmania) the authorities had reached the conclusion that completion requirements for the certificates were so minimal that the certificate had become almost meaningless, and the new certificates will introduce minimum standards in numeracy and literacy and ICT (Tasmania only – TQA, 2006). In Tasmania it is planned to use the national literacy reporting benchmarks to set a minimum standard. In NSW, the ACT and Victoria minimum standards continue to be embodied in the subject curricula. The Western Australian Certificate of Education (WACE) effectively uses levels (foundation through to level 8) and the review of the WACE has recommended the introduction of a General Achievement Test (GAT) to support moderation and comparability of standards across courses of study (Robson, 2005). Some officials feel that the current negotiations around the Australian Certificate of Education may lead to a type of GAT to set minimum standards. This would be similar to developments in some of the states in the USA.

Qualification types

The innovation of VCAL in Victoria raises the issue of the qualification types that are available within the mass participation stages of initial education and training. Most senior secondary certificates in Australia evolved from the matriculation and leaving certificates authorities have endeavoured to use design measures that will allow a broader range of learning and learners, and even different pathway types within qualifications. There is a clear tension between the idea of a specific or defined qualification, as against a completion certificate, and multiplicity of learning and pathways. The issue also extends to the question of learning modes and assessment types.

Across Europe there is a difference between a large qualification that forms some kind of matriculation, like the International Baccalaureate and the various school leaving certificates, and an umbrella or a wrapper that goes around a variable mix of stand-alone qualifications, like the Scottish Grouped Awards. The wrapper is a brand that is designed to add value, a transparency tool for recruiters and a QA signal for learners.

For inclusion purposes the UK has been moving towards the wrapper concept (to be called the Specialised Diploma for 11-19 year olds) but at the same time there are new large vocational qualifications. Despite or perhaps because of the competing demands upon school level qualifications, and their high levels of public exposure there has been limited change in countries in Europe, especially with respect to main school leaving qualification. The Abitur (Germany), A level (England and Wales), Bachilerato (Spain, Italy, and Portugal), Baccalaureate (France) and the like are still very strong. Within these qualifications the general pattern is to have a broad curriculum with a few subjects as chosen examination specialisation. There are some countries
where other qualifications, suited to ‘people with non academic intentions’, are also prominent, for example in the dual system countries such as Denmark, the Netherlands, Germany, Austria and Slovenia.

Within the different transition systems the traditional routes to higher education via qualifications either as ‘accreditation for entry to higher education’ or ‘entitlement to a place in higher education’ have remained stable in virtually all countries. There has been much debate about flexibility of programmes, modularisation, and new methods of assessment. However a shift in provision structures has not occurred. Finland, for example, have reviewed its senior secondary structure but the examinations are the same. France have introduced the option of an individual project as part of final Baccalaureate assessment (as has Sweden), but the qualifications seem to be the same. Modularisation is only evident in Nordic countries such as Finland and Sweden. Diversification and mixing of vocational and general routes remains a goal rather than wide practice.

There continue to be proposals and developments across Europe for transcripts or supplements which accompany qualification certification and raise the profile of general skills such as communication, interpersonal skills etc. These are seen as a means by which learners and workers can move around the EU.

No other Australian state, apart from Victoria, has introduced or plans to introduce a qualification alongside the senior secondary certificate, although it was considered in Western Australia. Certificates for students with disabilities are provided in Queensland and Tasmania (a ‘narrative certificate’). Broadly there are two types of certificates – curriculum based (NSW and Victoria) and recognition based. In reality all of the other certificates are a combination of curriculum and recognition based. To an extent the issue of a single certificate relates to the curriculum structure and the levels structure of the certificates. Those states that have ‘recognition’ based certificates (Queensland, ACT, and South Australia) allow wider forms and locations of learning. Those that effectively incorporate levels, such as the ‘core, enrichment and advanced’ elements of the new Queensland Certificate of Education have reduced the tensions.

Beyond the senior secondary certificates, and the Melbourne University model, there are three emerging issues related to qualifications types in Australia:

- Training packages within the VET sector raise the issue of their capacity to provide for generalist studies. As indicated below the levels of participation of school age students in TAFE, apart from VETIS students. The OECD classified type B tertiary stream (diploma level) remains weak in Australia and this limits the options for the expansion of tertiary education. There are signs of falling demand for higher education from both overseas and domestic students (AVCC, 2006). The development of stronger short cycle and tertiary type B education is an important option in this context. A lack of both appropriate diploma level courseware and qualifications and appropriate feeder courseware and qualifications, outside of the senior secondary certificates, will inhibit this option.

- Some stakeholders, especially the private RTOs (ACPET) have perceived a lack of flexibility in training packages, and question their relevance for emerging skill types, especially in niche industries.

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18 Although it also has a historical foundation of the principle of common access for year 12 graduates to tertiary education. This principle developed during the 1980s when retention rates were lower than now.
The emergence of vocational graduate certificates and diplomas has raised some tensions about the use of what some argue are higher education qualifications, especially graduate diplomas, in the VET sector.

Recognition: non-formal and informal learning

Recognition of informal and non-formal (defined as structured learning that has not been recognised) have typically been linked to the agenda for lifelong learning (EC, 2001). It is seen as reducing the cost of education and training, helping people with weak formal education backgrounds gain recognition and better access to further education and training.

More broadly the educational objectives of access and inclusiveness and lifelong learning have led to the idea of recognition frameworks, or more specifically qualifications that have a capacity to recognise learning that is outside the accredited and process based learning that has been developed for these qualifications. In this sense it is useful to delineate between solely accreditation based and recognition based qualifications.

Informal learning

As a follow up to its work on national qualification systems the OECD has recently begun an activity on the recognition of non-formal and informal learning and credit transfer. On current indications it is a large and ambitious activity, with at least 20 countries, including Australia, taking part. The activity will aim to:

- Map out existing institutional and technical arrangements.
- Develop indicators to measure benefits and risks and collect evidence of who pays, who manages, who benefits and who is at risk;
- Collect evidence of what is working and what is not working with current systems; and
- Develop effective, beneficial and equitable pilot models (embracing risk-management) and help launch a pilot model.

The guidelines note that “a number of OECD activities ...and existing work outside OECD all point to the importance of recognising non-formal and informal learning and facilitating credit accumulation and transfer. However, currently, the existing work provides the evidence of benefits in fragments.” The recognition of informal and non-formal learning has been promoted strongly by the EU over the past decade (Dehmel 2006; Colardyn and Bjornavold, 2004,) and also has attracted the interest of the international organisations (OECD, ILO). It has typically faced resistance within countries that fit Young’s (2001) typology of having ‘process based qualifications’, such as Germany, and as with the Australian experience of RPL, the rhetoric of informal and informal learning is far ahead of the realisation (e.g. see ECOTEC, 2006). There are similar results for North America, and especially Canada (Dyson and Keating, 2005).

RPL continues to be of policy interest in Australia, but despite the amenability of the ‘recognition based’ infrastructure of the VET qualifications the realisation of credit is limited. Within the higher education sector most qualifications remain process based, in Young’s (2001) term, and offer little opportunity for RPL. While there is some capacity to

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19 Details of the activity can be found on the OECD web site at http://www.oecd.org/document/25/0,2340,en_2649_33925_37136921_1_1_1_1,00.html and in OECD (2005) Recognition of Non-formal and Informal Learning and Credit Transfer: Project Plan, EDU/EC(2005)17, Paris.
gain recognition towards post graduate qualifications through various types of community
access programs the realisation of this credit is minimal. Recently two states (Queensland
and South Australia) have effectively introduced RPL through the recognition of community
based learning.

Recognition systems

Only a handful of countries have developed or are developing frameworks that are designed to
support the recognition of wider forms of learning (Scotland, Wales, Northern Ireland, South
Africa, New Zealand). In some cases (New Zealand and South Africa) the NQF and the
recognition frameworks are integrated, and in others (Scotland) they are separate. There are
essential differences between qualifications that describe specific qualifications, levels and/or
genre of qualifications and those that describe types or domains, levels and amounts of learning.
The AQF describes specific qualifications, while most other NQFs describe levels and genre of
qualifications. Qualifications within these levels and genre may allow for recognition of learning
other than the accredited learning, but the frameworks only align the qualifications, not the
learning.

The highly standardised sets of qualifications within the VET and higher education sectors
have limited demand for more robust credit or recognition mechanisms. This is not
withstanding the insipient developments in the tertiary sector that Davis (2004) has
predicted, and the limitations of the training packages that some stakeholders have
reported.

However, the continuing and arguably the greater pressure upon the senior secondary
qualifications20 has seen the emergence of significant difference between accreditation and
recognition. There are possibly four levels here:

- Accredited curriculum and subjects that contribute to an award (Victoria and NSW)
- Recognition frameworks that allow parts of other qualifications to contribute to an
  award, such as the IB (ACT);
- RPL where informal learning such as community learning can be recognised and
  contribute to an award (Qld, South Australia); and
- Recognition of experiences and achievements, such as the Duke of Edinburg’s award and
  AMEB that can be included in a portfolio or passport (Tasmania and Western Australia)

It is likely that the more ‘recognition based’ certificates will continue to face the criticism
of lack of explicit standards and that they ‘recognise anything’. Therefore, it is of
considerable interest that personnel from three systems (Tasmania, Queensland and South
Australia) have indicated that the VQA’s Credit Matrix would be of considerable
assistance if it were adopted, and one (Tasmania) has indicated an intention to use it in the
future.

Progression and transition

The term ‘progression routes’ has been used for some time in British and European
discourses on education, training and work pathways. It refers to the opportunities that
are available for young people to progress through education and training systems and into

20 Indicative of the pressures are the Federal Government’s push for a national certificate, and the
Australian’s ‘campaign’ (in its own words: Editorial 23 Sept., 2006) to return senior secondary subjects to
more traditional content.
employment. The concept has been especially relevant in Europe where tracked systems have limited routes in education and training for young people in different tracks.

The characteristics of progression routes goes to the heart of the conceptual model identified above. There are two sets of variables – the labour market and what Smyth et al. (2001) define as transition systems: ‘relatively enduring features of a country’s institutional and structural arrangements which shape transition processes and outcomes’ (p.19). If it is taken that core elements of the labour market, that is industry structures and skill needs, are outside the scope of policy options, the institutional and structural arrangements included regulatory frameworks, structures and processes within education and training systems and structural and operational linkages between education and training and employment. In this sense the institutional and structural policies to support transition systems and improved progression routes include the following:

- The structure and characteristics of the education and training system. This includes the structure of the secondary and tertiary education systems – whether they are general or tracked, opportunities for access and transfer, and the place of vocational programs;
- Support systems for students, including guidance systems;
- The qualifications and recognition systems;
- Arrangements for links with industry and the labour market, including work placements and support for apprenticeships.

As argued above these institutions and structures are influenced by a range of factors and interests that go beyond the objective of improved youth transitions. As a consequence the concept of progression or transition policy is extremely complex (see Raffe, 2007). This is demonstrated by the enormous variety of arrangements across different countries, and especially in Europe where the education and training systems have such historical stamps.

There is a substantial literature on typologies of transition systems that link structural and behavioural aspects. For example, Iannelli and Raffe (2007) suggest that in systems with strong linkages vocational education follows an ‘employment logic’, and in systems with weak linkages it follows an ‘education logic. Studies by Rosenbaum and colleagues have drawn attention to the role of institutional networks in systems as diverse as Germany, Japan, the UK and the US (Rosenbaum et al., 1990, 1999). As a consequence it is difficult to identify common lessons for strong progression routes and transition systems. The OECD (2005) report on qualifications and lifelong learning has identified the following as key factors:

- The existence of pathways options that allows content to be relevant to learners and diverse modes of delivery. There are exceptions here as there is still a strong pathway system in for example Netherlands, Germany, France and Spain.
- Enable transfer between pathways in order to widen choice and participation and to improve labour market relevance of education programmes;
- Improve the links between education and the labour market.

Following the publication in 2000 of the report of the OECD’s thematic review of the transition from initial education to working life, two activities have been initiated on transition issues. The first of these, stimulated by concern in some countries about adverse developments in the youth labour market, is a thematic review on school-to-work transition being conducted by the Directorate for Employment, Labour and Social Affairs. Its focus will almost entirely be on
labour market issues, with little recognition of the role of education. It will be structured around four main themes or issues:

- An analysis of the labour market position of youth in OECD countries. This will look at factors such as: the relative size of the youth labour force; its composition in terms of factors such as initial education level, gender and family situation; employment, unemployment and inactivity rates; earnings; and flows and dynamics.

- Policies that help to combine formal education and training with work. This will include examination of apprenticeship, in-firm training systems, less formal combinations of schooling and work experience, and second chance programmes for those neither in work nor education.

- Activation strategies and income support systems. This will encompass examination of: the interaction between welfare benefits and work incentives; activation guarantees and obligations for youth and their effectiveness; safety nets for non-employed youth; and the role of employment services.

- Demand side factors. This will focus upon factors such as: wage rates; social security payments; employment protection legislation; and the ways in which the rules governing part-time work allow it to be combined with study.

The second significant work that has recently been initiated is part of the Programme for International Assessment of Adult Competences (PIAAC). As a result of pressure from OECD members the initial round of assessments, to be conducted in 2009, will contain a specific focus upon transition issues, and will over-sample among the 16-30 age-group to make this possible. Initial decisions on the type of approach to be taken will not be taken until at least the next meeting of the PIAAC governing board to take place in October. However the Secretariat’s initial proposal for a PIAAC strategy, as well as two papers commissioned by the OECD to inform its thinking, suggest that a broad approach will be taken, and that the data could be as important in understanding comparative approaches to pathways and transitions as PISA has been to understanding achievement in the compulsory years of schooling. The importance of PIAAC for understanding transition issues in a comparative perspective will arise partly because it will contain an assessment of cognitive skills, and partly because, for the first time, it will contain comparable measures of family background, both economic and cultural resources, geographical location, and migrant status. In addition to individual assessments, PIAAC will gather detailed data on national transition systems, including descriptions of the main upper secondary, and hopefully tertiary, pathways, and of participation in relevant programmes such as apprenticeship, work-study combinations, safety net measures, and career education and guidance.

Sweet (2006) notes that Australia has a youth friendly labour market. As Breen (2005) notes relatively unregulated labour markets, with high rates of contingent employment, and in growth patterns are conducive to high levels of youth employment.

Core competencies

The issue of generic skills or core competencies continues to be discussed within international education and to a lesser extent in the Australian education context. It is now

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15 years since the release of the Meyer Report on Key Competencies in Australia, and apart from their embedding in Training Package units of competency (and VCAL) they have had a limited impact upon school and higher education curriculum and qualifications. The continued interest in ‘core’, ‘key’, ‘generic’, ‘soft’, skills and competencies raises the questions of why they have made a limited impact and what are the future prospects for their wider implementation.

The European Commission has recently published a consultation on the inclusion of eight key competencies into all learning: Numeracy, Literacy, ICT, Problem Solving, Study Skills, Interpersonal skills, Citizenship, Work related Knowledge, Creativity, and Health Awareness. Some of this is work related (school leavers are not work ready, and some of it is social such as knowing more of your national identity). There has been a move in some countries to learning outcomes (e.g. Finland, Estonia). In the area of VET qualifications there has been a general shift towards competency based systems with the UK and Belgium (Flanders) leading the way.

On the other hand the assessed curriculum in senior secondary schools continues to be dominated by recall and application of subject knowledge. There have been attempts to develop project assessment in some countries (Finland, France, and UK). In the UK there is an intensifying debate on the reliability of assessment evidence arising from internal assessment that is done in provider institutions. This debate seems confined to the world of academic qualifications. At the moment it would be difficult to make a proposal for increasing the level of internal assessment in a qualification. Arguments about reliability and cost outweigh those concerned with increased validity every time.

Much of any movement in assessing across the range of the taught curriculum concerns the use of transcripts or supplements which accompany qualification certification and raise the profile of general skills such as communication, interpersonal skills etc.23

Personnel from most of the ACACA authorities have indicated that the original Meyer Key Competencies have been included in the certificate in only a token manner. Some of the more ‘recognition based’ certificates have a wider capacity to include different types of competencies through areas such as ‘community studies’ (Queensland), and the recognition of practical skills. The review of the South Australian Certificate of Education (SACE – Crafter, 2005) has recommended the inclusion of five ‘capabilities’, and the development of Essential Learnings in Tasmania is likely to have some impact upon the senior secondary curriculum. As indicated above, one of the outcomes of the investigation into the ACE is a project to investigate a common reporting system for employability skills. The WACE includes the 13 overarching learning outcomes of the Curriculum Frameworks.

Provision

The objective of increased educational participation leads to the issue of the type, location and cost of provision. At the tertiary level a major expansion in provision has led to increased pressure for course fees, and several countries have followed Australia’s lead and implemented fee and loan schemes for higher education. Australian universities gain a large percentage of their revenue from fee and other private income, although Australia also has a large and therefore costly university sector. The most relevant issue for

23 See the Europa website for details of the supplements for the Europass: 
http://www.eurydice.org/ressources/eurydice/pdf/026EN/007_chap4_026EN.pdf#search=%22europass%22
pathways policy in Australia is what type of providers are supported to provide for the school age cohort.

Across most OECD countries secondary education is divided into a lower, middle or junior stage and a senior stage. In European countries this is a result of the tracked systems of schooling. However, North American secondary education also is divided into middle and senior secondary stages and providers, and only the British and Australian ‘systems’ are based predominantly upon the model of comprehensive schools that cover the full five to six years of secondary education. However, as can be seen from figure 2 approximately half of 16 & 17 year olds in education in England are in sixth form or Further Education colleges, and over the past two decades this percentage has increased. In part this is a qualifications and course route issue. The trifurcated, and now mostly bifurcated senior secondary senior secondary years have led many non-A level students into the FE sector. On the other hand the introduction of the General Certificate of Secondary Education that has replaced the O Levels appears to have been very successful with over 80% of students completing it, and thus providing a degree of ‘unification’ in the context of the numerous failed attempts to end the A-levels and non-A-levels divide at the senior level.

Figure 2: Education enrolments 16 & 17 year olds England.

Over the last few years there has been an increased level of policy activity in the area of provision for teenagers across Australia. All of the states, with the exception of NSW have or intend to either increase the school leaving age to 16. Table 1 indicates the current leaving age provisions which now include a number of variations to the traditional minimum age requirements, including:

Queensland requires a leaving age of 16 or 17, but with the option of ‘Learning or Earning’.

Victoria has guaranteed free instruction at a government school or a place in a TAFE institute or other training provider until the completion of a year 12 or an equivalent qualification, provided the student is under the age of 20 years’ (Kosky, 2006).

Tasmania through its Guaranteeing Futures legislation guarantees all students a place in a senior college or TAFE.
South Australia intends to raise the school leaving age to 17 by 2010, but this also includes the option of structured training or employment.

**Table 1 Legal minimum school leaving age, States and Territories, 2006**

<table>
<thead>
<tr>
<th>State</th>
<th>Age</th>
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<tbody>
<tr>
<td>New South Wales</td>
<td>15</td>
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<tr>
<td>Victoria</td>
<td>16</td>
</tr>
<tr>
<td>Queensland</td>
<td>16</td>
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<td>South Australia</td>
<td>16</td>
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<tr>
<td>Western Australia</td>
<td>16</td>
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<tr>
<td>Tasmania</td>
<td>16</td>
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<tr>
<td>Northern Territory</td>
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<td>ACT</td>
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These developments raise the question of the preferred location for school age students. No state or territory has formally abandoned the expectation that the school sector will be the primary provider for school age students. However as they strive to increase levels of year 12 or equivalent completion TAFE sector has taken more responsibility for provision.

Table 2 provides a range of AVETMIS data on VET provision for teenagers. The data show high levels of enrolments, especially for 16+ year olds across all of the systems. The data need to be treated with caution because of the multiple types of enrolments. They include VETIS students and apprentices and trainees, and there has been some unreliability in AVETMISS data in the past.\(^2^4\)

Nevertheless enrolment levels are significant. Comparisons of equivalent enrolment levels for schools can be made with table 3. In all systems, and especially in Victoria and Queensland enrolment levels for 17 year olds across the two sectors are relatively close. Again in needs to be stressed that the VET enrolments include VETIS students. The break-up of school and not at school students is shown in table 2 shows. When18 & 19 year olds are subtracted from the ‘not at school’ figures the figures remain high, especially for Queensland and Victoria.

Most enrolments are in TAFE, with Victoria having a high level of enrolment in the Adult and Community Education sector. A recent study of TAFE provision (Clarke, et al, 2006) found a high degree of variation in the attitude of different TAFE institutes towards provision for school age students. Some institutes saw provision for the age group as part of their support role for schools and their community or local area responsibilities. Others took a stronger market oriented outlook, and decisions on provision were mainly based upon commercial criteria. There appeared to be no particular geographical patterns to these different approaches.

Funding sources for these enrolments also are shown. The high levels of fee-for-service funding in Victoria is probably an indication of higher levels of commercial activity, but also the purchased based model for VETIS. Several other states, such as Queensland) fund VETIS through profile allocations and funding of VETIS continues to have issues of double costs, price consistency, and student fees (especially considering the social profile of students).

\(^2^4\) For example, the 2001 AVETMIS data showed enrolment levels that were double those recorded through the Census. The data include multiple individual enrolments, VETIS, and students who were enrolled in other sectors.
Table 2: 15-19 VET enrolments, states and territories, 2004

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<tr>
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<th>‘NSW’</th>
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<th>‘SA’</th>
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<td><strong>Total</strong></td>
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<td>28151</td>
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<td>75264</td>
<td>28151</td>
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<th></th>
<th>Commonwealth and state recurrent funding for VET</th>
<th>Commonwealth &amp; state specific purpose funding</th>
<th>Fee-for-service funding</th>
<th>Full fee-paying overseas</th>
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<th>Certificate III</th>
<th>Certificate IV</th>
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<td>141852</td>
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<td>141852</td>
<td>141852</td>
<td>141852</td>
<td>141852</td>
<td>141852</td>
<td>141852</td>
</tr>
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</table>

Source: Unpublished AVETMISS data
Table 3: Full-time school enrolments by age, states and territories, 2004

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<th>‘QLD’</th>
<th>‘SA’</th>
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<th>‘TAS’</th>
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<td>44 240</td>
<td>33 141</td>
<td>26 034</td>
<td>10 080</td>
<td>13 712</td>
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<td>2 341</td>
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<tr>
<td>17 years</td>
<td>29 226</td>
<td>24 970</td>
<td>13 440</td>
<td>6 291</td>
<td>5 965</td>
<td>1 991</td>
<td>688</td>
<td>2 113</td>
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<tr>
<td>18 years</td>
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<td>7 527</td>
<td>1 592</td>
<td>1 091</td>
<td>644</td>
<td>757</td>
<td>188</td>
<td>676</td>
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</table>

Source: ABS, Schools Australia, 2005

**TVET qualifications**

Raffe (2007) has noted the continued trend of academic drift within post compulsory/post-16 education and training. It appears that there has been no significant recent change in European countries in public perceptions of currency, with general qualifications still carrying most weight. This is true even in countries like Germany where the vocational route is extremely strong. Ironically there has been some ‘vocationalisation’ of higher education, but this has had a limited impact upon secondary curriculum and qualifications.

In Europe the notion of a qualification, especially in the workplace, continues to be tightly linked to time based completion of training. The issue of certificates is often restricted to a ‘certificate of attendance’. This is because it is cheap, and efficient in terms of a firm’s productivity and staff retention. It also fulfils minimum legal requirements in lots of cases. The implication of this is that there are many TVET ‘qualifications’. When this is coupled with diversification and specialisation in the workplace the qualifications on offer continue to rise.

In the EU review of progress towards a single labour market VET was a prominent theme in countries with innovation in delivery being a major sub theme. In addition to all the new possibilities with new technology the research pointed to the fact that increasingly firms were at the cutting edge in terms of technical aspects of work practices. This means that traditional off-site training (and qualifications) was becoming redundant. Instead new on-the-job training was growing in some technical workplaces. This may be signalling a further shift towards generic off-the-job training and specific on-the-job training.

The last substantive work on vocational education conducted by the OECD took place in the early to mid 1990s, and was responsible both for some detailed studies of apprenticeship and for the pioneering work on the concept of a pathway (Raffe, 2003). Since then, and unlike tertiary education or compulsory schooling, it has appeared only tangentially in the OECD work programme. However the long drought has now broken and a thematic review of vocational education and training is in the process of being planned. It remains to be seen how broad its scope will be and the issues that it will examine. A meeting of experts and interested countries is to take place in November 2006, and Norton Grubb OF UCLA Berkeley has been asked to prepare an issues paper as a background document for the meeting, with the draft being due at the end of this month September.

A significant driver of the review is the pressure for work on VET to be given greater prominence that was evident at the meeting of the CEOs of OECD education systems that took place in Copenhagen in September 2005. The Chair’s summary of the meeting shows that the importance of work on VET was emphasised by the Danish Chair in his opening presentation as well as in discussion on: strengthening engagement in learning; overcoming school drop outs; building more flexible upper secondary pathways and better pathways into higher education; the need for
more systemic approach to lifelong learning; and the need for improved links between education and work.

The fact that the review is being undertaken has been assisted by the fact that it has been increasingly clear from other work, and in particular the recent work on adult learning, equity and qualification systems, that VET needs to receive greater prominence in its own right. It has been given added impetus by the recent regime change within the Directorate for Education. The previous two Directors and Deputy Directors have been Anglo-Saxons, and issues of vocational education have received little prominence, despite polite pressure from, in particular the German speaking countries, for it to be given greater prominence. However the new Director is from Germany.

The trends towards diversification in VET qualifications in some other countries and regions do not appear to be occurring in Australia where the Training Packages are now well established. However, as indicated above the increased levels of participation of younger students and industry skill changes may threaten this stability.

VETIS continues to grow in levels of participation, and despite the existence of the training packages, the MCEETYA and AQF processes, and the push for a national certificate the arrangements across the different states remain quite different. They also have been subject to reviews that are essentially state centric, whether they are part of a broader certificate review (Crafter, 2006) or directly focussed upon VETIS (Evans, 2005). Once again this suggests that they are the product of the interactions between different institutional and governance arrangements rather than the different VET systems and student needs.

Indicative of these differences is the issue of the types of certificates delivered through VETIS. There has been resistance to the inclusion of certificate IIIs because of the lack of workplace experience, the training and experience of teacher, and the lack of facilities in schools. The new recognition arrangements in South Australia and Queensland allow for all certificate Is to be recognised within the senior secondary certificates. On the other hand the accreditation based certificates find certificate Is to be too limited, especially in VETIS that can contribute to the ENTER. Many school based apprenticeships deliver Certificate IIIs, and the introduction of the Commonwealth supported Australian Technical Colleges will also require the delivery of courses at Certificate III level.

One possible trend is the inclusion of VETIS funding for delivery by TAFE in profile funding (NILS – CPELL, 2006) in a number of states (NSW, Qld., Tasmania, South Australia). However, other systems (Victoria) continue to use a purchase model and profile funding has limitations for school based apprenticeships that involve partnerships with private RTOs.

As a consequence of these differences it is difficult to locate VETIS as simply different subject areas that expand students’ options, or as programs that have clear differences in pedagogy and learning styles and pathways. Whether the VETIS programs can contribute towards university entry influences this, yet the different VETIS arrangements in Victoria and Queensland produce similar post school pathways for students who have undertaken the programs (DET, 2005; DEA, 2006). Overall, VETIS continues to show very positive results for its participants (Helme et al 2005)

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Acronyms

ACACA  Australasian Curriculum, Assessment and Certification Authorities
ACE  Australian Certificate of Education
ACER  Australian Council for Education Research
ACPET  Australian Council for Private Education and Training
AQF  Australian Qualifications Framework
AQFAB  Australian Qualifications Framework Advisory Board
AVCC  Australian Vice Chancellors Committee
AVETMISS  Australian Vocational Education and Training Management Information System
CEDEFOP  European Centre for Vocational Education Research
EC  European Commission
ECTS  Credit Transfer and Accumulation System
ECVET  European Credit for VET
EQF  European Qualifications Framework
EU  European Union
GAT  General Achievement Test
IB  International Baccalaureate
ICT  Information and Communication Technology
ILO  International Labour Office
LSAY  Longitudinal Study of Australian Youth
MCEETYA  Ministerial Council for Education, Employment, Training and Youth Affairs
NILS  National Institute of Labour Studies
NQF  National Qualifications Framework
OECD  Organisation for Economic Cooperation and Development
PIACC  Programme for International Assessment of Adult Competencies
PISA  Programme for International Student Assessment
QCA  Qualifications and Curriculum Authority
QCE  Queensland Certificate of Education
RPL  Recognition of Prior Learning
RTO  Registered Training Organisation
SACE  South Australian Certificate of Education
STC  Schools Year 12 and Tertiary Entrance Certificate
TAFE  Technical and Further Education
TOP  Tertiary Orientation Program
UNESCO  United National Education, Scientific and Cultural Organisation
VCAL  Victorian Certificate of Applied Learning
VCE  Victorian Certificate of Education
VET  Vocational Education and Training
VETIS  Vocational Education and Training in Schools
VQA  Victorian Qualifications Authority
WACE  Western Australian Certificate of Education
Appendix 1:

Mechanisms for strengthening qualifications and qualifications systems.

1. Communicating returns to learning for qualification
2. Developing employability mechanisms.
3. Establishing qualifications frameworks
4. Increasing learner choice in qualifications.
5. Clarifying learning pathways
6. Providing credit transfer
7. Increasing flexibility in learning programmes leading to qualifications
8. Creating new routes to qualifications
9. Lowering cost of qualification
10. Recognising non formal and informal learning
11. Monitoring the qualifications system
12. Optimising stakeholder involvement in the qualifications system
13. Improving needs analysis methods so that qualifications are up to date
14. Improving qualification use in recruitment
15. Ensuring qualifications are portable
16. Investing in pedagogical innovation
17. Expressing qualifications as learning outcomes
18. Improving co-ordination in the qualifications system
19. Optimising quality assurance
20. Improving information and guidance about qualifications systems