

LINKING LEARNING AND WORK

CEET NATIONAL CONFERENCE: LINKING ECONOMICS AND LEARNING:
VET FOR INNOVATION

29 OCTOBER, 2001

Helen Praetz
Chair, Victorian Qualifications Authority

Abstract

In accepting the recommendations of the recent report into education and training pathways, (the Kirby report) the Victorian Government established the Victorian Qualifications Authority with the task of determining and strengthening the range of qualifications available to young people. The VQA has moved rapidly to introduce new qualifications and establish pilot sites to trial certificates in applied learning directed towards those young people who yearn for applied and practical studies and for learning in doing. The paper outlines the characteristics of these approaches and likely future directions.

Linking Learning and Work

The Victorian Government recently established the Victorian Qualifications Authority as part of its desire to increase the proportion of citizens who have completed Year 12 or its equivalent. This level is deemed to provide a basis for lifelong learning, necessary in the knowledge economy. Given the strong link between educational participation and success in the labour market, there is wide concern about the uneven distribution of educational outcomes. This is summed up by Jacques Delors in his important OECD report as follows:

The major danger is that of a gulf opening up between a minority of people who are capable of finding their way successfully about this new world ... and the majority who feel that they are at the mercy of events and have no say in the future of society. (Delors, 1996)

Governments turning to qualifications reform aim to improve the accessibility and flexibility of education systems and their links with the labour market. As the number and type of qualifications awarded can be shown as a measure of productivity, qualifications frameworks also give governments more leverage over education providers and measurable criteria for funding. They can enable measurement of progress towards targets, as in Victoria, which seeks to increase the proportion of those holding the VCE or equivalent to 90 per cent of young people by 2010. Qualifications frameworks provide a means of signalling the knowledge, skills and competencies of those holding them, thereby reducing the uncertainties and expense of job recruitment as well as enhancing individual employability. They enable a focus on individuals' interests and purposes in preference to maintaining sectoral and provider divisions and orientations. They also could encourage the development of higher standards of achievement and can be used to raise standards.

A recent paper from the OECD argues that particular views of economic and social trends have led to the introduction of national qualification frameworks. Outcomes-based frameworks highlight the following developments:

- weakened occupational boundaries
- reduction of divisions and distinctions between the learning needs of different sectors and types of jobs
- continued reduction of opportunities for unskilled and traditionally skilled employment
- general increase in the knowledge content of the majority of jobs
- shortening of the average life of companies, occupations and the time that individuals spend in any particular job. (OECD 2001)

Such thinking had a major impact on education in Australia in recent years and has led to increasing recognition, especially in VET and higher education but also in schooling, that education must equip people to handle rapid technological and structural changes and to benefit from new forms of work organisation. *The National Strategy for Vocational Education and Training 1998-2003*, for example, includes among 'major forces of change' the emergence of service and knowledge-based industries as important sources of employment, changes in the way work is organised within enterprises, and increasing part-time and casual work.

A range of studies has shown a growth in cognitive and interactive skills and a decline in the use of motor skills, suggesting that technological change is reducing the demand for unskilled labour. Such trends are likely to increase with the impact and uptake of new technologies. More generally, it is argued that the application and manipulation of knowledge is increasing and hence everyone must become a knowledge worker, able to contribute to the knowledge economy (Leadbeater 2000).

Nonetheless, there is not a single direction of change in skill requirements, and the picture is much more complex. While levels of skill and knowledge requirements are increasing in some occupations, there is also growth in low skill service-based jobs often casualised and available on a part-time basis.

What this means for education

The view of the economic and social changes outlined above puts a new focus on students and how to provide for their diverging interests and needs. In policy terms this means an emphasis on

- segments of students with particular interests and needs rather than whole cohorts
- tailored solutions rather than one size fits all
- modularised and interconnected programs with multiple entry and exit points
- programs to encourage entrepreneurship, innovation, self employment
- flexible delivery at times convenient to students with competing demands for work, family and study
- constructing pathways to destinations, portfolio skills and serial careers and occupations rather than life long preparation and employment.

This position marks a shift from front-loaded initial qualifications to qualifications geared to continual professional and occupational development; from a focus on learning in formal programs of study to multiple forms of work- and community-based learning; and from pre-defined, prescribed learning pathways to more individual routes of skills acquisition. (OECD 2001)

The VQA is seeking to respond to the aspirations of individuals and communities in Victoria by expanding the pathways which they can travel to gain worthwhile qualifications which equip them for work and further education within a global context. To do this, we need a global imagination, that is, to design and accredit qualifications which embody the kinds of skills and knowledge which will be needed for working life, personal satisfaction and for citizenship.

The OECD's analysis (2000b) of global trends in pathways to transition is evident in Australia, where the proportion engaged in the general education pathway has increased, as has the proportion engaged in work-based pathways, that is, apprenticeship and traineeship. There are also some combination of qualifications, for example, students who undertake the VCE can choose to include VET subjects and a VET accredited qualification, usually at AQF level 2, and some of these count towards the ENTER. A very small proportion of students undertakes part-time apprenticeships in combination with the VCE.

However, substantial numbers of students leave school throughout the final years without qualifications and move to unknown destinations, including employment and training (Kirby Report 2000). These young people include Aboriginals; recently arrived immigrants with language backgrounds other than English; low SES; rural, outer eastern, northern and western Melbourne location; those with low skills; long term unemployed; women in non-traditional areas of study or employment; and young males. Many young people fail to gain that basis of initial education which can provide a platform for continued learning throughout life. By Year 9 and 10 they are drifting away from a pedagogy that has not engaged them and many do not return to learning.

Many schools, TAFEs and other providers, including neighbourhood houses, have responded by offering a range of other VET qualifications in their attempts to cater for all students. Their introduction responds to the view expressed in the Kirby report that a large proportion of young people requires different forms of learning. While the report is indicative only in what is required, there is mounting evidence that many young people, including those who are successful in classroom-based learning, are keen to engage in work-based learning (Unwin and Wellington 2001).

The Victorian Certificate of Applied Learning

Increasing the range of qualifications offered to young people is the VQA's first step in seeking to ensure that more people gain the basis for lifelong learning. The VQA has moved rapidly to propose the introduction of the Victorian Certificate of Applied Learning which will be trialed in 2002. The VQA proposes a broader approach, in particular for those young people who would benefit from the learning in doing, who yearn for practical and applied studies and who are presently dissatisfied with more of classroom-based studies. Accordingly, the VQA will work with eight or nine different sites in the remainder of this year to design qualifications which will provide students with a strong basis for success in learning in doing. It is proposed that the customisation of awards would be tailored to students' interests and purposes and to the resources and needs of the local area. The Local Learning Employment Networks (LLENs) become vital links in their development, with the LLENs' statistical resources, LLENSTAT, providing the data to shape the contexts for the application of the generic and the personal skills required.

The new qualification provides a framework which will be developed with schools and will comprise English and Mathematics, work-related skills and knowledge, industry specific skills including work experience, and personal development and citizenship. Many of these young people may not have focused on a particular industry and may need to explore several possibilities. Studies can be customised to include a designated set of competencies from across a cluster of industry sectors and to build the capacity to act in a responsible manner in complex work environments. The certificate is based on industry specification of work place practice; it will use applied learning approaches; it will embody practical and work based pedagogies; and will be assessed in terms of performance. They are thus not incorporated into the VCE, though it is intended that credit transfer will occur between all qualifications so that students will not have to double back and repeat studies. Clearly the more mutual recognition of studies the better.

Applied learning defined

Applied learning or learning in doing contrasts with the learning before doing which, a recent OECD report claims, generally characterises the general education pathway (OECD 2000a). The differences are specified starkly in the following table:

| Learning before doing | Learning in doing |
|----------------------------|------------------------------|
| Declarative (facts about) | Procedural (how to) |
| Usually explicit | Often tacit |
| More easily stated | More easily demonstrated |
| Abstract | Concrete |
| Logical | Intuitive |
| In the mind | Embedded in action |
| An end in itself | A means to an end |
| Remote from application | Close to application |
| Learnt sequentially | Learnt piecemeal |
| 'Hooked' to a text | 'Hooked' to persons/events |
| Stored in semantic memory | Stored in episodic memory |
| Usually fragmented | Usually integrated |
| A stack of information | A stock of experience |
| Something to be remembered | Something to be understood |
| Forgotten quickly | Forgotten slowly |
| Rehearsed during revision | Rehearsed through practice |
| Tested by examinations | Tested by performance |
| A process of acquisition | A process of engagement |
| Weakly related to identity | Strongly related to identity |
| Linked to being taught | Linked to being coached |

Present VET qualifications focus on outcome performance, described in 'Units of Competency' which are the specification of standards of workplace practice. These are the basis for the development of the curriculum, which starts with the concrete and practical and builds a cognitive framework around them as need dictates. Learning is for identified need. Doing without thinking is not competence, nor is knowing without application (Down and others, 2001). Practice and reflection give rise to understanding and theory.

Applied learning pedagogies require teachers to determine:

- What learners need to know and be able to do
- What developmental activities will assist their learning
- What skills and knowledge can be applied routinely in the work place
- How the students will integrate and consolidate their learning to ensure that competency is achieved
- What assessment activities will cumulatively recognise performance at the standard required.

Assessment

Assessment is a key factor in introducing a separate certificate rather than further expanding the VCE to accommodate a broader range of students. VET in the VCE sits within the context of the pathway from school to higher education, leading to the conclusion that ‘The demands of this articulation has meant that the purpose and context for which the Training Packages were written is subverted by the emphasis on tertiary entrance scores and acceptance into higher education’ (Down and others, 2001). VET in the VCE arranges training package competencies so they resemble other school subjects and, while a standards approach has been adopted in some areas, performance is marked and assessed in terms of the mastery of a specified body of knowledge abstracted from on the job performance. ‘The assessment of underpinning knowledge is separated from the assessment of competence. This means that what is really being assessed is a body of knowledge which has been inferred from the Training Package. In both States (Victorian and New South Wales) the method of assessment is examination based and in the same format as other Year 12 disciplines. Thus the design of assessment is largely divorced from the context and purpose of the Unit of Competency.’ (Down and others, 2001).

What is required is assessment is of performance in authentic situations. The focus will be on performance and its assessment and the capacity to do and make things to standards specified by industries in work situations. Young people need to learn how to learn and how to manage themselves; to work collaboratively with other people and to take risks. Much of what is required for successful work performance involves the progressive acquisition of skills, knowledge and identity using experienced mentors skilled in pedagogic conversations.

Quality assurance of programs and providers in higher education and TAFE institutes is well advanced and it would not seem to be impossible to develop some agreed measures to give confidence to students, employers and others that achievements are valid. The notion of repackaging already accredited curriculum from VCE and VET according to agreed performance standards and criteria seems to offer a possible way forward with regard to equivalence, as all studies are already aligned to levels of the Australian Qualifications Framework and VCE studies also involve a specified quantum of classroom instruction. Developments in New Zealand may also provide some guidance in accumulating credit towards dual qualifications, an approach increasingly encountered in higher education institutions

Short cycle qualifications

The VQA is also interested in the further development of qualifications which encompass advanced technical skills and knowledge. Questions include whether educational standards would be raised by the introduction of short cycle (associate degrees, for example,) at AQF levels 5-6? What would such awards achieve and how could they resist duplicating existing degrees and avoid recreating the binary divide between VET and higher education?

The present pathway which leads from apprenticeship to diploma, advanced diploma and degree is lengthy and daunting. An emerging approach is shown in a recent request to RMIT from a large global engineering firm seeking to recruit high achieving young people into careers in engineering. The firm wants to create

Linking Learning and Work

engineering pathways which begin at apprenticeships at Year 10 and end in degrees. Educators are working with the firm to ensure that both employers' needs and the best interests of young people are met through programs which are coherent, progressively more difficult and vocationally relevant. The program which is developing in engineering combines the kind of hands-on training that is gained through apprenticeship together with continuing development in English, science and maths. The path is assured to an engineering degree with substantial management and work experience. Interest is now being expressed by a number of similar firms willing to develop this pathway.

Conclusion

The OECD (2001) describes qualifications as hinges or turning points between learning and work. They also operate within education systems and between different types and levels of education and training. Hence qualifications can have important effects on various aspects of lifelong learning, including:

- accessibility and openness to progression of learning for all;
- connectivity of learning in different environments, be it at work, in educational institutions, family or community;
- relevance of learning outcomes to changing needs and opportunities in the labour market and more generally;
- visibility and value of formal and non-formal learning;
- and the quality of learning processes and learning outcomes, both at school and in the work place.

The effectiveness of such reforms will be seen in whether the proportion of those engaging in lifelong learning increases over time. Other performance measures could include

- numbers by group and location obtaining qualifications by AQF levels in all sectors
- improved functioning of the labour market
- proportion employed on a full- and part-time basis
- increased literacy, numeracy and learning how to learn
- employer satisfaction
- social indicators including higher per capita income, fewer children living in poverty, reduced numbers receiving unemployment and other benefits.

References

- Delors, J. (1996) *Lifelong learning for all*, OECD, Paris
- Down, CM, Figgis, J, Alderson, A, Butorac, A, and Standen, A. (2001) 'Training packages and underpinning knowledge: getting our heads around the issues', AVETRA Conference, Adelaide
- Kirby, P (Chair) (2000) Ministerial review of post compulsory education and training pathways in Victoria, *Final report*, Melbourne
- Leadbeater, C (2000) *Living on thin air*, Penguin, Ringwood
- OECD. (2000a) *Knowledge management in the learning society*, Paris.
- OECD. (2000b) *From initial education to working life: making transitions work*, Paris.
- OECD (2001) *The Role of National Qualification Systems in Promoting Lifelong Learning*, (unpublished).
- Unwin, L and Wellington, J (2001) *Young people's perspectives on education, training and employment*, Kogan Page, London