



# YOUNG PEOPLE'S

p a r t i c i p a t i o n

IN

POST-COMPULSORY  
EDUCATION & TRAINING



REPORT OF THE

AUSTRALIAN EDUCATION

COUNCIL REVIEW

COMMITTEE

July 1991



# Young People's Participation in Post-compulsory Education and Training

Report of the Australian  
Education Council  
Review Committee

July 1991

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## **Executive Summary**

### **Convergence of General and Vocational Education**

Both individual and industry needs are leading towards a convergence of general and vocational education. There is an increasing realisation internationally that the most successful forms of work organisation are those which encourage people to be multi-skilled, creative and adaptable. At the same time schools are broadening their programs and curriculums to offer greater access to vocational education for the increasing proportion of young people staying on past the end of compulsory schooling.

There is also a related process of convergence between the concepts of work and education. Increasingly, as regular updating of skills and knowledge becomes essential to maintaining and enhancing productivity in the workplace, the concepts of working and learning will converge.

This view implies that in order to serve their clients' needs, both schools and TAFE will need to change: schools to become more concerned with issues of employability and the provision of broad vocational education; TAFE to recognise that initial vocational courses must increasingly be concerned with competencies that are more general than those which, for example, characterised the traditional craft-based apprenticeships. In industry, all parties will need to take a more active role in the development and support of on-going training which is integrated with employment.

The Committee believes that Australia must continue to develop both the quality and quantity of skills and knowledge in our society in general and our work force in particular. This means that there should be continuing growth in education and training in all educational sectors and in the workplace. The growth in knowledge and skills is required across a wide span of disciplines and occupations, not just those which have been associated traditionally with higher levels of education.

As part of this process there is a need to re-emphasise the importance of vocational education and to recognise its increasing convergence with general education.

### **New National Targets**

The Committee believes that these imperatives should be recognised in the establishment of a set of new national targets for post-compulsory education and training which encompass schools, higher education, TAFE and other training, and which identify target levels for attainment as well as participation. In essence, the Committee proposes that almost all young people should take sufficient post-compulsory education and training to complete Year 12 or some other initial post-school qualification, and at least half should go on to higher levels.

More specifically, the Committee proposes the following set of targets:

- as a minimum, at least a Level 1 traineeship or participation in Year 12 for all 18-year-olds by 1995;
- at least a Level 2 traineeship or progress toward a higher level vocational or academic qualification for almost all 20-year-olds by 2001; and

- at least a vocational certificate (Level 3) or progress toward a vocational qualification above Level 3 or a diploma or degree for at least 50 per cent of 22-year-olds by 2001.

This set of targets can be distilled into a single summary target that, by the year 2001, 95 per cent of 19-year-olds should have completed Year 12 or an initial post-school qualification or be participating in education or training.

### **New Measures for Participation**

To support this goal, the Committee proposes that:

- governments should agree to introduce a post-compulsory Education and Training Guarantee whereby all young people would be guaranteed a place in school or TAFE after Year 10 for two years of full-time education or training or its equivalent part-time for up to three years. The Guarantee should apply for all those who are under 20 at the first of January in each year;
- State and Territory governments should introduce a uniform compulsory requirement to attend school (unless exempted) to at least the end of Year 10;
- current entry-level training arrangements should be reformed;
- a new entry-level training system should be developed which extends these reformed arrangements beyond the existing apprenticeship and traineeship occupations;

Fundamental principles for a new entry-level training system include:

- it should provide high quality education involving general vocational as well as occupation-specific competencies;
- it should meet and relate clearly to industry needs and standards;
- it should integrate with other educational pathways, for example, providing clear opportunities for movement to and from school and to further educational programs with maximum credit; and
- it should provide opportunities for as many young people as possible who do not proceed direct to higher education this implies coverage of the maximum possible number of occupations.

### **Key Competencies**

The Committee believes that there are certain essential things which all young people need to learn in their preparation for employment. These employment-related 'Key Competencies' are in the areas of:

- language and communication;
- mathematics;
- scientific and technological understanding;
- cultural understanding;
- problem solving; and
- personal and interpersonal characteristics.

Young people should be able to develop these Key Competencies regardless of the education or training pathway that they follow. To facilitate this, a standards framework should be developed with a 'profile' for each Key Competency to describe clearly the nature of each competency at a range of



levels. This will allow educators in different education and training sectors to focus on the desired outcomes and develop curriculum and teaching approaches to suit. It will also allow a consistent approach to the assessment and reporting of young peoples' achievement in each of the Key Competency areas.

The development of appropriate profiles will be a complex task which must take into account similar work currently under way on school subject profiles and national training curriculums. The Committee proposes that an appropriate process be established as soon as possible to take on this work so that there can be national reporting on students' levels of attainment in Language and Communication and Mathematics by 1993.

A standards framework for the Key Competencies in combination with the Australian Standards Framework developed by the National Training Board, offers new opportunities for creating clearer linkages between education, training and the world of work, and new ways for industry to clarify its expectations of young people and the educational training system.

### **National Curriculum Principles**

The Committee has identified a set of national curriculum principles to enable all young people, including those with special needs, to develop the Key Competencies. These principles emphasise the need for a comprehensive and flexible post-compulsory curriculum which offers an appropriate mix of general and vocational education, allows for a range of learning styles, maximises students' choice and is structured in terms of clear outcomes.

### **Implications for Teachers**

The Committee's proposals imply significant changes to curriculum, assessment, participation and organisational arrangements across the school and TAFE/training sectors.

The successful implementation of these changes is dependent upon the capacity and willingness of teachers in both sectors to deliver them.

There will be major implications for pre-service teacher education and ongoing professional development for school and TAFE teachers. There will also be implications for the preparation and professional development of trainers in private vocational education and training institutions and for enterprise based providers.

The National Project on the Quality of Teaching and Learning and the VEETAC Working Party on TAFE Staff and Related Issues provide the most appropriate forums for the necessary development of strategies to support school and TAFE teachers in the implementation of the proposed reforms.

### **Pathways**

It is important at the post-compulsory level that young people should have access to a range of different pathways and should be able to move from one to another without 'losing ground'. The real level of skills and knowledge acquired by an individual in one educational setting should be given due recognition when that individual moves into a different setting. Young people also need to know, in advance, the implications of any significant educational

choice in terms of possible employment outcomes and opportunities for further education and training. There is a range of improvements needed in policy and practice in relation to the integration of pathways through schools, TAFE and higher education.

### **Education and Training Delivery Arrangements**

Industry, private and community providers, higher education institutions, TAFE colleges and schools all have roles to play in the delivery of post-compulsory education and training. The role of each will expand as the scope of post-compulsory education and training expands. In that process there is a particular need to strengthen the role of industry and to clarify and enhance the status of TAFE as a post-school option.

Each State and Territory government must determine its policy orientation to education and training delivery in the two years immediately following the end of compulsory schooling. There are two general approaches which overlap substantially in practice. One emphasises the primary role of school-based provision to Year 12 and therefore a long-term objective of full retention to Year 12 in schools. The other aims to provide a range of options after Year 10, including pathways which involve a substantial level of vocational specialisation.

The methods and structures of education and training delivery in the immediate post-compulsory period in each State/Territory will be determined in part by the policy orientation adopted to this issue.

It is appropriate to have a variety of approaches provided that there is a consistent set of national competency frameworks around which curriculum and assessment are structured.

There is a range of innovative models of delivery arrangements around the country. The possible application of each model should be considered by each State/Territory in the context of their policy orientation and physical infrastructure.

In particular, the Committee is persuaded, on the basis of Australian and overseas experience, that it is desirable to separate the education and training delivery arrangements for students at the post-compulsory level from those for younger students. This will not be practical or economic in all circumstances, but appropriate options to achieve such a separation should be examined wherever new institutions are being considered or existing institutions are being rationalised.

If implemented, several of the strategies proposed by the Committee will contribute to improved community understanding of and esteem for TAFE courses, for example, the renewed emphasis on vocational education, revised and expanded entry-level training, and improved credit transfer and articulation between sectors. Of particular importance are improved linkages between TAFE and higher education through cooperative curriculum design, bridging arrangements, course articulation and maximum credit transfer. These improvements are needed to open up new pathways and provide extended opportunities for skill and career development. This in turn will increase the value of vocational qualifications and the esteem in which they are held.

In addition to these measures, the Committee believes that there is a need to define the principle role of TAFE more clearly and communicate it better to the community.

The Committee was encouraged by the strength of statements of commitment to education and training contained in the submissions received from key industry organisations, both business and unions.

This increased evidence of commitment is welcome and overdue. Both sides to the partnership, industry and education, must ensure that this positive approach from peak bodies is translated into maximum practical benefit.

In particular, the Committee believes that there is an onus on the partners in each industry and on governments to ensure that there is an appropriate and effective industry training advisory body or other relevant structure in each industry sector, capable of representing the sector in the establishment of competency standards and the development of training programs.

One issue which arises from the increasingly extensive range of industry/education relationships is the proliferation of educational agencies wishing to deal with enterprises and industry associations. Business representatives emphasised strongly to the Committee that the willingness of business to contribute to education and training is actually undermined by this proliferation of contact points.

The Committee therefore believes that there is a need to examine arrangements for contact between education and industry with a view to rationalising procedures and lines of communication.

### **Support for the Disadvantaged**

The major proposals developed by the Committee will substantially improve the participation of disadvantaged groups in post-compulsory educational training. There is already an extensive range of strategies around the country to boost the participation and attainment of 'at-risk' groups. The Committee believes that there are some specific areas for improvement in relation to:

- young people with disabilities;
- the process of transition from school for some 'at risk' young people; and
- the coordination of education and training systems with other support structures for young people.

In relation to young people with disabilities, the Committee believes that further work should be done on initiatives to enhance their participation in post-compulsory education and training, having particular regard to the process of transition. More generally, the Committee believes that there should be a pilot program developed to trial the establishment of Transition Coordinator positions in schools in which retention rates are low and in which there are low levels of youth participation in training and employment. Coordinators would be directly responsible for monitoring the immediate post-school experience of students leaving school.

Various groups made strong representations concerning the adequacy of current income support arrangements. The Committee notes the importance of income support policies to equitable access to post-compulsory education and training. Many of the matters raised will be addressed in a comprehensive review of AUSTUDY arrangements recently announced by the Commonwealth.

## **Careers Education**

The growing pace of change in the world of work and the increasing integration of education and training pathways make an effective system of careers education even more important now than in the past. There is a need to raise the profile of careers education, provide greater national consistency, involve industry to a greater degree, and ensure a more effective use of resources across systems and across the country. The Committee believes that a range of options should be considered to meet these needs, including the possible establishment of a new, national, joint industry-government career education body.

## **Resource Implications**

The resource implications of current trends in post-compulsory education and training are substantial, involving an increase by 2001 of between 14 per cent and 23 per cent over 1991 recurrent expenditures depending on wage cost assumptions. This increased expenditure would, however, represent a fall in the proportion of GDP from between 4.2 per cent and 4.4 per cent to between 3.5 per cent and 4.0 per cent. The Committee's proposed targets involve an increase of about \$450 to \$500 million or 2.5 per cent over the trend level by 2001. Even in the target scenario, expenditure would fall as a proportion of GDP to between 3.6 per cent and 4.1 per cent. In addition to the recurrent costs there would be very substantial capital costs in all sectors.

The Committee believes that governments need to consider a comprehensive range of options for TAFE funding with a view to removing anomalies, improving boundary arrangements and providing a mechanism which can provide a more balanced approach to setting funding priorities across the sectors.

The contributions to the cost of post-compulsory education and training from individuals, industry, entrepreneurial activity and enhanced efficiency can all be expected to increase. However the majority of the resources needed will be drawn from the public purse.

If society and governments are not willing to meet the resource implications, the types of strategies proposed by the Committee would need to be reconsidered.

## List of Committee Recommendations

### Chapter 3

#### Targets and Measurements

##### **3.1    *The Committee recommends that:***

Australia as a nation should be committed to providing for all of its young people a program of education/training which prepares them for life as individuals, citizens and workers now, through the current decade and into the coming century.

In recognition of Australia's need for a more highly skilled work force which is able to operate more flexibly and with greater innovation at all levels, a framework of nationally agreed essential competencies and standards should be established and incorporated appropriately in all education and training programs for young people.

Nationally agreed standards in the employment-related key competencies should be progressively established with an expectation that all young people will achieve at least those standards by the completion of their initial program of post-compulsory education/training.

To raise the base skill level of those who currently enter the work force without any appropriate form of education/training, a minimum target should be established as follows: by 1995 all young people by the age of 18 should have attained sufficient vocational skills to achieve at least a base-level traineeship (or other vocational qualifications recognised by the NTB as Level 1) or participation in Year 12 or progress toward a higher level qualification.

In addition, by the year 2001 almost all people by the age of 20 should have attained at least a higher-level traineeship (or other vocational qualification recognised by the NTB as Level 2) or progress toward a higher level vocational qualification or a post-Year 12 academic qualification.

In relation to higher levels of qualifications, by the year 2001 at least 50 per cent of people by the age of 22 should have attained at least a vocational certificate (or other vocational qualification recognised by the NTB as Level 3) or progress toward a vocational qualification above level 3 or a diploma or degree.

##### **3.2    *The Committee recommends that:***

The adoption of a new national completion/participation target that, by the year 2001, 95 per cent of 19-year-olds should have completed Year 12, or an initial post-school qualification or be participating in formally recognised education or training.

##### **3.3    *The Committee recommends that:***

State and Territory education and training authorities formulate targets that give appropriate expression to the proposed national target, taking into account distinctive agency organisational features and regional needs and responsibilities.

##### **3.4    *The Committee recommends that:***

The National Training Board and other education and training agencies, in conjunction with the Australian Bureau of Statistics, develop credentialing

standards that would enable statistical measures of competency levels to be constructed as soon as possible.

That relevant institutional statistical systems be developed to enable the construction of the proposed national measure of completion and participation.

That statistical systems be developed to enumerate enrolments and graduates of accredited vocational education and training courses conducted by private providers registered with the appropriate State, Territory and national training boards.

That the Australian Bureau of Statistics be asked to develop educational and transition surveys to enable more precise measurement of persons undertaking or completing accredited vocational education and training courses conducted by private providers.

### ***3.5 The Committee recommends that:***

VEETAC should consider how the key competencies might be best incorporated into the vocational education and training of adults, and whether a national target in vocational skills and competencies among adults might be a useful stimulus to achieving a better skilled work force.

## **Chapter 4**

### **Curriculum Principles and Key Competencies**

#### ***4.1 The Committee recommends that:***

AEC and MOVEET adopt the following national curriculum principles for post-compulsory education and training:

- A commitment to at least two years of post-compulsory education and training for all young people means curriculum and programs must cater for ability at all levels and of all kinds, diverse interests and different initial vocational and educational destinations.
- Curriculum must be appropriate and relevant to the full range of students so that all students can experience success and satisfaction in their learning and the talented should be challenged to extend themselves fully.
- The curriculum must be broad and balanced with an appropriate mix of general and vocational education and theoretical and applied studies. The appropriate mix will vary for different groups of students.
- School programs should be coherent and incorporate the Agreed National Goals for schools and the employment-related Key Competencies. TAFE/training programs should be coherent and broad enough to incorporate the employment-related Key Competencies.
- The curriculum must allow for a range of learning styles and, in particular, for experiential learning. In the schools sector this will require a stronger commitment to integrated and appropriately structured work experience.
- Increasingly, accredited learning should take place in the workplace as well as in education and training institutions.
- Curriculum must be adaptable to flexible learning contexts including non-institutional community-based contexts.
- Vocational education and training must reflect the needs of industry as

well as meeting national standards and promoting a higher level of general education.

- Curriculum must be structured across all sectors so as to maximise students flexibility in choices of pathways, re-entry capacity and articulation and cross accreditation.
- Curriculum must be clear as to the expected outcomes in terms of knowledge, skills and attitudes.
- Expected outcomes must be explicitly structured into standards frameworks which, where relevant, are compatible across the school and TAFE/training sectors to allow for consistent and credible assessment and reporting on student achievement in Key Competencies.
- Progression through curriculum stages/levels must be based on achievement or competence.

#### **4.2    *The Committee recommends that:***

The AEC and MOVEET endorse the following Key Areas of Competence as essential for all young people engaged in post-compulsory education and training.

- Language and Communication
  - Speaking
  - Listening
  - Reading
  - Writing
  - Accessing and using Information
- Mathematics
  - Computation
  - Measurement
  - Understanding mathematical symbols
- Scientific and Technological Understanding
  - Understanding scientific and technological concepts
  - Understanding the impact of science and technology on society
  - Scientific and technological skills including computing skills
- Cultural Understanding
  - Understanding and knowledge of Australia's historical, geographical and political context
  - Understanding of major global issues — e.g. competing environmental, technological and social priorities
  - Understanding of the world of work, its importance and requirements.
- Problem Solving
  - Analysis
  - Critical thinking
  - Decision making
  - Creative thinking
  - Skill transfer to new contexts
- Personal and Interpersonal
  - Personal management and planning including career planning
  - Negotiating and team skills
  - Initiative and leadership
  - Adaptability to change
  - Self esteem
  - Ethics

#### **4.3    *The Committee recommends that:***

All post-compulsory education and training programs for the 15–19 age cohort should include within their overall expected outcomes, appropriate levels of competence in the six Key Areas.

#### **4.4    *The Committee recommends that:***

The AEC and MOVEET keep the status of LOTE as an employment-related competence under review, with the possibility of setting an appropriate national target for LOTE competence.

#### **4.5    *The Committee recommends that:***

The AEC extend the School Subject Profile levels to encompass the expected levels of achievement in Years 11 and 12.

#### **4.6    *The Committee recommends that:***

AEC and MOVEET should establish an appropriate process to complete the work started by the Committee of the Review into Post-compulsory Education and Training in relation to Key Competencies. That process should:

- be capable of making substantial progress within a limited time frame;
- involve consultative arrangements which ensure that key groups including relevant State and national agencies accept the process and are involved in the formulation of outcomes;
- ensure that current AEC subject profiling and MOVEET work on national training curriculum and national skills standards are integrated appropriately with the development of the Key Competencies framework; and
- ensure appropriate continuity of membership with the Review Committee.

The Committee proposes that the process involve a steering committee with membership drawn from the groups represented on the Review Committee, plus the NTB and the higher education sector. The steering committee should maintain momentum and therefore include at least two members of the Review Committee and be supported by an expert group drawn from those currently working on the AEC Subject Profiles and the national training curriculum, the NTB, and the community and adult education area.

Terms of reference for the process should be along the following lines:

- Building on the work of the AEC Review of Post-compulsory Education and Training and taking into account relevant work on Subject Profiles (AEC) and the national training curriculum (MOVEET) and national skills standards:
  - finalise the definition of employment related Key Competencies for post compulsory education and training
  - finalise employment related Competence Profiles for Language and Communication and Mathematics, encompassing a range of levels appropriate to Years 11–12 and all training leading to NTB Levels 1,2 and 3 standards
  - outline a schedule to implement nationally comparable assessment and national reporting on levels of attainment in Language and Communication and Mathematics in Year 10 and 12 in school and as appropriate in TAFE and private training agencies by 1993
  - develop appropriate draft Profiles for the remaining Key Competencies and specify a timetable and process for their completion



- this timetable should allow for implementation by stages and should involve early completion of work on the Key Competencies of Science and Technological Understanding, Cultural Understanding and Problem Solving
- the timetable should provide for overall completion of the process and implementation by 1995 in conducting this work, consult widely with relevant groups.
- Work should commence as soon as possible with a view to reporting progress and proposed work schedules to Ministers in six months.

#### **4.7 The Committee recommends that:**

All States/Territories develop valid and publicly credible, nationally comparable ways of assessing young people's attainments in terms of the National Competence Profile Levels in the areas of:

- Language and Communication
- Mathematics
- Problem Solving
- Science and Technological Understanding
- Cultural Understanding
- Personal and Interpersonal

All States/Territories should provide young people with reports on their level of competence in these areas at Year 10 and 12 in schools and at appropriate points in the TAFE/training sector.

Reporting on students' achievement should initially range across institutional, state and national levels.

National reporting should be implemented for the Languages and Communication and Mathematics Competencies in 1993.

Problem Solving, Cultural Understanding and Science and Technological Understanding should initially be reported at institutional and State level with the aim of progression to the national level.

The Personal and Interpersonal area of Competence should initially be reported at an institutional level with the possibility of progression to the state and national level.

Appropriate assessment and reporting arrangements should be implemented for all Competence Areas by 1995.

#### **4.8 The Committee recommends that:**

Effective mechanisms be put in place to enhance understanding and coordination across the school and TAFE/training sectors on matters relating to curriculum development, assessment and accreditation:

- at the National level across AEC and MOVEET bodies;
- at the State level on relevant Boards, agencies and committees; and
- at the point of syllabus/curriculum design and development.

#### **4.9 The Committee recommends that:**

School systems:

- integrate the Key Competency Profiles as appropriate across the curriculum;
- strengthen the 'hands on', practical dimensions of their curriculum;

- give more explicit emphasis to the relevance of mainstream curriculum to the world of work; and
- where appropriate, and particularly in specific vocational courses, adopt an outcome/competency based approach to curriculum, teaching and assessment.

#### ***4.10 The Committee recommends that:***

The TAFE/training sector:

- should adopt a more direct role in the development of young people's levels of achievement in all the Key Competencies;
- should ensure that its curriculum across entry-level training courses incorporates all the Key Competency areas of skill and knowledge in line with industry-determined competency requirements.

#### ***4.11 The Committee recommends that:***

The group with responsibility for finalising the Competency Profiles give a high priority to consultation with industry training committees/councils to ensure industry acceptance of the incorporation of Key Competency standards in statements of industry requirements.

#### ***4.12 The Committee recommends that:***

AEC and MOVEET should refer the relevant proposals from this Review to both the National Project on the Quality of Teaching and Learning and the VEETAC Working Party on TAFE Staff and Related Issues with a brief to:

- identify the immediate implications for professional development of teachers in the school and TAFE/training sectors;
- identify implications for initial preparation of teachers in the school and TAFE/training sectors;
- develop strategies to support teachers in the pedagogical and curriculum changes resulting from the Committee's proposals;
- consult with each other to ensure appropriate consistency and cooperation in the development of strategies; and
- bring initial recommendations to the AEC and MOVEET at their first meetings in 1992.

#### ***4.13 The Committee recommends that:***

Governments should ensure adequate professional development funds are available to the schools and TAFE sectors for the successful implementation of the Committee's proposals.

## **Chapter 5**

### **Provision and Pathways**

#### ***5.1 The Committee recommends that:***

MOVEET continue to give high priority to reform of current entry-level training arrangements as a key step in achieving the proposed national completion/participation targets.

A reformed entry-level training system should extend arrangements beyond the existing apprenticeship and traineeship occupations to achieve better coverage of young people, especially young women.

### **5.2 *The Committee recommends that:***

The proposed new entry-level training system should:

- provide high quality education, involving general vocational as well as occupation-specific competencies;
- meet and relate clearly to industry needs and standards;
- integrate with other educational pathways, for example providing clear opportunities for movement from and to school, and to further educational and training programs with maximum credit; and
- provide opportunities for as many young people as possible who do not proceed direct to higher education.

### **5.3 *The Committee recommends that:***

The ESFC should consider the issues raised in this review relating to compulsion and incentives in its consultations around the proposed new entry-level training system.

The ESFC's consultations and report should be completed by early 1992 to enable Ministers to make decisions in the first half of 1992.

### **5.4 *The Committee recommends that:***

State and Territory governments should introduce a uniform compulsory requirement to attend school (unless exempted) to at least the end of Year 10.

### **5.5 *The Committee recommends that:***

Governments should agree to introduce a post-compulsory Education and Training Guarantee whereby all young people would be guaranteed a place in school or TAFE after Year 10 for two years of full-time education or training or its equivalent part-time for up to three years. The Guarantee should apply for all those who are under the age of 20 at the first of January in each year.

### **5.6 *The Committee recommends that:***

AEC and MOVEET establish a working party to examine the detailed implementation of the proposed post-compulsory Education and Training Guarantee.

### **5.7 *The Committee recommends that:***

The NTB should promote a wider knowledge of the concept of competency standards, including by reissuing its National Competency Standards Policy and Guidelines in a more accessible, plain English version.

### **5.8 *The Committee recommends that:***

The NTB review its generic formulation of the Australian Standards Framework, especially Levels 1 and 2, in consultation with relevant education and training authorities having regard to the appropriate integration of education, training and employment pathways.

### **5.9 *The Committee recommends that:***

States and Territories review their policies and practices at the school/TAFE interface with a view to maximising credit transfer and articulation between the sectors. Policy and practice should involve:

- the establishment of formal advanced standing arrangements and the encouragement of local initiatives;
- the removal of unnecessary impediments to cooperation;

- the extension of local agreements across systems;
- two-way recognition so that school students are granted credit in TAFE for appropriate subjects completed as part of the senior school certificate and students returning to senior secondary studies are granted credit if they have undertaken an appropriate TAFE course;
- the recognition of advanced standing on a provisional basis where the degree of prior learning is not clear, subject to subsequent achievement of the required outcomes;
- the cooperative development and dissemination of information about school/TAFE pathways and credit transfer arrangements to students before the end of their compulsory education, and also to parents, career advisers and school and TAFE teachers; and
- means of reporting progress at the national level.

**5.10 *The Committee recommends that:***

That the Commonwealth Government should:

- in conjunction with TAFE systems and higher education institutions continue to support the piloting of the Credit Transfer Authority with a view to the early establishment of a national agency;
- offer significant seeding funds if significant progress has occurred within a specified time frame — say 1 January, 1992; and
- consider setting minimum targets for the level of credit transfers at institutional or State level.

**5.11 *The Committee recommends that:***

NBEET and the AVCC give urgent attention to the development of competency based approaches to university entry selection and credit transfer.

**5.12 *The Committee recommends that:***

MOVEET should extend the terms of reference of the Working Party on a National Framework for the Recognition of Training to include a review of the system of vocational qualifications and its relationship with school and higher education credentials.

## **Chapter 6**

### **Roles and Responsibilities for Delivery of Post-compulsory Education and Training**

The Committee has recognised two essentially different approaches to the role of schools and TAFE in the education of young people in the immediate post-compulsory period.

**6.1 *In this context, the Committee recommends that each State and Territory:***

Define clearly the respective responsibilities of schools and TAFE in the provision of education and training for young people in the immediate post-compulsory period.

Define the inter-relationships expected of schools and TAFE in implementing those responsibilities.

**6.2 *The Committee recommends that:***

State and Territory Governments examine exemplary and innovative models

of post-compulsory education and training delivery arrangements with a view to determining the extent to which the general principles such as cooperation, resource sharing, and joint curriculum provision and development can be applied more broadly within the overall educational contexts for each State and Territory.

**6.3    *The Committee recommends that:***

State and Territory governments should consider options to separate the education and training delivery arrangements for students at the immediate post-compulsory level from those for younger students when new institutions are being planned or existing ones rationalised.

**6.4    *The Committee recommends that:***

Governments and TAFE systems should:

- identify unequivocally that TAFE'S primary role is the provision of high quality education and training relevant to industry needs and standards;
- introduce or extend programs to enhance the understanding of and support for TAFE programs among school teachers particularly careers advisers;
- develop joint public relations campaigns to enhance public understanding of the nature and purpose of TAFE; and
- rationalise stream 1000 courses so that purely recreational courses are delivered by agencies other than TAFE.

**6.5    *The Committee recommends that:***

The National Industry Education Forum should strengthen its coverage of and involvement with TAFE and the training sector.

**6.6    *The Committee recommends that:***

Governments should examine arrangements for contact between education and industry with a view to rationalising procedures and lines of communication. The NIEF should provide advice to governments to aid this process of review.

## **Chapter 7**

### **Participation in Education and Training by the Disadvantaged**

**7.1    *The Committee recommends that:***

The AEC and MOVEET establish a working party to examine possible initiatives to enhance the practicable participation of young people with disabilities in post-compulsory education and training with particular regard to the process of transition. The working party should be established as soon as possible and be required to report within six months.

**7.2    *The Committee recommends that:***

The Students at Risk Program should be extended and maintained until there is clear evidence that its objectives have been consolidated in services at school level.

**7.3    *The Committee recommends that:***

The Commonwealth Government, in conjunction with interested States, pilot the establishment of Transition Coordinator positions in schools where

retention rates are low and where there are low levels of youth participation in training and employment.

**7.4 *The Committee recommends that:***

TAFE systems should identify separate components within their equity targets for the participation of disadvantaged teenagers.

**7.5 *The Committee recommends that:***

The Commonwealth Government should ensure that the Austudy Review pays particular attention to TAFE participation issues.

**7.6 *The Committee recommends that:***

Community Services and Health Ministers examine ways of coordinating welfare services at the local level to promote more effective educational participation for disadvantaged young people.

**7.7 *The Committee recommends that:***

States and Territories examine their information systems with a view to improving their capacity to monitor regional patterns of education and training participation and attainment, especially for 'at risk' groups.

## **Chapter 8**

### **Careers Education**

**8.1 *The Committee recommends that:***

The National Data Base Management Committee of the AEC review the usefulness of systems for computerised careers guidance and learning with a view to identifying the best systems for application in the Australian context.

**8.2 *The Committee recommends that:***

Governments act on NBEET's recommendation that every school with a large secondary enrolment, and appropriate clusters of smaller schools, have a full-time careers adviser.

**8.3 *The Committee recommends that:***

The Commonwealth Government should allow employer expenditure on industrial experience programs for students and teachers as valid expenditure for the purposes of the Training Guarantee legislation.

**8.4 *The Committee recommends that:***

AEC and MOVEET should establish a working group with the NIEF to develop strategies to:

- raise the profile of careers education;
- achieve better coordination in the operation of the careers education system; and
- respond positively to the call from business for a simplified and improved mechanism for involvement in careers education.

The working group should be established as soon as possible to examine a range of implementation options, including the possible formation of a new national body. It should report to AEC, MOVEET and the NIEF no later than May 1992 to allow for decisions to be taken and implemented by January 1993.

## Chapter 9

### Resource Implications

#### **9.1    *The Committee recommends that:***

Governments should commission a review of the sectoral impact of policies for participation in post-compulsory education and training with a view to ensuring balanced growth in the provision of places for schools, TAFE and higher education.

#### **9.2    *The Committee recommends that:***

Governments give consideration to the need for a national schools infrastructure program in the context of a more detailed analysis of the resource implications of increased school retention.

#### **9.3    *The Committee recommends that:***

Ministers should consider a comprehensive range of options for TAFE resourcing including the following options:

- i) Full Commonwealth Funding Responsibility for TAFE Beyond the Education and Training Guarantee
  - The States and the Commonwealth would guarantee to provide a place in school or TAFE for all young people for twelve years of education and training
    - the Commonwealth would contribute to the cost of these places as per existing arrangements.
  - The Commonwealth would assume full funding responsibility beyond that level.
  - States would retain control of the priorities and management of their TAFE systems
    - operationally one option to achieve this would be for States to identify the desired 'profile' for their TAFE system in the funding period (annually or possibly triennially) in accordance with their own priorities. The 'profile' could identify the number of students by stream and any other characteristics considered essential to the 'mission' of the TAFE system. The Commonwealth would agree to all or an identified part of this profile as the 'agreed profile' against which Commonwealth funding would be provided as a block grant. State TAFE systems would be free to fund additional places and undertake activity outside of the agreed profile provided that activity is funded from sources other than the Commonwealth grant for TAFE.
  - This option would allow for the equitable rationalisation of fees and charges across States and sectors.
    - for example education and training in schools and TAFE could be provided free of tuition fees for the period of the Guarantee, with a consistent approach to individual contributions applying thereafter.
  - Capital funding for TAFE would be a matter for negotiation.
  - There would need to be a negotiated adjustment to the Financial Assistance Grants to the States.
  - The Commonwealth would continue to provide income support to students.

- Funding arrangements for higher education would be unchanged.
- ii) Full State Funding Responsibility for TAFE Beyond the Education and Training Guarantee
- As per option 1, except that States and Territories would assume full responsibility for funding of TAFE beyond the level of the guarantee.
  - States would require access to a wider revenue base.
- iii) Commonwealth Funding Responsibility for Higher Education
- The Commonwealth would assume full recurrent funding responsibility for associate diploma and diploma courses (on the basis that they are higher education)
    - definition would be an issue, especially since course articulation means that almost any course can be part of an associate diploma.
  - HECS would then apply for these courses.
  - There would be a minor adjustment to the Financial Assistance Grants to the States.
  - Other arrangements would be unchanged.
- iv) Commonwealth Funding Responsibility for Structured Entry-level Training
- The Commonwealth would assume full recurrent funding responsibility for all apprentices and trainees and any other students in an identified set of contractual training arrangements
    - definition would be an issue
    - a variation would be for the Commonwealth to fund additional places above the current number of trainees in the identified arrangements.
  - Any adjustment to the Financial Assistance Grants would be a matter for discussion and dependent on the nature of the change.
  - Other arrangements would be unchanged.

The Committee believes that as part of any rationalisation of TAFE funding, it would be desirable to move to funding on a student-load basis (whereby funds relate to the number of equivalent full-time students) to introduce greater funding equity and efficiency. This would require significant improvements to statistical collections and management information systems in the TAFE sector.



## Chapter 1

### Introduction and Context

#### 1.1 Establishment of Committee

At its 59th meeting in October 1988, the Australian Education Council (AEC) resolved to establish a working party on links between schools and TAFE. The report of the working party was considered by Ministers at the 62nd meeting of the AEC in June 1990. One of the resulting agreements at that meeting was to form a small group of officials to develop an issues paper and to recommend an agenda for a national review of post-compulsory education and training.

The issues paper prepared by the officials is provided in Appendix 1. The introductory paragraphs to that paper provide some of the background thinking which led to the establishment of the Review:

*The last decade has seen major changes in the pattern of education and training participation by young Australians. Retention rates to Year 12 at school have risen from 34.5 per cent in 1980 to more than 60 per cent this year (1990), with corresponding increases in direct school leaver entry to higher education. Apprenticeship intakes have risen from 34 100 in 1982-83 to a record 56 600 currently (1989), and the Australian Traineeship System has been established as a new source of entry-level training opportunities. Participation in TAFE vocational courses is also at record levels.*

*This major growth in participation has raised important issues about the appropriate form and focus of education and training provision at the post-compulsory level, and the organisational and delivery arrangements which will best meet the needs of the 15-19 age group. Major reviews have been conducted in every State and Territory, leading to important changes in curriculum, certification arrangements and relationships between the sectors. For example:*

- all States/Territories are now acting to promote mutual recognition of subjects offered by schools and TAFE, and to develop more flexible approaches to tertiary entrance and dual or joint accreditation;*
- some innovative institutional arrangements are being trialed in a number of States and regions, involving a far closer relationship than normally applies between senior secondary schools, TAFE institutions and private enterprise;*
- there is also a clear trend towards "convergence" of the full-time curricula offered to young people by senior secondary schools and TAFE, reflected in the increasingly vocational emphasis of many new programs at upper secondary level and the incorporation in most full-time TAFE courses of a significant element of general education.*

#### 1.2 Terms of Reference

Having considered the issues paper prepared by officials, Ministers agreed at the 63rd meeting of the AEC (December 1990) to the terms of reference for this review, as follows:

### ***Terms of Reference***

Having regard to the findings of previous relevant studies and reviews, and having regard to current reviews and working parties and initiatives being implemented in each of the States and Territories, to report to the Australian Education Council and to Ministers of Vocational Education, Employment and Training on the future development of post-compulsory education and training in Australia, with particular reference to those young people who have left school and are not participating in a formal education or training program. The Review would consider:

- a. the appropriate form and level of a new national target for participation in post-compulsory education and training, an appropriate basis of measurement of that target, and a recommended timetable and strategies for its achievement;
- b. appropriate national curriculum principles designed to enable all young people, including those with special needs, to develop key competencies, with the associated implications for curriculum development, initial teacher preparation and continuing professional development;
- c. the means by which links can be drawn between different education and training pathways and sectors to expand the options available to all young people, including those with special needs, and to achieve national coherence in entry and exit points between education, training and employment;
- d. the appropriate roles and responsibilities of schools, TAFE and higher education in the provision of post-compulsory education and training for young people consistent with the principles and objectives identified in (b) and (c) above, and the roles of private and industry providers;
- e. current barriers to the effective participation of disadvantaged young people, including those with disabilities, in post-compulsory education and training, and strategies for increasing their participation and improving their educational and labour market outcomes;
- f. the implications of current and prospective changes in post-compulsory education and training for the provision of careers education, information and counselling to students, including the requirements for information on educational pathways and associated career paths; and
- g. the likely resource and funding implications of existing trends in, and further strategies for, post-compulsory education and training.

### **1.3 Membership of the Committee**

Ministers agreed that the Committee should be structured as follows:

- an independent Chair selected by the AEC Executive Committee, in consultation with relevant Ministers,  
*Mr T. B. Finn, A.O.;*
- a Commonwealth nominee,  
*Dr H.N. Johnston;*
- two representatives of the Conference of Directors-General of Education (representing school systems), as nominated by State and Territory Ministers of Education;  
*Ms A. Morrow and Dr F.G. Sharpe;*

- two representatives of the Vocational Education, Employment and Training Advisory Committee (representing TAFE systems), as nominated by relevant State and Territory Ministers,  
*Mr N. Fisher, A.M., and Mr K. Woods;*
- a representative of the business community;  
*Mr A. Houston;* and
- a representative of the trade union movement,  
*Mr L. Carmichael.*

#### **1.4 Administrative Arrangements**

In respect of administrative arrangements for the Review, the AEC agreed:

- a. work would begin early in 1991, with a final report to be provided by the end of July 1991 for consideration by the AEC Executive Committee, in consultation with relevant Ministers, with a view to release as a public discussion document, and for consideration by the AEC and Ministers of Vocational Education, Employment and Training (MOVEET) later in 1991;
- b. the Secretariat and funding for the Review would be based on similar arrangements to those adopted for the Deveson Review, with details to be finalised on the basis of a paper prepared by the Commonwealth and the State in which the Chair of the Review resides, in consultation with the Chair.

#### **1.5 The Committee Process**

The Committee met for a total of fifteen days between 23 January 1991 and 29 July 1991. Meetings were in Canberra, Melbourne, Sydney and Adelaide. In addition, two sub-committees were formed, which worked between meetings of the full Committee to give closer attention to specific terms of reference.

##### ***Other Contributions***

Two working groups were also formed to draw in expertise from the States and Territories and other agencies on matters relating to:

- statistics, measurement and target setting; and
- resource analysis and implications.

The Committee wishes to acknowledge the contributions by officials from New South Wales, Victoria, Tasmania, South Australia and the Commonwealth to those working parties.

More generally, all States and Territories were involved to some degree in the provision of information and advice to the Committee.

There was wide consultation with relevant officials on specific aspects of the Committee's work, especially in relation to curriculum matters. The Committee was assisted by a Secretariat drawn from the Commonwealth, New South Wales and Queensland. Details of the support structures for the Review are set out in the acknowledgments section.

##### ***Commissioned Work***

The Committee commissioned consultancies to provide expert advice on:

- education and training for disabled young people;
- education and training for disadvantaged groups;

- barriers to participation from the perspective of disadvantaged groups; and
- resource calculations.

The terms of reference for these consultancies and the reports received by the Committee make up Appendix 2. No specific report was produced for the resource calculations, but the advice of Gerald Burke underpins the calculations throughout Chapter 10.

### ***Overseas Research***

The Committee gained access to information from overseas through a variety of sources, including the individual country reports prepared following the 1990 overseas mission of the Commonwealth/State Training Advisory Committee (COSTAC). One member of the Committee and one from the Secretariat attended an OECD seminar on Linkages in Vocational-Technical Education and Training which was from 19 to 22 March 1991 in Arizona. Details of the seminar are included in Appendix 1.

## **1.6 Consultations**

The Committee invited submissions from individuals and organisations through direct contact and through newspaper advertisements. To focus and encourage public input, the Committee released the issues paper prepared for the AEC (see Appendix 1). A total of 82 submissions was received. A list of these is provided in Appendix 1. The submissions were analysed with the assistance of a small team from New South Wales, Queensland and South Australia. Their overview report to the Committee is included in Appendix 1.

In addition to an extensive round of meetings conducted by the Chairperson of the Review Committee, the Committee, as a whole met, with representatives of a range of key organisations. Members also visited education and training institutions and had discussions with institutional representatives. Details of these consultations are also provided in Appendix 1.

To provide further insight into current innovations and 'best practice' in terms of education and training delivery, the Committee was assisted by two officials from South Australia and New South Wales who visited selected institutions in Queensland, New South Wales, Victoria and South Australia. Their report to the Committee is included in Appendix 1.

Committee members spoke informally with young people in a variety of contexts whenever time permitted. In order to gain more structured and comprehensive input from young people, the firm of Motive Market Research was commissioned to organise direct consultations with different groups in three capital cities, Melbourne, Sydney, Adelaide, and one regional centre, Ballarat. The report from these consultations is included in Appendix 2.

## **1.7 Scope of the Review**

In order to deal with the wide scope of the terms of reference within the time available, the Committee devoted most attention to those issues which it considered to be of most fundamental importance. It has not been possible to address all issues in equal detail or to take all the Committee's proposals through to an operational point. In a number of areas, therefore, there will need to be some further developmental work if the directions identified by the Committee are to be followed through to their practical conclusions.

## 1.8 Vocational and General Education

As one of its essential tasks the Committee has sought to develop a perspective which encompasses all of the major pathways available to young people in the period following compulsory schooling. In so doing the Committee hopes that it can contribute to an increase in the level of shared understanding across the different education and training sectors and among employers and the community. There are marked differences in perspectives, concerns and even language between employers and educators, and between educators involved with schools, TAFE, private providers and higher education. At one level, much of the Committee's report is aimed at bridging these gaps so that the post-compulsory education and training system as a whole can operate in a more coherent way and provide comprehensive opportunities to young people without disjunctions and inconsistencies.

In this context, the Committee has been concerned to develop a clear understanding of the concepts of 'vocational' and 'general' education and how these concepts can most meaningfully be interpreted and applied in the modern education, training and employment environments.

Australia has inherited an educational and cultural tradition which until recently has tended to see as separate the concepts of 'education' and 'training', 'theoretical' and 'practical', and 'general' and 'vocational' education. In some respects these distinctions are beginning to blur, but they are still reflected in our educational structures, our language and our ways of thinking. We have regarded general education as the province of schools and vocational education and training as something separate which is the province of 'technical' schools, TAFE, private colleges and the workplace. Moreover, in common understanding the concepts of 'skills' and 'skill training' have been associated with only a limited range of occupations, mainly the so-called 'skilled trades'.

These concepts and structures, based on a notional separation of general from vocational education, do not exist in the same way in countries with different educational traditions. In a position paper prepared for the Committee, the Dusseldorp Skills Forum advised that:

*in countries such as France, Japan, Italy, Finland and Sweden, schools accept as a matter of course that they have a role in providing students with skills that are required by the labour market, as well as roles in preparing them for higher education and for active citizenship...in virtually all countries that have not been influenced by the Anglo-Saxon tradition and by its apprenticeship model, students who enrol in programs that are termed vocational combine in their total curriculum elements of what we would refer to as vocational training and elements of what we would refer to as general education: languages, the humanities, mathematics and science. This is as true of school-based models of vocational preparation, such as those found in France and Sweden, as it is of employment-based models such as the dual system in the German speaking countries and Sweden's industrial high schools.*

*It is widely accepted elsewhere in the world that the continued development of intellectual and social competencies in the post-compulsory years needs to be enmeshed with the development of competencies that are explicitly required by the labour market. (Dusseldorp Skills Forum, submission to the Review, p. 2)*

There is an increasing realisation internationally that the most successful forms of work organisation are those which encourage people to be multi-skilled, creative and adaptable. Such people are ultimately more productive because they know and understand their work, their product or their service. They are encouraged and able to work in teams, to become involved in problem solving, planning and decision making and to renew and adapt their skills. They are also better equipped to participate actively in the range of roles outside of employment which are required of members of a complex society. Recent thinking in Europe and the OECD points:

*to a need for the competencies required by workers in their roles as citizens to merge more closely with the competencies that they require in the workplace...the argument is for a convergence of vocational and general education to meet both individual needs and industry needs.* (Dusseldorp Skills Forum, submission, p. 3)

The separate approach to general and vocational education in this country has in some ways hindered the development and implementation of more creative and relevant educational responses to the rapid changes in the nature of work and the skill requirements of individuals as workers and active participants in modern society. Nonetheless, the notion of a convergence between the traditionally separate processes of education and training is increasingly becoming a reality in Australian senior secondary schools. This change has received additional impetus from the introduction of a wider client group with more diverse needs and ambitions into the school system.

At the same time, employers are more clearly articulating their desire for the school system to provide young people with a foundation of basic skills and a range of broad skills and attributes which are generally relevant to the world of work without being occupation- or industry-specific.

Similarly, while there are pressures for more broadly vocational education in schools, there are concerns that the traditional vocational preparation programs such as apprenticeships are too narrowly focused on specific technical skills and do not provide the flexible, adaptable skills and attributes necessary in the modern workplace.

The Committee therefore believes that both individual and industry needs are leading in the same direction: toward an increasing convergence of general and vocational education. Already the two concepts overlap inseparably. Literacy is at once both a general and a vocational competence. An understanding of computers and information technology may once have been seen as strictly vocational, but is increasingly a general requirement. A desire for lifelong learning which was traditionally associated with the general and academic education pathway is now often identified by employers as a core attribute for every employee. This degree of overlap between the general and the vocational can be expected to increase as the nature of work and work organisation changes and becomes more complex.

There is also a related process of convergence between the concepts of work and education. Increasingly, as regular updating of skills and knowledge becomes essential to maintaining and enhancing productivity in the workplace, the concepts of working and learning will converge. Ongoing learning will become a part of productive work. Traditional notions of separation between education and work, especially the notion of a one-off period of education followed by employment, will be replaced by an integrated concept of work intertwined with lifelong learning, commencing with post-compulsory education and training.

This view implies that in order to serve their clients' needs, both schools and TAFE will need to change—schools to become more concerned with issues of employability and the provision of broad vocational education; and TAFE to recognise that initial vocational courses must increasingly be concerned with competencies that are more general than those which, for example, characterised the traditional craft-based apprenticeships. In industry, all parties will need to take a more active role in the development and support of ongoing training which is integrated with employment. These changes are of course already occurring to differing degrees around the country. Much of the remainder of this report addresses the question of how this process of change can best be accelerated, developed and managed through post-compulsory education and training to the advantage of young people and the nation generally.

### 1.9 Terminology

Current usage of the terms general and vocational education carries historical connotations of separation and difference and therefore requires reconsideration if the terms are to describe the concepts of overlap and convergence described above. The Committee has found it helpful to conceive of two overlapping circles which are increasing the extent of their intersection over time. One circle represents general comprehensive education, the other represents vocational education. The growing intersection of the two is logically termed 'general vocational' education. (see Figure 1.1) 'General vocational' education could therefore be defined broadly as those aspects of general education which are important for employment, or alternatively as those aspects of vocational education which are important for active citizenship. Conceived in this way the useful and generally accepted terms 'general' and 'vocational' can be retained without implying that they are mutually exclusive.

The overlap between the two circles, while substantial and increasing, is not complete: there are elements of general education which do not have any clear vocational character, and there are elements of vocational education which are so specific to an individual task or occupation that they have no wider application. This conceptualisation obviously cannot be applied rigourously in every situation; the margins are indistinct and the meaning varies according to the situation. A deep appreciation of religion may be a very vocational attribute for a priest, but is less so (perhaps unfortunately) for a plumber. Nonetheless, it provides a straightforward and useful way of re-interpreting existing terminology to reflect current realities.

This concept of an overlap between general and vocational education can be illustrated with reference to the ten common and agreed national goals for schooling in Australia. Those goals are listed in Table 1.1.

If the term 'general-vocational education' is interpreted as suggested above to represent those aspects of general education which are clearly important for employment in the modern context, it can be seen that many of the goals of schooling could be described as general-vocational in character. Certainly goals 1, 2, 4, 5, most of 6, and 10 fall in this area of overlap between general and vocational education, as do some aspects of the other goals.

This conceptualisation suggests that, in simplistic terms, the principal domain of schools could be regarded as covering all of general education, as represented by the national goals for schooling, including a substantial area of

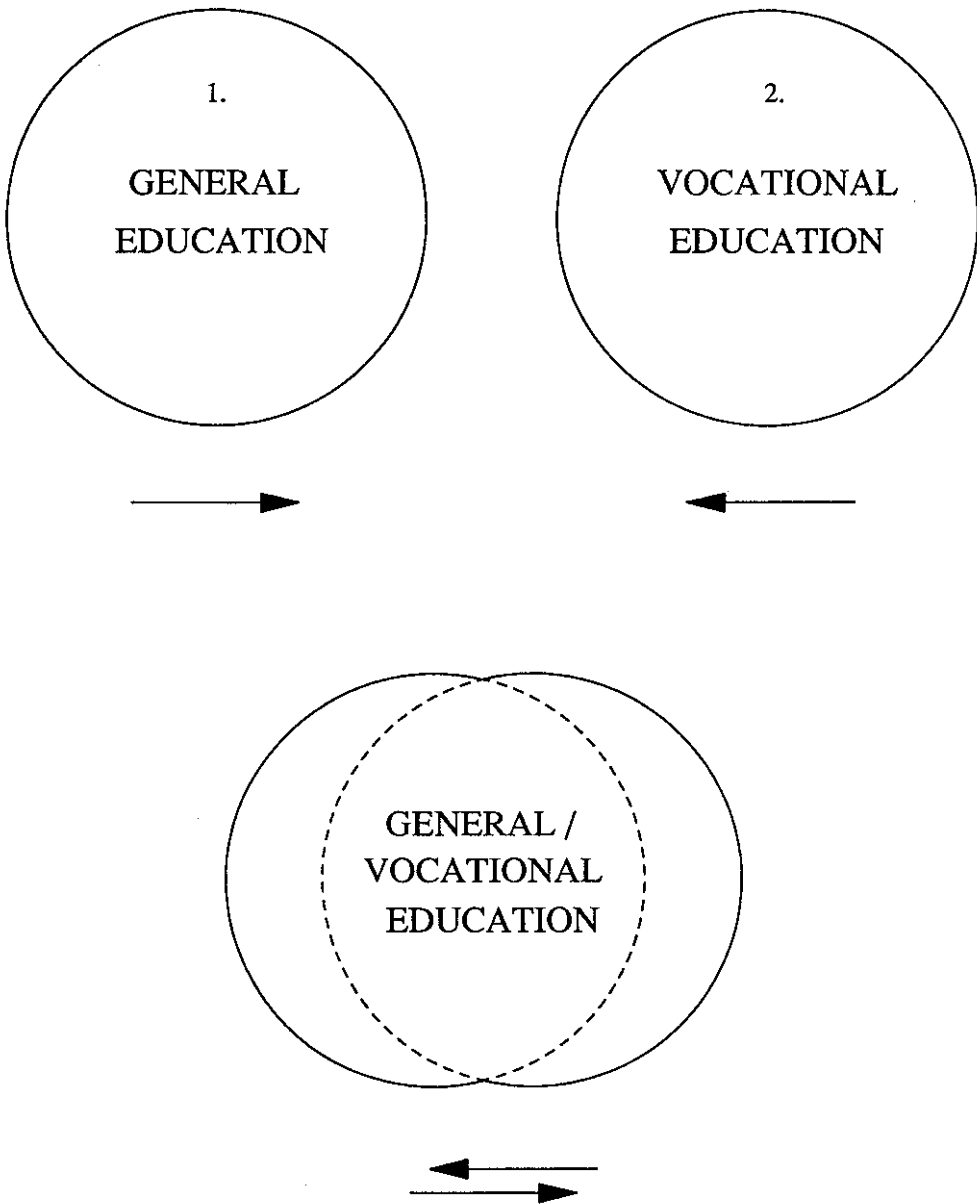


Figure 1.1



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**Table 1.1 Common and Agreed National Goals for Schooling in Australia**

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1. To provide an excellent education for all young people, being one which develops their talents and capacities to full potential, and is relevant to the social, cultural and economic needs of the nation.
  2. To enable all students to achieve high standards of learning and to develop self-confidence, optimism, high self-esteem, respect for others, and achievement of personal excellence.
  3. To promote equality of educational opportunities, and to provide for groups with special learning requirements.
  4. To respond to the current and emerging economic and social needs of the nation, and to provide those skills which will allow students maximum flexibility and adaptability in their future employment and other aspects of life.
  5. To provide a foundation for further education and training, in terms of knowledge and skills, respect for learning and positive attitudes for lifelong education.
  6. To develop in students:
    - a. the skills of English literacy, including skills in listening, speaking, reading and writing;
    - b. skills of numeracy, and other mathematical skills;
    - c. skills of analysis and problem solving;
    - d. skills of information processing and computing;
    - e. an understanding of the role of science and technology in society, together with scientific and technological skills ;
    - f. a knowledge and appreciation of Australia's historical and geographic context;
    - g. a knowledge of languages other than English;
    - h. an appreciation and understanding of, and confidence to participate in, the creative arts;
    - i. an understanding of, and concern for, balanced development and the global environment; and
    - j. a capacity to exercise judgment in matters of morality, ethics and social justice.
  7. To develop knowledge, skills, attitudes and values which will enable students to participate as active and informed citizens in our democratic Australian society within an international context.
  8. To provide students with an understanding and respect for our cultural heritage including the particular cultural background of Aboriginal and ethnic groups.
  9. To provide for the physical development and personal health and fitness of students, and for the creative use of leisure time.
  10. To provide appropriate career education and knowledge of the world of work, including an understanding of the nature and place of work in our society.
-

overlap with vocational education. Some aspects of schooling for some students may have a more specifically vocational character. Similarly, the principal domain of TAFE could be regarded as covering all of vocational education, including a substantial area of overlap with general education. Higher education covers both spectrums, ranging from general elements of some arts and humanities courses to the specifically vocational elements of professional programs.

### **1.10 Perspective of the Report**

The Review's terms of reference direct attention to the immediate post-compulsory school period and the transition from education to employment. The Committee has therefore approached the issues before it from a perspective of 'employability', understood in the broadest possible sense. That is, the Committee has consciously given greater prominence in its thinking to those issues or aspects of issues which bear most directly on the process of transition from the world of education to the world of work.

This is a very wide scope which, in the terms described above, encompasses all aspects of education other than that small part of general education which has no clear vocational character.

It encompasses the entire domain of TAFE activities as it relates to young people, and all of the 'general-vocational' aspects of school activity, that is, all the aspects of general education which are important for employment in the modern context. By adopting this perspective the Committee is in no way implying that it supports any narrowing of the broad social, cultural and individual goals currently served by post-compulsory education. On the contrary, the Committee considers it essential for the education system, especially schools, to maintain and pursue a broad set of objectives which aims to develop the capacities of young people to their full potential as individuals and citizens of our complex society.

The Committee has adopted a medium- to long-term perspective, seeking to develop strategies and recommendations which will be relevant regardless of fluctuations in the business and economic cycle. The current recession accentuates the need for reform but the strategies adopted should be viable in periods both of growth and contraction in economic and labour market activity.

For example, the current strong increases in school participation reflect, among other things, young people's reaction to reduced employment opportunities, changing community expectations in relation to participation in education and training, and enhanced senior secondary curriculum. Institutional structures and funding for student places need to respond to these demands. A flexible response is also required in the TAFE and training area where economic recession tends to reduce the availability of structured entry-level training positions. A successful medium-term strategy aimed at increasing the availability of and participation in structured entry-level training will require flexible institutional arrangements where greater reliance can be placed on full-time off-the-job and pre-vocational training when economic circumstances require it.

### **1.11 Emphasis on Those Not in Education and Training**

The terms of reference for the Review required the Committee to pursue its task 'with particular reference to those young people who have left school and are not participating in a formal education or training program'. The Committee was conscious of the interests and needs of this group throughout its deliberations.

In general, the issues for the education and training system are similar in respect of the 'early leavers' and those who, in recent years, have been opting to remain in education in increasing numbers. For example, a broader school curriculum offering more effective linkages with vocational qualifications and employment as well as higher education, is important for those remaining in school, as well as in influencing potential early leavers to remain. A more comprehensive and flexible set of opportunities for entry-level vocational training is important in delivering better outcomes for those who are determined to pursue a vocational qualification. It is also important in offering new opportunities to young people who currently do not take any formal education or training after leaving school.

There are, of course, some specific policy issues associated with this group and these are examined in Chapter 7. In addition, the relevance of more general policy matters to this group is identified where appropriate throughout the remainder of the Report.

### **1.12 Context to the Report: Developments in Post-compulsory Education and Training**

The report forms part of an extraordinary avalanche of policy development and implementation triggered by the joint impacts of rapidly increasing school retention, and labour market and workplace reform. In addition to an extensive range of reports produced for State, Territory and Commonwealth governments in recent years, there is a great deal of work currently under way under the auspices of the National Board of Employment, Education and Training (NBEET), the National Training Board (NTB), the AEC, MOVEET and its advisory body, the Vocational Education, Employment and Training Advisory Committee (VEETAC). Most important of the current AEC and VEETAC processes for this Review are the following:

- work on 'mapping' of the school curriculum around the country and development of common 'profiles' in eight learning areas;
- the development of national core curriculum for TAFE in key vocational courses;
- Working Parties, following the Special Premiers' Conference on Commonwealth/State relations, on:
  - Higher Education,
  - Training and Labour Market Programs and
  - Schools;
- AEC Review of National Policy for the Education of Girls;
- National Plan of Action for Women in TAFE;

- VEETAC Working Parties on:
  - Training Curriculum,
  - Competency Based Training and
  - Framework for National Consistency in Recognition of Training; and
- AEC Working Party on Careers Education.

Several policy themes emerge consistently from all this activity:

- a desire for a better educated and more highly skilled society with an interest in life-long learning;
- the need for broader and 'more relevant' curriculum at senior secondary level, to be achieved both by expansion of the vocational programs offered by schools, and by extending school/TAFE cooperation;
- the need to reassert the importance of vocational education and training and to raise its status relative to academic education;
- the need to make post-compulsory education and training arrangements more consistent across the country, both between and within sectors, in order to facilitate recognition of qualifications, credit transfer and articulation and to make the system more efficient;
- an emphasis on education and training outcomes, that is, the achievement of competencies; and
- the need for training arrangements to be linked more directly to the requirements of industry and, in particular, to respond to the demands of award restructuring.

An important recent development at the interface between education and training and the world of work has been the establishment of the National Training Board (NTB). The original agreement by Commonwealth, State and Territory Governments to establish the NTB provided for:

- a consistent national framework for developing competency standards by industrial parties based on industry needs;
- acceptance by all governments and training authorities of competency standards ratified by the Board as the benchmarks for vocational education, curriculum development, industry training and recognition, and the delivery and accreditation of training; and
- competency standards endorsed by the Board to be the benchmarks for recognition of skills and qualifications of those trained overseas.

The NTB has now established the Australian Standards Framework so that industry can determine and express the standards it requires in a consistent way, enabling training providers to deliver appropriate, accredited training that is both nationally consistent and economical, and providing trainees with outcomes which are recognised within and across industries and around Australia. VEETAC has commenced work to align training credentials and State accreditation processes with the Australian Standards Framework.

### **1.13 International Developments**

Australia is not alone in the speed and direction of policy change. The Committee reviewed current structures and policy developments in a number of other countries and was able to gain a more detailed insight into overseas concerns through representation at the OECD seminar. A remarkable degree of consistency exists in the issues identified, especially amongst countries

with traditions which have tended to separate general and vocational education. As in Australia, there is international interest in the areas of:

- increasing the status of and levels of participation in vocational education and training;
- the convergence of general and vocational education; and
- the integration of education, training and employment, especially through notions of competency, recognition of prior learning, and life-long learning.

It is worth noting that at the OECD seminar it became clear that the extent and pace of reform in this country compares favourably with that in most other OECD nations, although our current position generally falls short of best international practice. There was particular interest from Canada and the USA in the Australian approach, whereby education and training reforms have been viewed as part of an integrated set of policies which include nationally implemented industry and award restructuring.

In June 1991, the British Government released its White Paper on post-compulsory education and training, *Education and Training for the 21st Century*. The White Paper addresses many of the same issues as referred to in this Review and reaches many similar conclusions. The policy intentions announced in the White Paper are set out in Table 1.2. Two significant policy documents were also released in the United States in recent months:

- America 2000: The President's Education Strategy; and
- the Report of the Secretary's Commission on Achieving Necessary Skills (SCANS) which deals with the key competencies required for employment.

The consistency in both the scope and timing of such policy reviews around the world reflects the shared belief that international economic competitiveness, as well as domestic social well-being, is increasingly dependent on a nation's ability to produce both a well-trained, flexible work force and to develop enterprises which enable employees at all levels to contribute to their full potential. Australia will need to pay greater regard to the rapid developments in competitor nations if we are to maintain or improve our performance relative to best international practice.

A more detailed discussion of overseas structures and developments is included in Appendix 1.

### 1.14 Pathways

The Committee has used the concept of 'pathways' in this Report as a way of describing and dealing with the processes associated with movement from compulsory education, through post-compulsory education and training, and between education, training and employment.

The idea of a set of pathways provides a useful mental image to explain the various combinations of education, training and employment activities which individuals may undertake over time in order to reach a certain destination, for example, a desired qualification or type of employment.

A pathway in this sense is an interrelated set of education, training and/or employment experiences providing for progression toward some identified outcome which may be an educational credential, entry to a subsequent pathway, or a particular employment goal. The concept of pathways implies that education and training should not be structured as a series of continuous

movement even where a pathway crosses the boundary of education and discontinuous, self-contained 'lock steps', but rather should provide for training sectors. This imagery emphasises the importance of effective credit transfer and articulation\* arrangements to provide smooth 'bridges' between the pathways. It also draws attention to the importance of clear 'signposts', that is, information and career advice, at the beginning of each pathway and at each junction between pathways.

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**Table 1.2    Policy Announcements in British White Paper**  
***Education and Training for the 21st Century***

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- establish a framework of vocational qualifications that are widely recognised and used, and that are relevant to the needs of the economy;
  - promote equal esteem for academic and vocational qualifications, and clearer and more accessible paths between them;
  - extend the range of services offered by school sixth forms and colleges, so that young people face fewer restrictions about what education or training they choose and where they take it up;
  - give Training and Enterprise Councils more scope to promote employer influence in education, and mutual support between employers and education;
  - stimulate more young people to train, through the offer of a training credit;
  - promote links between schools and employers, to ensure that pupils gain a good understanding of the world of work before they leave school;
  - ensure that all young people get better information and guidance about the choices available to them at 16 and as they progress through further education and training;
  - provide opportunities and incentives for young people to reach higher levels of attainment; and
  - give colleges more freedom to expand their provision and respond more flexibly to the demands of their customers.
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\* Articulation: the specific design of education and training programs in ways which facilitate and maximise opportunities for credit transfer.

Credit transfer: the granting of advanced standing by institutions (either in the same or a different sector to the original institution) to students on the basis of previous study taken in another institution. The term is also taken to include the recognition of prior learning whereby students' previous work and life experience is assessed for credit toward an academic award or qualification.

## Chapter 2

# Teenagers—An Education, Training and Employment Profile

### 2.1 Introduction

The profile of teenage activity reflects the peculiarities of an age cohort in transition between education and work. Most teenagers achieve this transition successfully. Changes of jobs and short periods of unemployment often reflect experimentation with different employment options. For a small proportion of teenagers however the transition is very risky indeed, with prolonged periods of unemployment and underemployment.

Changes in the labour force status of teenagers over the last decade mostly reflect the increase in educational participation among this age group. Full-time labour force participation rates of teenagers have fallen. The proportion of teenagers in full-time employment has decreased while the proportion in full-time education has increased (see Figure 2.1).

While there is clearly a link between labour force and educational participation, the precise relationship is hard to specify. To what extent has increasing unemployment boosted school retention? Has increasing educational participation contributed to the 'casualisation' of the teenage labour market? There is some evidence that teenagers have remained in school in greater numbers in recent years as a consequence of the difficult labour market, but the trend to higher school retention was already established well before the current recession.

It is certainly likely that increased educational participation over the last decade has constrained the level of teenage unemployment which would otherwise have been experienced. The combined effects of an increase in the size of the youth population and a decline in full-time employment over the 1980s would have led to increased teenage unemployment had it not been for the growth in full-time educational participation over the same period. In 1980 some 8.5 per cent of all teenagers were unemployed and looking for full-time jobs, compared to about 8 per cent in 1991, despite the less favourable labour market conditions in 1991.

Whatever the relationship between education and employment patterns for teenagers it is important to note that young people with higher levels of education and training experience lower rates of unemployment than their peers.

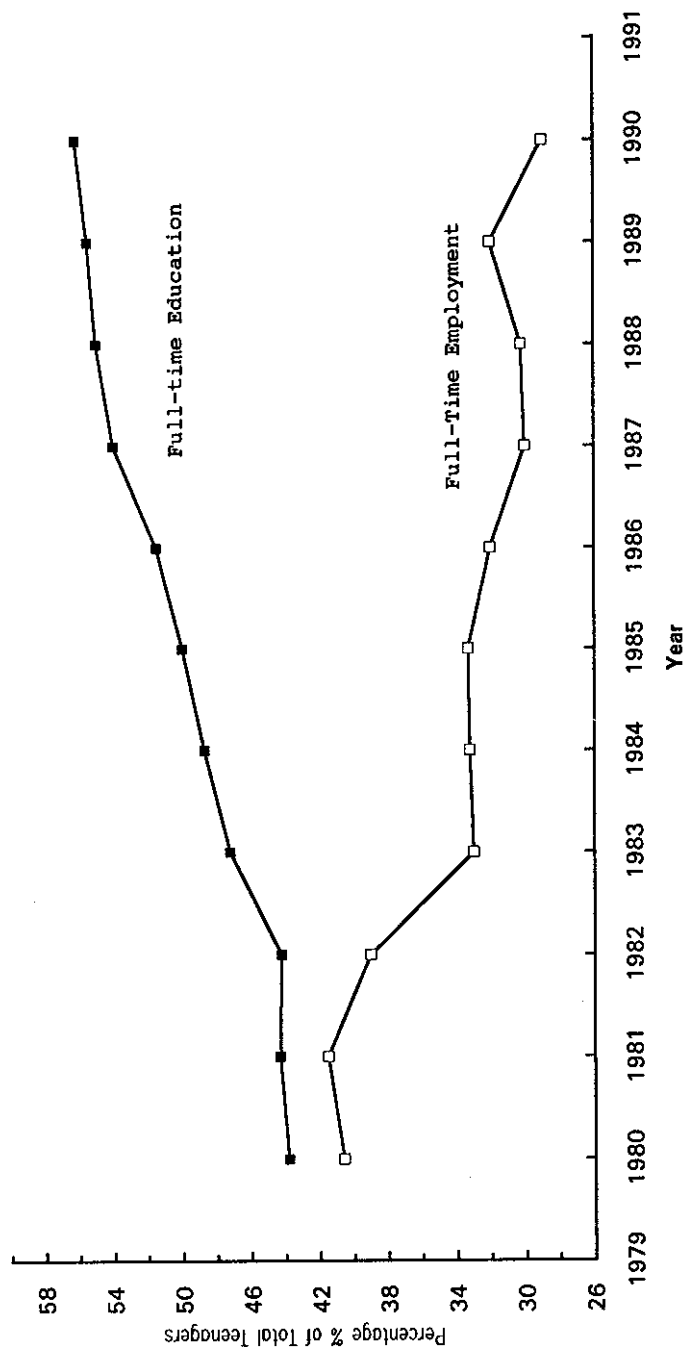
### 2.2 Participation in Education and Training

#### *Overall Education Participation*

Over the last decade teenage participation in education and training has grown significantly. Between 1983 and 1990 overall participation in education and training by the teenage cohort rose from 56.9 per cent to 66.7 per cent. This increase in teenage education participation was largely because of rises in participation in schools (from 38.3 per cent to 43.5 per cent) and higher education (from 6.5 per cent to 10.6 per cent). Teenage participation in TAFE and training has remained fairly constant over the same period (around 11 per cent). It should be noted that most of the education and training statistics in this chapter are from ABS survey sources, not from administrative system

# Full-Time Education and Full-Time Employment\* Participation Rates

for 15 - 19 Year Olds, Australia



\* Not in full-time education

Source: Report of the Review's Statistics Working Party

Figure 2.1



data (see Figure 2.2 and Table 2.1).

School retention figures give the most striking picture of the change in educational activity. Year 12 retention in 1990 reached 64 per cent, compared to about 33 per cent for most of the 1970s.

### ***Participation by Age***

Table 2.2 illustrates the activities of young people from 15 to 19 and demonstrates the extent to which patterns of participation vary between teenagers of different ages. The table shows:

- the dominance of schooling as the principal activity of young people up to age 17;
- the fall-off of education and training over the 15–19-year-old period, especially after age 17
  - by age 18 only half of all young people remain in some form of education or training either part-time or full-time;
- TAFE and training as a whole increases in significance up to age 18, but falls away again at age 19
  - full-time TAFE is a very minor pathway throughout this period, involving only 2.8 per cent of all 15–19-year-olds and
  - part-time TAFE and training other than for apprentices and trainees is also a very minor pathway, involving only 2.3 per cent of the age group; and
- there is a small group at each age who are not taking any education or training, and are either unemployed, in part-time employment or not in the labour force
  - the size of this group, predictably, increases with age and
  - notably, 2.8 per cent of 15-year-olds are in these categories, but would not normally be eligible for income support or social security payments.

## **2.3 Pathways Through Education and Training**

One of the most useful ways to describe the activities of teenagers in the education system is to use the pathways concept outlined in Chapter 1. The Australian Longitudinal Study shows that there are five major pathways which accounted for 65 per cent of the educational experiences of those who were in Year 10 in 1984 and had taken at least twelve years of education or training by 1988;

- school attendance to Year 12 without a break (53.3 per cent);
- apprenticeship following Year 10 (5.4 per cent);
- apprenticeship following Year 11 (3.0 per cent);
- full-time study other than at TAFE, school or higher education after Year 11 (1.7 per cent); and
- apprenticeship following a year of full-time study other than at TAFE or school (1.4 per cent).

To gain a more complete picture of pathways, young people's involvement with the world of work must be added to this sort of information on their educational experiences. Figure 2.3 shows a very simple 'map' of the destinations of school leavers in 1988. The most notable features of this map are that:

Table 2.1 Participation in Education by Type of Institution, Age 15-19, Australia, 1983-1990

Year	School		Higher Educ		TAFE		Other		Total	
	No ('000)	%	No ('000)	%	No ('000)	%	No ('000)	%	No ('000)	%
1983	484.0	38.3	81.5	6.5	133.6	10.6	19.3	1.5	718.4	56.9
1984	510.8	40.6	78.9	6.2	123.0	9.7	21.0	1.7	733.6	58.0
1985	548.0	42.3	86.8	6.7	139.8	10.8	17.2	1.3	791.9	61.1
1986	563.8	42.4	94.8	7.1	132.3	9.9	26.6	2.0	817.5	61.5
1987	613.9	44.9	105.2	7.7	140.6	10.3	16.7	1.2	876.4	64.1
1988	626.4	45.0	110.3	7.9	156.7	11.3	17.0	1.2	910.5	65.5
1989	616.2	43.9	131.9	9.4	158.0	11.3	23.7	1.7	929.8	66.2
1990	606.2	43.5	147.2	10.6	149.0	10.7	26.1	1.9	928.5	66.7

Source: ABS, Cat No. 6227.0

Table 2.2 Activity of Young People 1990 (percentages)

	AGE					Total
	15	16	17	18	19	15-19
<b>Education And Training</b>						
School	93.6	75.5	53.7	11.0	1.9	45.3
Higher Education	0.1	0.7	5.2	17.8	20.6	9.3
TAFE/Training						
- Full-time	0.3	2.2	1.9	5.5	3.7	2.8
- Part-time (apprentices and ATS Trainees)	1.3	8.6	12.0	14.8	10.3	9.6
- Part-time (other)	0.2	0.9	2.2	3.9	3.7	2.3
<b>Sub-Total</b>	<b>95.5</b>	<b>87.9</b>	<b>75.0</b>	<b>53.0</b>	<b>40.2</b>	<b>69.2</b>
<b>Full-Time Labourforce</b> (Excluding education and Training)						
Employed	1.8	3.9	13.3	28.1	39.5	18.1
Unemployed	1.2	3.9	5.9	8.5	8.1	5.7
<b>Sub-Total</b>	<b>3.0</b>	<b>7.8</b>	<b>19.2</b>	<b>36.6</b>	<b>47.6</b>	<b>23.8</b>
<b>Other</b>						
Part-Time Employment	0.5	2.2	2.1	4.8	6.0	3.2
Other	1.1	2.0	3.7	5.5	6.2	3.8
<b>Sub-Total</b>	<b>1.6</b>	<b>2.4</b>	<b>5.8</b>	<b>10.3</b>	<b>6.8</b>	<b>7.0</b>

Source: Workforce 2001. Unpublished tables derived from ABS 6203.0 and 6227.0

PARTICIPATION IN EDUCATION AND TRAINING BY SECTOR, 15-19 YEAR OLD,  
AUSTRALIA, 1983-1990

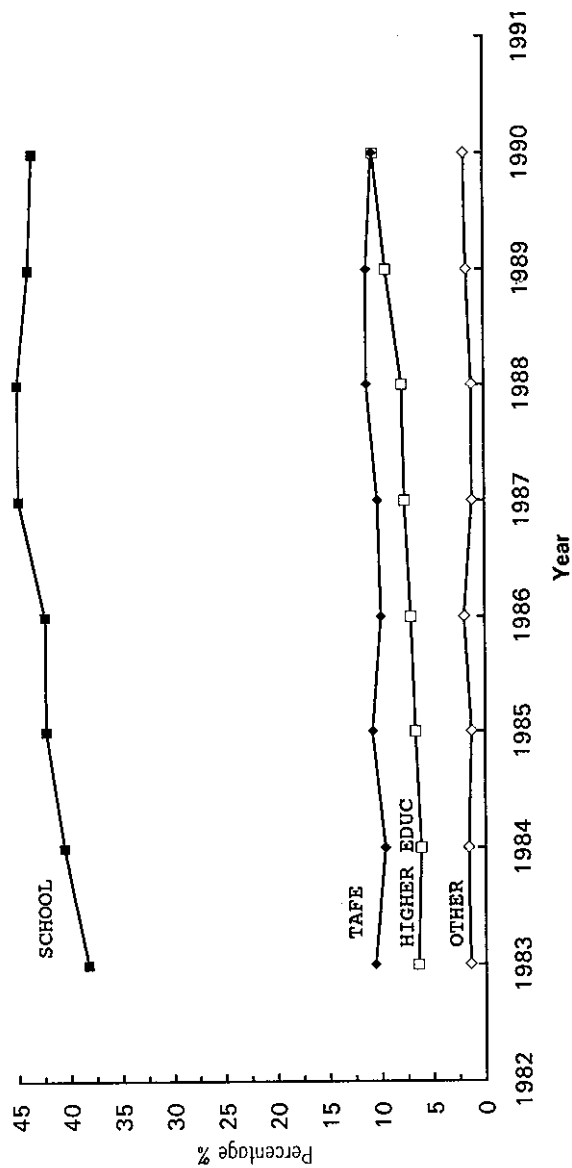
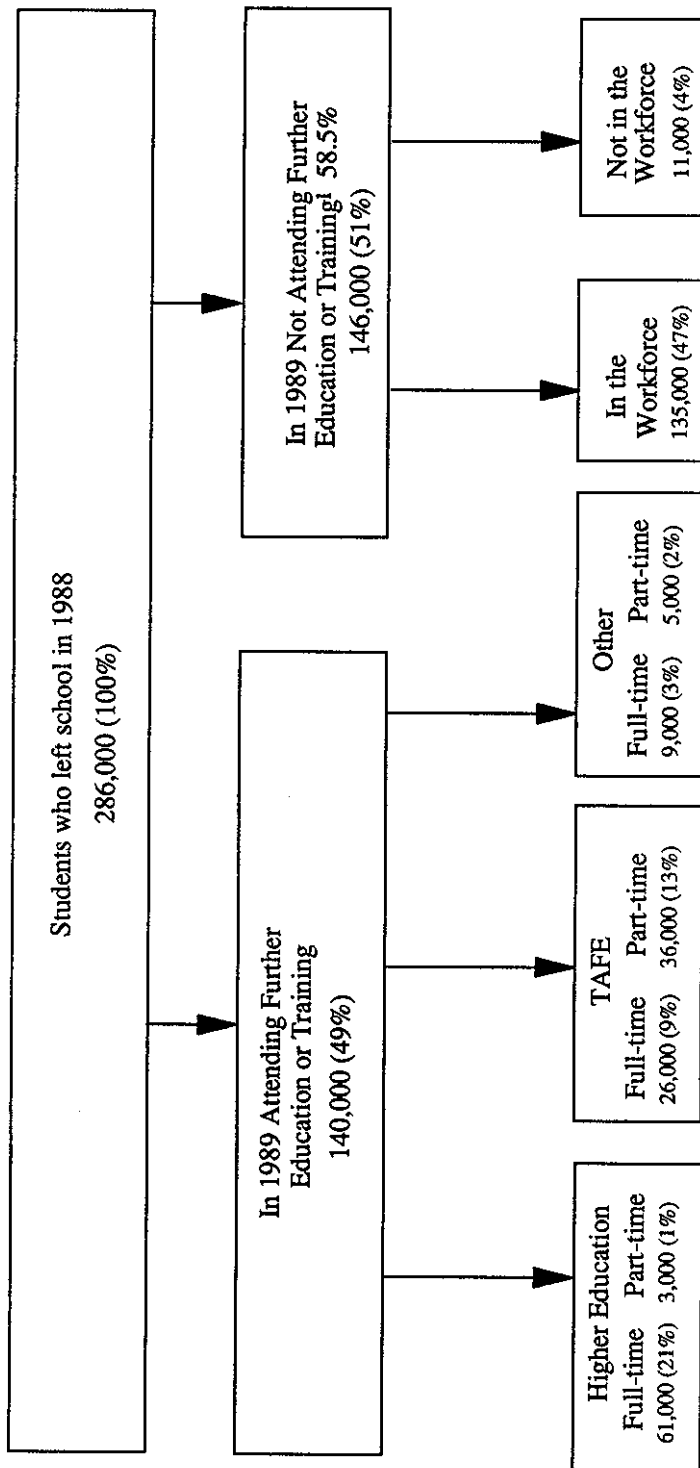


Figure 2.2

Figure 2.3 Destinations of School Leavers



Source: ABS, Transition from Education to Work, Australia (6227.0)

- slightly more than half of all school leavers in 1988 did not continue their formal education and training in any form in 1989; and
- of those who continued, roughly equal proportions entered higher education and TAFE, but the proportion of part-time enrolments was much higher in TAFE than in higher education because of the substantial numbers taking apprenticeships and traineeships.

The Australian Longitudinal Survey enables us to look behind this aggregated picture to identify the different pathways and experiences of those who left school before Year 12 compared with those who remained until the end of Year 12. Figures 2.4, 2.5 and 2.6 show the education and employment pathways followed in 1989 by young people who left school in 1988.

Comparison of Figures 2.5 and 2.6 highlights the significant differences between those who completed Year 12 and those who did not. Year 12 completers are significantly more likely to continue with further education and training than those who finish school earlier (61.5 per cent compared with 43.3 per cent). This difference is largely explained by the participation of Year 12 completers in higher education. In comparison, those who left before Year 12 cannot proceed directly to higher education, but participate in a much higher proportion in apprenticeships and trade certificate courses (32.6 per cent compared with 6.6 per cent). Students who left school before Year 12 were more likely than their peers to be unemployed or not in the labour force.

It should be noted that pathways differ between the different States, partly as a consequence of varying patterns in enrolment ages. There are different school starting ages, different compulsory school leaving points, and different credentialing arrangements. This means that the characteristics of school-based pathways differ from State to State in terms of, for example, the proportion of students of a particular age at a particular stage of schooling. Similarly, there are quite different State patterns in the movement of students from school to TAFE and, to a lesser extent, from school to higher education.

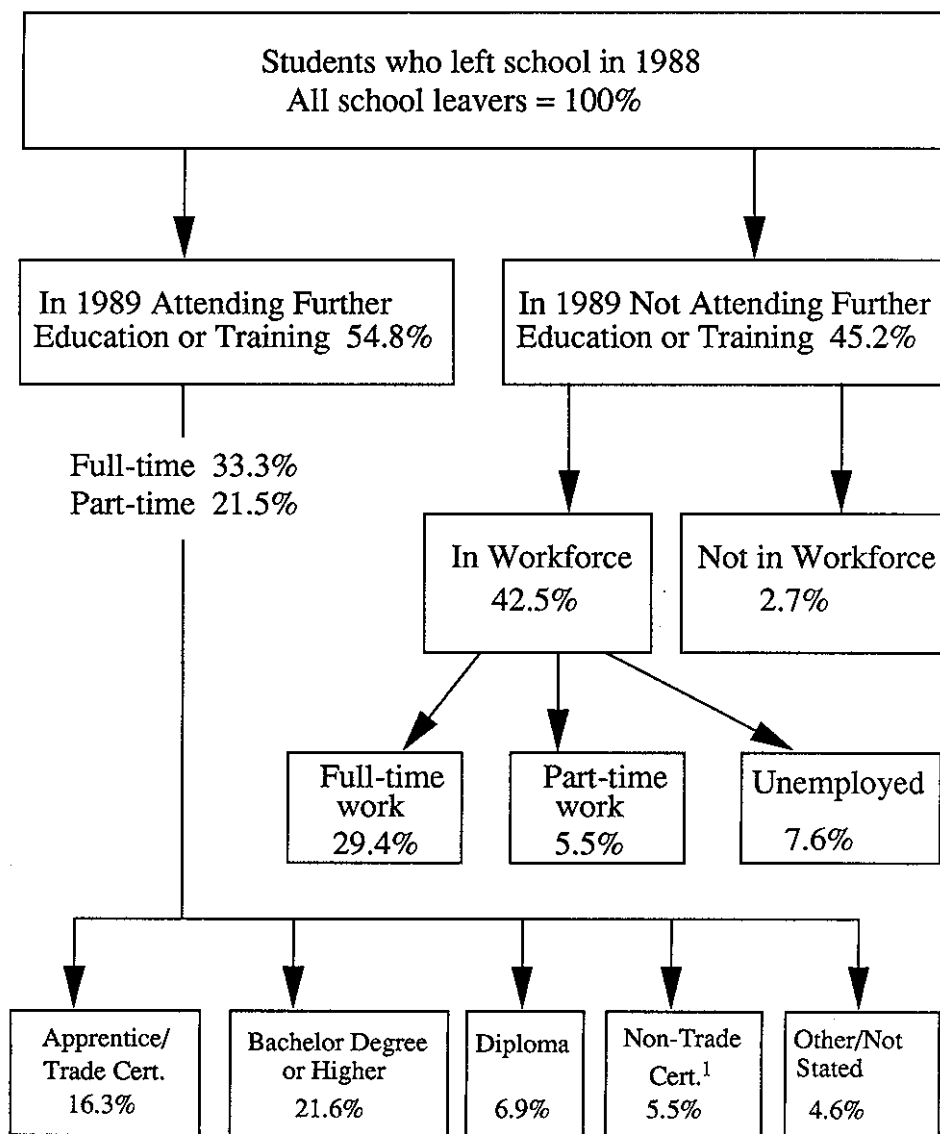
Therefore, aggregated national descriptions of student flows in different pathways do not necessarily reflect the picture at a State level.

For example:

- Victoria and Queensland have comparatively low rates of transfer from school to TAFE (5.1 per cent and 4.2 per cent respectively) whereas the other States have much higher rates (up to 13.5 per cent in Western Australia); and
- between 1989 and 1990 one-quarter of Year 10 students in New South Wales left school with 51 per cent entering TAFE or other training. In Victoria, only 9 per cent of school leavers left from Year 10 and only 14 per cent of these continued with some further education or training.

To some extent this difference reflects different policy approaches to post-Year 10 education and training between the States. This issue is addressed in more detail in Chapter 6.

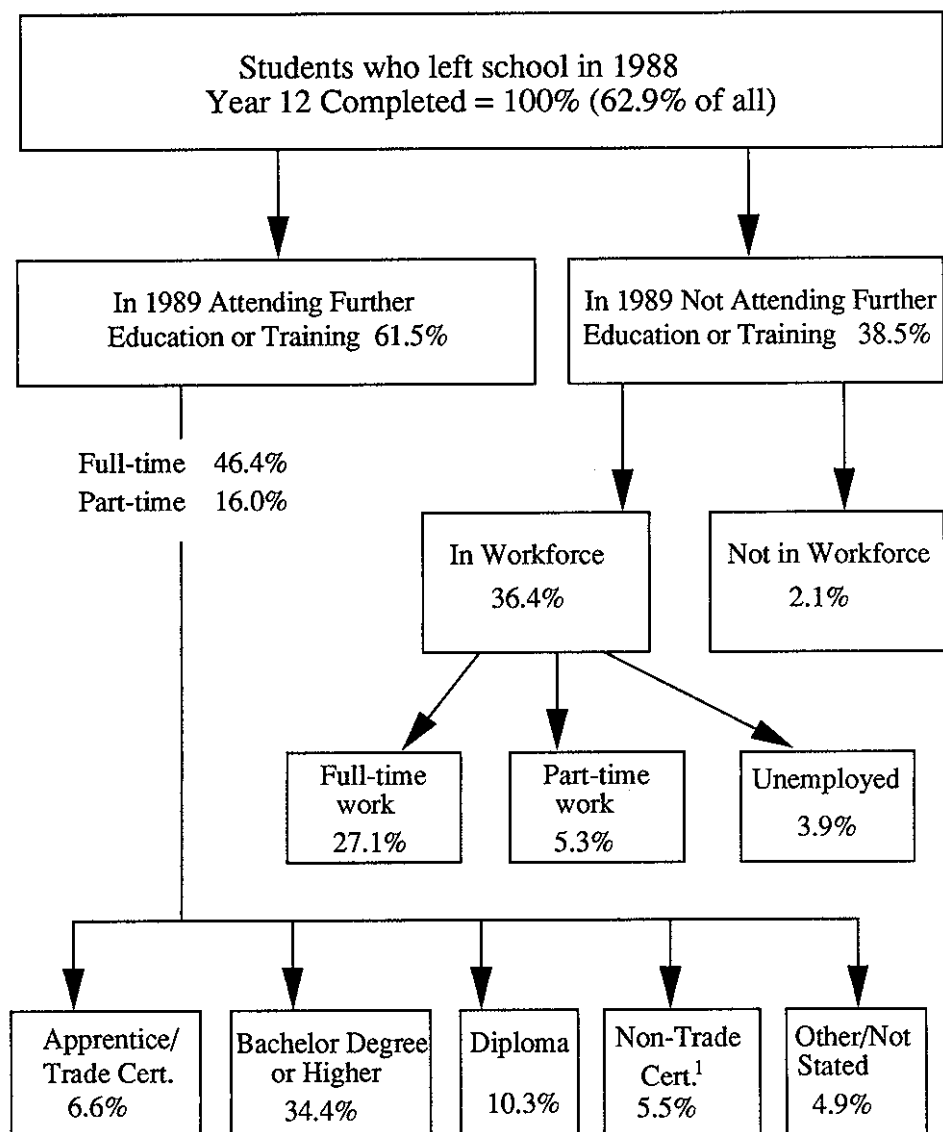
Figure 2.4 Flows of School Leavers, All Students



Notes: 1. Includes traineeships

Source: Australian Longitudinal Survey, unpublished tables

Figure 2.5 Flows of School Leavers, Completed Year 12

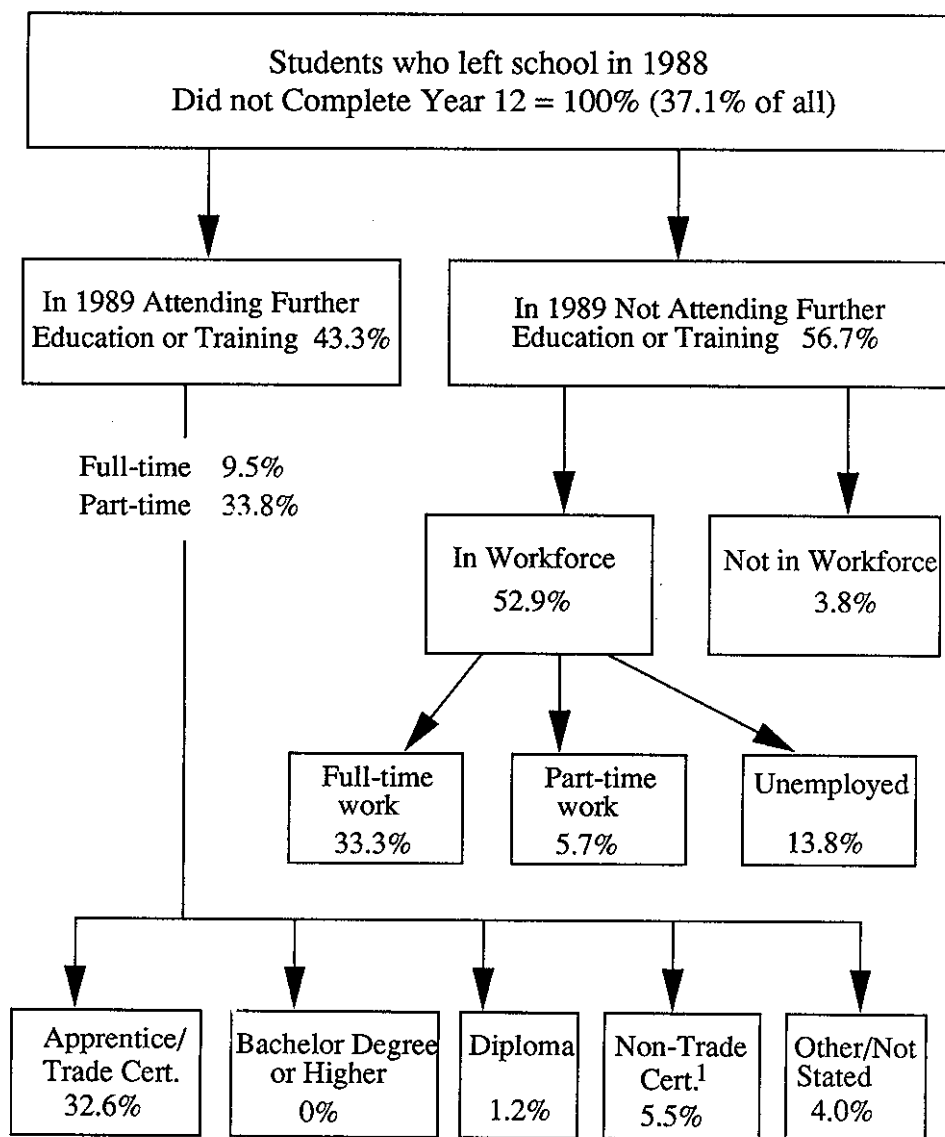


Notes: 1. Includes Traineeships.

Source: Australian Longitudinal Survey, unpublished tables



Figure 2.6 Flows of School Leavers, Did not Complete Year 12



Notes: 1. Includes Traineeships.

Source: Australian Longitudinal Survey, unpublished tables

Table 2.3 Activity in 1990 of Teenagers Aged 15-19 Who Were in Full Time Schools in May 1989

State	Still in School %	TAFE %	Other Education %	Higher Education %	Not in Education %	Total %
NSW	68.9	8.2	2.5	7.2	13.2	100
VIC	70.9	5.1	1.1	9.0	14.0	100
QLD	66.7	4.2	1.9*	6.2	21.1	100
SA	67.1	10.0	1.3*	6.3	15.3	100
WA	60.0	13.5	1.3*	6.1	19.1	100
TAS	64.7	9.3	0*	6.3	19.7	100

\* Estimate unreliable because of high sampling variability

Source: ABS, *Transition from Education to Work, 1990 Unpublished table*

Table 2.3 illustrates some of the State-by-State variations for the 15–19-year-old group as a whole.

It is also worth noting that within States there are substantial regional differences in participation patterns. These differences are particularly significant for educational planning at the State and Territory level.

### ***Limited Educational Participation After Schooling***

The Review Committee was asked to have particular regard for those young people who have left school and are not participating in a formal education and training program. Table 2.2 gives some details about these young people. In 1990, 30.8 per cent of 15–19-year-olds were not participating in either full- or part-time education or training. Expressed in terms of the proportion of the total teenage populations, this group was made up of 18.1 per cent who were working in full-time jobs, 3.2 per cent who were in part-time employment, 3.8 per cent who were not in the labour force, and 5.7 per cent who were unemployed.

These figures do not take into account the number of young people who may have already attempted or completed some form of post-school qualification before the survey date. In a more detailed analysis, the New South Wales Department of Industrial Relations, Employment, Training and Further Education estimated that 18 per cent of the 15 to 19-year-old population in that State in 1990 were not in any form of education or training and had not attempted any form of post-school qualification, including apprenticeships and traineeships.

Of the total group who left school in 1989 about half were not continuing with formal education on either a full- or part-time basis in May 1990. The Australian Longitudinal Survey showed that, for teenagers who did not complete Year 12 this figure rises to almost 60 per cent. To some extent these observations overstate the fall-off in participation, given that some school leavers return to education and training in later years. In addition, some of the young people in the work force would have been receiving informal, on-the-job training or may have engaged in short training courses (although the extent and quality of that training is very difficult to gauge). However, most school leavers with a part-time job (other than full-time students) do not combine their employment with part-time learning, and it is likely that relatively few of these would receive significant training on-the-job.

## **2.4 Participation in the Labour Market**

### ***Unemployment***

The teenage unemployment rate remains higher than that for the labour force as a whole—in May 1991 the rate was 26.8 per cent, compared with a total labour force rate of 10.1 per cent.

However, the teenage unemployment rate itself is probably not the best measure of labour market disadvantage for teenagers given that only a proportion of the teenage population actively seeks full-time work. The unemployment rate, in a sense, overstates the labour market disadvantage of teenagers. Measured as a proportion of the total teenage population, 8.2 per cent of teenagers were unemployed and looking for full-time work in May 1991. The actual number of teenagers looking for full-time work decreased between 1980 and 1990, despite an increase in teenage population.

However, over a longer time period the proportion of the teenage population unemployed and looking for full-time work has increased, despite increasing educational participation. The figure of 10 per cent for most of this decade compares with a rate of about 2 per cent in the mid 1960s.

The DEET study, *Australia's Workforce in the Year 2001* makes the point that unemployment problems among teenagers are explained, in part, by the process of transition from education to work. High job turnover rates and high levels of shorter term unemployment partly reflect teenagers' testing of job opportunities as they settle on a career choice. While this interpretation does not address the longer-term evidence for rising teenage unemployment, it is an accurate observation about teenage entry into the more difficult labour market of the last decade and a half.

Within the teenage cohort there are significant numbers of people who remain 'at risk', including teenagers with poor early school achievement, some from poor socioeconomic backgrounds, some teenagers from non-English speaking backgrounds, Aboriginal young people, and some of those living in rural and isolated areas. The 'at risk' group includes about 2 per cent of 15 to 19-year-olds who are unemployed for longer than six months. Estimates of the total size of the 'at risk' group vary between about 6 per cent and 14 per cent of the 15 to 19-year-old cohort, depending on how the group is defined. This matter is discussed in greater detail in Chapter 7.

### ***Falling Full-time Employment***

There has been a long-term decline in the full-time youth labour market since the mid-1960s. As a proportion of the 15–19-year-old population, the number of teenagers in full-time employment fell from 58 per cent in August 1966 to 28 per cent in August 1990. As at May 1991 only three in ten teenagers were in the full-time labour force (both employed and unemployed). This change in the labour force status of teenagers mostly reflects the significant increase in educational participation among this age group, as well as structural changes in the labour market. The decline has been more significant for females than males, and has affected younger teenagers more than the older teenagers. Male teenagers have stronger representation in full time employment and females are more likely to engage in part-time work.

There has been a remarkable acceleration in the decline of teenage full-time employment during the current recession. In a paper to the Youth Affairs Congress in July 1991, Richard Sweet observed that:

*Among 15–19-year-olds the rate of full-time job loss has been accelerating with each successive recession since the mid-1970s. In the 1974–75 recession it was around 5 per cent over twelve months, rising to around 13 per cent in the 1982–83 recession, and doubling to 26 per cent on this occasion (Sweet 1991 b: p. 10).*

This trend of declining full-time employment is expected to continue, but may affect males and females through different mechanisms. In a report prepared for this Review, John Freeland points out that teenage male full-time employment is concentrated in industry and occupation areas experiencing long-term structural decline in total employment share, (although this in itself may not reduce youth employment opportunities if, for example, they are protected through apprenticeship arrangements). Female teenage full-time employment is concentrated in industries and occupations undergoing long-term growth, although their share of full-time employment is declining in these industries.

### ***Rising Part-time Employment***

The fall in full-time employment has occurred in parallel with a significant rise in part-time teenage employment over the past two decades. In May 1991, 49 per cent of teenage jobs were part-time. As a proportion of the total teenage population those in part-time jobs have increased from 3.5 per cent in August 1966 to 20 per cent in August 1990. This change is closely associated with the strong increases in educational participation.

Three-quarters of teenage part-time jobs are held by full-time students, most of whom are school students. Females hold a larger proportion of these part-time jobs than males, and younger teenagers are also more strongly concentrated in part-time jobs than older teenagers. Sweet makes the point that, on international comparisons, this high level of part-time employment by school students is unusual and that student participation in the labour market appears to be greatest in countries where participation in vocational preparation programs is relatively low (1991 a).

It is apparent that part-time employment has become increasingly important for teenagers making the transition to adulthood. However, in the absence of participation in education or training, part-time work is not a substitute for access to full-time employment. Most teenage part-time employment is casual, averaging fewer than ten hours per week, and it is not commonly associated with any long-term career prospects except perhaps in the wholesale/retail sector where part-time positions are a recruiting ground for full-time work. Part-time employment may not offer a reliable path to adult independence for those who have left the education and training system and who have been unable to secure full-time employment.

### ***Industry and Occupational Distribution***

The distribution of teenage employment by industry is shown in Table 2.4. The wholesale and retail trade sector stands out as the largest single employer of school leavers—with some 46 per cent of teenage jobs. In a sense, it is a teenage industry, having a much higher concentration of this age cohort's employment than of the total working population. The proportion of young people employed in the industry has also grown over the last ten years by about 10 per cent. For teenagers, part-time employment in the industry is much more significant than full-time employment—providing some 64 per cent of all teenage part-time jobs. Even so, the industry is still the most significant provider of full-time employment for teenagers, covering some 31.7 per cent of all full-time teenage jobs.

Manufacturing is the next major industry employer for teenagers (with 17.2 per cent of full-time jobs and 4 per cent of part-time), followed by the finance industry (12.5 per cent full-time and 3.7 per cent part-time). In terms of part-time employment, the recreation industry is also a significant employer of teenagers (with 16.2 per cent of part-time jobs and 7.5 per cent of full-time).

The major occupations for teenagers in 1990 were: sales workers, labourers, tradespersons and clerks (see Table 2.5). As a proportion of total employment in each of these occupational sectors, teenagers occupied 21.8 per cent of the sales workers jobs, 13.0 per cent of labouring positions, 11.5 per cent of tradespersons and 7.4 per cent of clerks. (*Australia's Workforce in the Year 2001*).

**Table 2.4 February 1991, Employment by Industry—  
15-19-year-olds (proportion)**

	Males			Females			Persons		
	Full	Part	Total	Full	Part	Total	Full	Part	Total
Agriculture	7.4	8.7	7.9	2.5	2.5	2.5	5.5	5.2	5.3
Mining	1.7	0.0	1.1	0.6	0.0	0.3	1.2	0.0	0.7
Manufacturing	22.2	4.3	15.7	9.6	3.7	6.5	17.2	4.0	11.3
Electricity	1.0	0.0	0.6	0.4	0.0	0.2	0.7	0.0	0.4
Construction	16.2	2.4	11.2	1.3	0.6	0.9	10.2	1.4	6.3
Wholesale/Retail	30.1	56.0	39.5	34.1	70.0	53.1	31.7	64.0	45.9
Transport	2.7	1.3	2.2	2.9	0.5	1.6	2.8	0.9	1.9
Communication	0.9	0.0	0.6	0.5	0.1	0.3	0.7	0.1	0.4
Finance	6.3	5.2	5.9	21.6	2.6	11.6	12.5	3.7	8.6
Public Admin	2.0	0.6	1.5	2.9	0.5	1.7	2.3	0.6	1.6
Comm Services	4.2	2.9	3.7	12.8	5.0	8.7	7.6	4.1	6.1
Recreation	5.4	18.6	10.2	10.8	14.4	12.7	7.5	16.2	11.4

Source: *DEET 1991*, unpublished

**Table 2.5 Employed 15-19-year-olds by occupation, May 1990  
(full- and part-time)**

Occupation	'000s	per cent
Managers	4.3	0.6
Professionals	10.6	1.5
Para-professionals	12.7	1.8
Tradespersons	140.8	20.0
Clerks	100.3	14.2
Sales Workers	258.8	36.7
Machine Operators	15.7	2.2
Labourers	161.7	22.9
Total	704.4	100.0

Source: *Workforce 2001*, ABS Labour Force, 6203.0

The labour market for teenagers is segmented by gender along similar lines to the adult labour market. Nearly half of all female school leavers enter sales occupations, and about another quarter enter clerical jobs. Three-quarters of all male school leavers enter either trade-related occupations or become labourers/plant operators.

Similar proportions of males and females are employed full-time in the wholesale and retail industry (30 per cent of full-time employment for males and 34 per cent for females). The next highest industry employer for teenage males is manufacturing (22 per cent of male teenage full-time employment), whereas for female teenagers it is finance (22 per cent of female full-time jobs).

### ***Apprenticeships and Traineeships***

The number of apprenticeships and traineeships rose to record levels in 1990. Over the long term, these training places increased from 7.2 per cent to 9.6 per cent of the youth population between 1966 and 1990, but places have not risen as a percentage of the teenage population since 1980. Such training opportunities now represent one-third of all full-time job opportunities for youth, compared to just over 10 per cent in 1966 (*DEET 1991*, p. 8), but this principally reflects the decline in other kinds of full-time employment and the increase in full-time educational participation. Freeland argues, in support of the apprenticeship system, that such training arrangements provide a degree of protection for youth employment because of the award regulation of such employment in occupational areas using apprenticeships. Evidence suggests that even after declining during economic downturns, apprenticeship numbers soon build up again. This conclusion is supported by DEET figures which indicate that in the last twenty-five years, apprenticeship opportunities have increased by 70 per cent while the full-time youth labour market overall has declined by more than a third (*DEET 1991*, p. 10).

There is clear evidence that the recession has had a negative effect on the provision of apprenticeship training positions in 1991. According to unpublished DEET figures, the intake between January and May 1991 is 31 per cent down on the same period for the preceding year. This figure suggests a significant decline in apprenticeship opportunities in the current economic context. In response to these changes, Commonwealth and State Government have expanded support measures to counter the effect of labour market downturn on the training system. These measures include assistance to preserve current entry-level training opportunities, the creation of new training places, improved access to training for unemployed people, and the provision of alternative full-time training opportunities to out-of-work apprentices.

Apprenticeships remain overwhelmingly a male form of job training. Fewer than 10 per cent of apprentices are female and most of these are hairdressers (*DEET 1991*, p. 11). On the other hand, traineeships are predominantly a female form of training, with around three-quarters of ATS positions occupied by young women. It appears that entry-level training arrangements are in fact even more segmented on the basis of gender than the labour market as a whole.

Freeland notes that young males have benefited from the resilience of apprenticeships in the face of severe economic downturns, and the strong recovery of indentures when the economy picks up. To some extent, the apprenticeship system has acted as a protected labour market reserve for young males making the transition from school to employment, although most apprenticeship positions are established for reasons other than award prescription. The development of the Australian Traineeship System since 1975 has not provided an equivalent level of protection for the non-trade occupations, because unlike apprenticeships, possession of an ATS certificate is not a pre-condition for employment in ATS occupations.

## 2.5 Youth Labour Market Prospects to Year 2001

The *Workforce 2001* report has attempted to project likely labour market outcomes for teenagers over the next decade. It notes that there will be a decline in the total number of young people in the population up to the middle of the 1990s, and it is likely that, even without major policy changes, participation in education and training will continue to increase. This implies that there will be fewer teenagers competing for the available jobs, potentially easing pressure on teenage unemployment.

Prospects for growth in those occupations in which teenagers are most heavily concentrated (salespersons, labourers, tradespersons and clerks) are generally good. The outlook for employment amongst salespersons (the major category) and tradespersons is well above average, while the outlook for clerks is slightly below average. Prospects for labourers are well below average.

However, the report notes that by 2001 when teenage numbers have returned to their current levels, these occupational trends will not have substantially reduced the number of teenagers having difficulty with the transition from school to work. On one 'conservative' estimate up to 70 000 teenagers could remain 'at risk'. The *Workforce 2001* report also suggests that, without policy changes, there will still be a significant number of young people in employment who are not in any formal training arrangement.

The Committee also sought advice from representatives of three industry sectors which historically have been major providers of youth employment: retail, banking and the public service. In each case, the industry representatives identified factors which will tend to suppress youth employment opportunities.

For example, in both retail and banking there is a move toward recruitment of older people rather than teenagers. At the same time the proportion of lower skill positions is being reduced. As management structures flatten and more responsibility is devolved, businesses are looking for employees with maturity for first level supervision.

Partly as a result of restructuring and the introduction of new information technology, the public sector is no longer a major recruiter of young people, and is reducing youth intakes even further. In 1989 the proportion of permanent officers aged under 20 in the Commonwealth public service was 2.8 per cent compared to 5.6 per cent in 1985. Annual appointments of those under 20 declined from 19.4 per cent in 1985 to 12.2 per cent in 1989.

To some degree this change reflects the fact that young people are choosing not to enter the public service, particularly in base-grade positions, and are resigning in greater numbers after gaining public service positions. However, constraints on public service growth have tended to diminish the level of base-grade recruitment, which is the major avenue for youth employment, at the same time as overall youth participation in the labour force has declined.



## Summary

There are a few key points which can be summarised from this brief review.

- Education and training participation has grown strongly over the last decade.
- In concert with this change there has been a significant decline in full-time employment for the teenage population.
- Teenage participation in education and training declines significantly after age 17.
- There is a substantial proportion of school leavers who do not continue with any form of further education after leaving school.
- A significant number of those who do not have full-time employment must be considered as 'at risk' in the transition from education to adult participation in the labour market.

## References

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## Chapter 3

### Targets and Measurements

#### 3.1 Introduction

The terms of reference for this review asked for consideration of 'the appropriate form and level of a new national target for participation in post-compulsory education and training, an appropriate basis of measurement of that target, and a recommended timetable and strategies for its achievement'.

The Committee formed an expert Working Party to provide technical advice on the types of measures and targets currently employed and to provide suggestions for new targets as appropriate.

The Committee and the Working Party worked simultaneously—the Committee concentrating on the suggested new targets and the Working Party on analysis of current targets and measurement systems.

The Working Party produced a comprehensive study that has not been included in this report but is available on request from the AEC Secretariat. Much of this chapter and the statistical material elsewhere in the report draws on the data and concepts developed by the Working Party.

#### 3.2 The Purpose and Value of Targets

The setting of broad targets has a potentially significant role to play in shaping, monitoring and evaluating education policy. Targets can provide a focus for policy development and for strengthening public understanding of and support for policy change. They can provide a framework for the initiation and assessment of cooperative action between the sectors and the States and Territories.

Most importantly, broad targets can provide a credible basis for strategic planning in education. They enable the allocation of resources against strategic objectives to be measured and evaluated, and provide a basis for judgments of the effectiveness and potential development of strategic action.

On the other hand, an over-emphasis on numerical targets could distort the directions of education policy if it limits policy development and evaluation to measurable components only. An overly simplistic use of targets could disguise what are in fact complex and sometimes competing policy objectives. The principal test of an effective target is its ability to act as a planning instrument, not just its application as a measurement.

The best known policy target for post-compulsory education and training has been the objective of 65 per cent retention to Year 12 by 1992.

The concept of a retention target was first proposed by the Commonwealth Schools Commission in its 1987 report *In the National Interest: Secondary Education and Youth Policy in Australia*. In that report, the Schools Commission put forward the following reasons for a target related to school retention:

- *there are good grounds for believing that the levels of education and training in a population are important factors in international competitiveness amongst developed economies. Recent OECD (Organisation for Economic Cooperation and Development) figures show that, in the early 1980s, Australia ranked fourteenth out of*

eighteen OECD countries in the population of 17-year-olds enrolled in either full- or part-time education which includes apprentices. The gap at that time was substantial between Australia, with only 59 per cent of 17-year-olds enrolled, and the top six OECD countries (Japan, West Germany, US, Netherlands, Austria and Switzerland), all of whom exceeded 80 per cent enrolled. For 19-year-olds, the comparison was not nearly as disadvantageous to Australia, indicating that sharp drops in enrolment in education occur in Australia at a much earlier age than in other developed economies;

- *the mainstream of employment in advanced economies requires a strong base of general education in the population. Completion of a full secondary education provides the foundation for multi-skilling and the social skills which contribute to decision making, productivity improvement and technological change. Conversely, the labour market for early school leavers has sharply contracted and this is likely to continue;*
- *the completion of a good general education makes an important contribution to personal development, provides lifelong benefits for the individual and is a foundation for further learning, recreation and participation in the arts and community life;*
- *early school leaving and the disadvantages which flow from it are not randomly distributed. They fall most heavily on families of low socioeconomic status. Gains in school retention are gains for equity;*
- *Australian democracy will be strengthened by a better educated population. The institutions, practices and conventions of a democracy need a generally well educated population for their preservation and development whereas intolerance, prejudice and irrationality thrive on ignorance.*

The target of 65 per cent Year 12 retention by 1992 has received widespread acceptance and has acted as a successful focus for policy development. Some States have already exceeded this target and, on current trends, most are likely to achieve it within the time-frame, although many sectors of the community, such as Aborigines, low socioeconomic groups and those in some rural and regional areas continue to lag well behind the average levels.

While the school retention target has been the best recognised, similar goals were also suggested in separate contexts for higher education and vocational training. The Commonwealth Government's Green and White Papers on Higher Education (1987 and 1988) discussed a possible increase in Australia's annual output of higher education graduates from the 1988 level of about 88 000 to about 125 000 by the turn of the century. The report of the Committee of Inquiry into Labour Market Programs (the *Kirby Report*, 1985) suggested a target of at least 75 000 traineeship places by the end of 1988.

The Issues Paper supporting the terms of reference for this current review recognised that at the post-compulsory level, education and training participation is spread across a range of different institutions. This draws attention to the limited value of targets established only for individual sectors. The Committee believes that any new national target should be capable of spanning all education and training sectors.

### 3.3 Possible Measures for a New National Target

There is a range of measures currently available which could be used to underpin a target for the participation and achievement of young people in education and training. These include:

- a. retention: the capacity of education and training systems to retain students/trainees to the final years of education or training programs;
- b. participation: the activity of young people in education and training programs for a particular period of time;
- c. pathways: the flow of students or trainees through the range of alternative programs from a point in time; and
- d. attainment: the achievement by young people of specified competency levels and/or credentials.

#### *Retention Rates*

The most frequently used measure of retention is the Year 12 apparent retention rate, which is the number of students in Year 12 as a proportion of the corresponding group enrolled in the first year of secondary education in the appropriate previous year. This measure is expressed by the following formula:

$$\text{Retention rate to Grade 12 for Year Y} = \frac{\text{No. of Grade 12 students calendar year Y}}{\text{No. of Grade i students in Year Y - n}} \times 100$$

when  $i = 7$  and  $n = 5$  for NSW, Vic., Tas. & ACT  
and  $i = 8$  and  $n = 4$  for QLD, SA, WA & NT

The measure that results from this formula is an apparent retention rate because the arithmetic simply relates Year 12 student numbers to the appropriate earlier year, and does not attempt to track the actual retention of individual students.

As with most derived and indicative statistics, apparent retention rate figures are subject to a number of factors and potential distortions. For example:

- **Migration:** Both overseas and interstate migration can significantly affect apparent retention rate figures. For example it is quite possible to have retention rates over 100 per cent when migration has added to the number of Year 12 students.
- **School/TAFE Provision:** Variations between the States and Territories in the provision of TAFE courses for post-compulsory age students can significantly affect retention rate values. Those States that historically have substantial TAFE enrolments among senior school-aged students, such as NSW and Tasmania, tend to show lower values in apparent retention data, which relate only to schools.
- **Transfer Between School Sectors:** The movement of students between government, Catholic and other non-government school systems has a significant influence on apparent retention rate values.

- **Grade Repetition:** Students who have repeated a school grade are 'double counted' in the apparent retention rate formula.
- **School Starting Ages:** Differences in the school starting ages in the different States and Territories affect attendance patterns and therefore apparent retention rates.

Other factors affecting apparent retention rate data include changes in the participation of mature-aged and re-entering students and a significant increase in recent years in fee-paying overseas students. State and Territory systems are also introducing more flexible opportunities for senior secondary participation, including part-time enrolments.

Despite these problems, apparent school retention rate statistics have widespread appeal and usage as an indicator of changes in the holding power of schools and school systems. The Commonwealth Government's widely promoted target of 65 per cent Year 12 retention, established in the mid-1980s, when national apparent retention rates were about 45 per cent, has been a popular and, as shown in Figure 3.1, an eminently achievable policy target.

As a basis for public policy, however, the apparent school retention rate is a poor statistic. It certainly cannot be used confidently as a performance target, as the distorting effects outlined above make it difficult to validly compare trends over time. It also does not provide reliable comparison of performance between the States and Territories.

In short, the Committee believes that retention rates cannot be considered as a basis for policy targets in education and training at the national level.

### ***Participation***

Measuring the participation of a particular age group in education and or training has also been used to inform policy development. A common approach has been to derive an education or training participation rate, as the proportion of the population of a particular age involved in education or training. That is:

$$\text{Participation Rate} = \frac{\text{No. of students/trainees aged X in calendar year Y}}{\text{No. of persons in population aged X in calendar year Y}} \times 100$$

Data for the calculation of participation rates across sectors can be drawn from ABS surveys. Data on the numbers of students participating in schooling and in higher education derived from these surveys are generally consistent with administrative data collected by school and higher education authorities.

There is no valid comparison, however, between the TAFE participation data provided by ABS surveys and TAFE enrolment data collected by TAFE authorities. This is a major presentational problem, although the differences are explainable when TAFE enrolment practices over an academic year are taken into account. TAFE authorities have a continuous admission period throughout the year whereas the surveys measure participation at a single point in time. Most TAFE enrolment procedures are able to determine accurately the number of different individual students who are 'active' within the system in any particular time period. The ABS surveys, on the other hand, relate to current attendance during the survey week, usually in the middle of May. As with all sample surveys, the results are also subject to sampling errors.

# APPARENT YEAR 12 SCHOOL RETENTION RATES, ALL SCHOOLS, AUSTRALIA

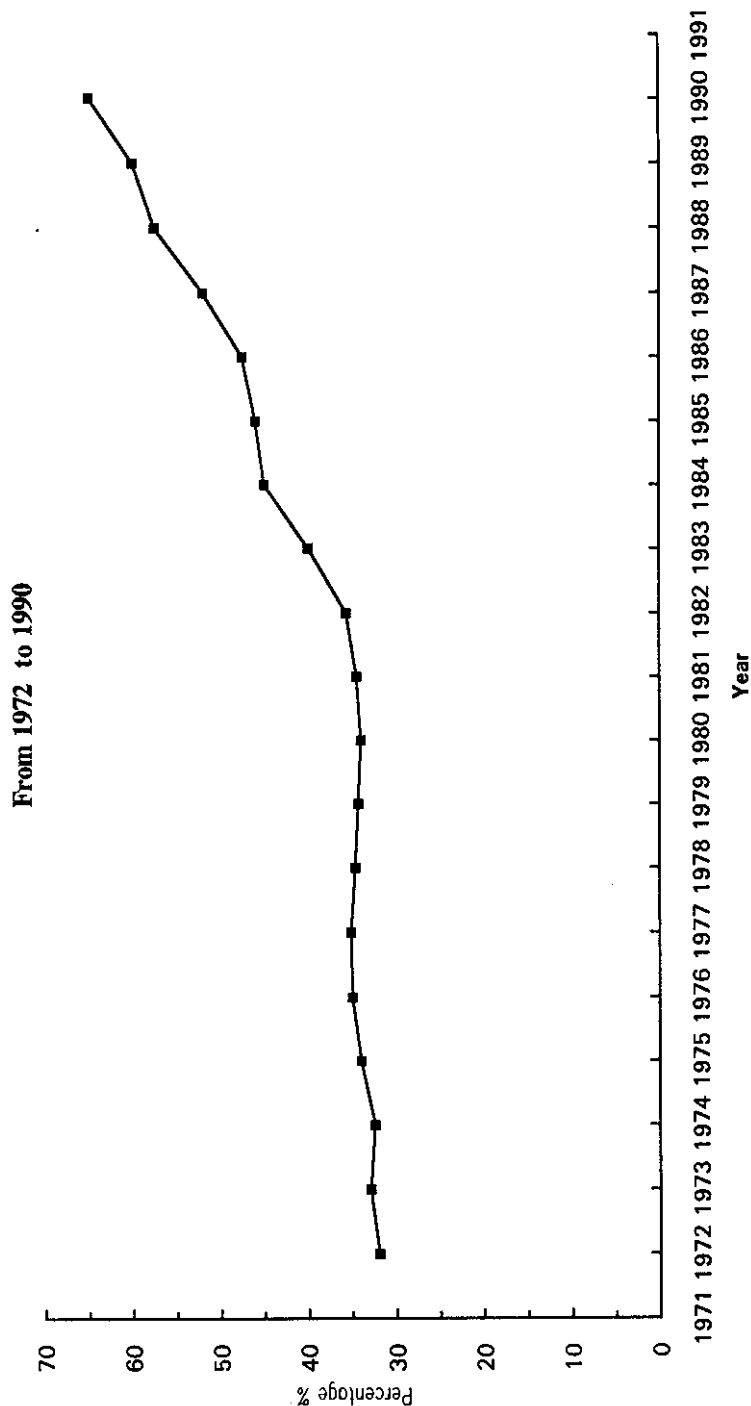


Figure 3.1

The alternative to using ABS survey data is to use administrative data. While this would enable a whole year approach to be used, there is some possibility of duplication between the school, TAFE and higher education sectors and there are no current administrative sources for persons in other forms of training. The problem of duplication could be addressed through changes to the TAFE student statistics systems. The problem of data sources for other training providers could, in principle, be improved with better methods for coding the types of institutions in ABS surveys, or by a direct collection of statistics from private providers.

Measuring the participation of a particular age group in education or training, however, does not in itself take into account the numbers of young people that may have already participated and have achieved particular education or training outcomes. Currently available participation data for schools, TAFE and higher education also underestimate the participation of young people in all forms of education and training. To get a complete picture, teenagers studying part-time, those at private educational institutions such as business colleges, and those taking training provided by employers would have to be added. An ABS survey of training indicates that more than 20 per cent of employed teenagers attend structured in-house training, although the length and substance of that training were not measured.

A further difficulty with participation rates is the invalidity of interstate comparisons. This arises from the different age patterns of school enrolments in the States and Territories. Thus, the higher school participation rates of 15-19-year-olds in New South Wales and Victoria, for example, is significantly affected by the older age groups at each grade in those States than in, say, South Australia and Queensland.

In addition, when broad age ranges (for example, 15-19-year-olds) are used, participation rates may be greatly affected by changing demographic profiles within the range.

In general, then, the Committee does not support the use of participation measures by themselves for the setting of national targets for education and training.

### ***Pathways and Flows***

It is also possible to measure the patterns in which people pursue education and the flows between various education and training activities. The Australian Longitudinal Study (ALS) illustrates what can be done. The survey enables the cohort of persons who were in Year 10 in 1984 to be tracked through the various ways of achieving twelve years of education/training. The sort of information available from the ALS was demonstrated in Chapter 2.

The ALS data enable us to trace pathways at the national level. The sample size, however, is not really sufficient to look at interstate differences. This can be partly remedied with ABS Transition from Education data, although even here the sample is only large enough to provide reasonable estimates for NSW and Victoria.

In short, data on pathways and flows are best regarded as descriptive of the ways in which people participate and are not useful as a basis for national policy targets.



## ***Attainment***

As noted above, a major drawback of measures relating to participation in education and training is that they do not assist in measuring educational outcomes. For example, any given educational participation rate for a particular age group contains no information about whether a high or low proportion of that age group has achieved a satisfactory level of schooling.

An alternative approach would be to focus on attainment levels, that is on the proportion of a cohort that has achieved a given level of educational attainment. The actual cohorts and educational levels to be used would depend on the area of interest. For example, an interest in the immediate post-compulsory years would suggest a focus on the attainment of, say, 18 or 19-year-olds. However, if there is interest in a wider range of education and training, the focus might be on 24 or 25-year-olds. Table 3.1 shows levels of attainment for 19 and 24-year-olds to put this in perspective.

A major difficulty with an attainment measure is the handling of Year 12 completion. Whereas most tertiary qualifications indicate that a person has successfully completed a course, Year 12 completion is a rather ambiguous level of attainment. In many cases, it means that an individual has attended Year 12, but does not necessarily indicate that they have achieved some prescribed level of competence. Thus, inevitably, measures based on Year 12 completion are really attendance rather than achievement measures. A similar problem exists in the treatment of incomplete periods of study.

Another form of attainment which could be included in a national target is the achievement of vocational competences, expressed in terms of the Australian Standards Framework developed by the National Training Board.

At present, NTB levels are not widely publicly understood and recognised, nor are they clearly aligned with currently awarded credentials. In the longer term however, targets based on competency levels will become statistically feasible, as long as credentialing systems allow a clear correspondence between credentials and the Australian Standards Framework.

### **3.4 Setting a New National Target**

The Committee believes that in order to be effective as a policy and planning instrument, any new national target must involve elements of both attainment and participation. This suggests that a complementary set of targets would be preferable to a single simplistic measure. The set of targets should include both quantitative and qualitative goals and should relate to the range of education and training taken at the post-compulsory level. Such a set of targets would therefore need to encompass schools, higher education, TAFE and other training.

After consideration of current trends, the extent of qualifications in the labour force and the approaches being adopted by our overseas competitors, the Committee agreed to recommend that a set of targets should be adopted in Australia incorporating key qualitative, as well as quantitative objectives.

#### **The Committee recommends that:**

**Australia as a nation should be committed to providing for all of its young people a program of education/training which prepares them for life as individuals, citizens and workers now, through the current decade and into**

Table 3.1 Educational Attainment, May 1990

	Age (years)			
	19		24	
	Number ('000)	%	Number ('000)	%
<i>With post-school qualifications</i>				
Degree	46	16	117.5	45.9
Trade qualifications, certificate or diploma, other	0.4*	0.1*	26.3	10.3
	45.6	15.9	91.2	35.6
<i>Without post-school qualifications</i>				
Attended highest level of secondary school available	237.5	83	138.7	54.1
Did not attend highest level of secondary school available	130.8	45.7	43.5	17
Still at school	106.5	37.2	94	36.7
	3.1*	1.1*	0.0*	0.0*
<b>TOTAL</b>	<b>286</b>	<b>100</b>	<b>256.2</b>	<b>100</b>

\* Since this estimate has a relative standard error of greater than 25 %, care should be exercised when using it.

Source: ABS unpublished data

the coming century.

In recognition of Australia's need for a more highly skilled work force which is able to operate more flexibly and with greater innovation at all levels, a framework of nationally agreed essential competencies and standards should be established and incorporated appropriately in all education and training programs for young people.

Nationally agreed standards in the employment-related key competencies should be progressively established with an expectation that all young people will achieve at least those standards by the completion of their initial program of post-compulsory education/training.

To raise the base skill level of those who currently enter the work force without any appropriate form of education/training, a minimum target should be established as follows: by 1995 all young people by the age of 18 should have attained sufficient vocational skills to achieve at least a base-level traineeship (or other vocational qualifications recognised by the NTB as Level 1) or participation in Year 12 or progress toward a higher level qualification.

In addition, by the year 2001 almost all people by the age of 20 should have attained at least a higher-level traineeship (or other vocational qualification recognised by the NTB as Level 2) or progress toward a higher level vocational qualification or a post-year 12 academic qualification.

In relation to higher levels of qualifications, by the year 2001 at least 50 per cent of people by the age of 22 should have attained at least a vocational certificate (or other vocational qualification recognised by the NTB as Level 3) or progress toward a vocational qualification above Level 3 or a diploma or degree.

In summary, the recommended targets are:

- essential competencies for all to nationally agreed standards;
- as a minimum, at least a Level 1 traineeship or participation in Year 12 for all 18-year-olds by 1995;
- at least a Level 2 traineeship or progress toward a higher level vocational or academic qualification for almost all 20-year-olds by 2001;
- at least a vocational certificate (Level 3) or progress toward a vocational qualification above Level 3 or a diploma or degree for at least 50 per cent of 22 year olds by 2001.

It is noted that in the United Kingdom similar targets have also been developed recently to encompass education, training and employment as follows:

- *all young people should be given an entitlement to structured training, work experience or education leading to a National Vocational Qualification (NVQ) level III or its academic equivalent (that is, 2 'A' levels and 5 GCSEs at A-C grades); The NVQ level III is equivalent to somewhere between Levels 3 and 4 in Australian Standards Framework*
- *by 1995, all employees should take part in company-driven training or developmental activities as the norm;*
- *by 1995, at least half of the employed work force should be aiming for updated or new qualifications within the NVQ framework, preferably in the context of individual action plans and with the support from employers; and*

- *by the year 2000, 50 per cent of the employed work force should be qualified to NVQ level III or its academic equivalent as a minimum.*

(Targets set in *Towards a Skill Revolution*, Confederation of British Industry (CBI), November 1989, and subsequently endorsed by the Secretary of State Employment, Norman Fowler)

As noted above, the set of targets recommended by the Committee will not be fully measurable until a more direct correspondence is established between credentials and competency levels. Therefore, the Committee proposes that a more immediately measurable summary target should also be adopted, consistent with the detailed set of targets and also based on a combination of attainment for those who have left the education system and participation for those still in the system.

A single attainment/attendance target must refer to the number or proportion of people at a particular age who have achieved certain qualifications or are still participating in a defined set of education and training activities. To assist in the choice of the target age, data from the Australian Longitudinal Survey can be used to show how a cohort reaches increasing levels of attainment as it grows older. Figure 3.2 shows these measures for the cohort of persons aged 16 in 1985.

From these data, it appears that there is a significant increase in the numbers attaining Year 12 between 17 and 18 years, but there is only a small increase between 18 and 19 years. Thus, for analysing attainment broadly equivalent to Year 12, the ages of 18 or 19 years are possible reference ages.

A reference age of 18 or 19 years is also quite robust between States. That is, regardless of the different schooling patterns across States, there is a similar pattern of attainment in all States by the time young people have reached age 18 or 19. The most appropriate target reference age would appear to be 19 years, which would ensure that the large numbers of young people who have undergone senior secondary schooling would be taken into account, while still encompassing the post-school experiences of the remainder of the group.

A completion-participation rate is able to deliver a valid comparative perspective on patterns of education and training across all States, as well as at the national level, by setting a target age rather than being grade dependent. It also ensures that the monitoring of changing trends over time can be pursued in a consistent manner.

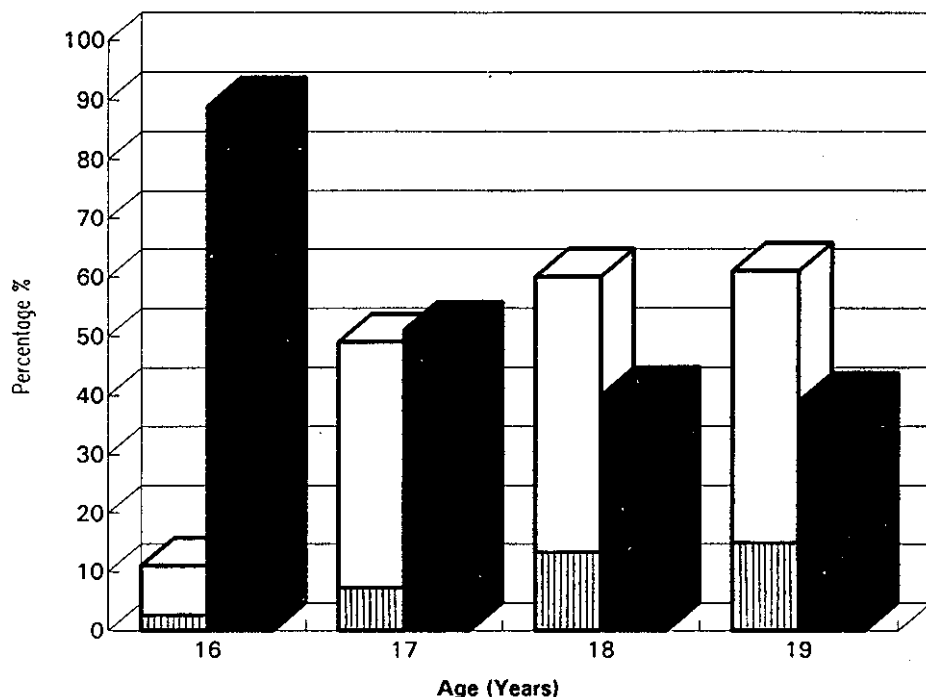
To estimate the number of 19-year-olds who are engaged in or who have completed Year 12 or some broadly equivalent training would need coverage of the following:

- secondary schooling;
- higher education degrees, diplomas and certificates;
- TAFE diplomas, certificates and transition courses, and apprenticeships and traineeships; and
- business college and other private training diplomas and certificates.

Although the precise definition may appear to be complex, it should be noted that for most practical concerns the only categories with substantial numbers are 'completed or current Year 12' and 'TAFE diploma/certificate'.

Table 3.2 shows that nearly 215 000 19-year-olds (73 per cent of all 19-year-olds) met the above criteria for completion or participation in education and training in May 1990.

# **Educational Attainment for 1985 Cohort of 16 Year Olds for All States**



## **Legend**

- Year 12  
 HSC/SC  
 Diploma or Certificate from a CAE or a Teacher College  
 Bachelor or Higher Degree
- Trade/Apprenticeship  
 Business College Certificate  
 Diploma/Certificate from a TAFE or TE
- Any Other Qualification

*Source: Australian Longitudinal Survey*

**Figure 3.2**

Table 3.2 Education and Training Completion and Participation  
Profile for 19 Year Olds, Australia, May 1990

SECTOR	NUMBER OF PERSONS	%
<b>School</b>		
Attending	7,229	2.5
Completed Y12, Not Attending Further Education	53,014	18
<b>TAFE</b>		
Attending	43,885	14.9
Attained Trade Qualification, Cert./Dip. Not Attending	34,110	11.6
<b>Higher Education</b>		
Attending	67,623	23
Attained Degree, Not Attending	----	----
<b>Other Training</b>		
Attending	6,800	2.3
Attained Other Qualification, Not Attending	1,876	0.6
<b>Sub Total</b>	<b>214,537</b>	<b>72.9</b>
Other 19 year olds	79,793	27.1
<b>TOTAL</b>	<b>294,330</b>	<b>100</b>

Source: ABS Transition from Education to Work Survey

Note: TAFE data, based on a May survey for 1990, understate full-year student numbers.

Table 3.3 Education and Training Completion Participation Rate, 19 Year Olds at 30 June

	Data Element	Source
Persons at school, doing Year 12 equivalent at TAFE or having completed Year 12	Completed Year 12 Credential At school	HSC or equivalent candidature records School enrolments data (National Schools Statistics Collection)
	Doing Year 12 or equivalent at TAFE	TAFE student database
	With completed nationally accredited TAFE course	TAFE student database
Persons having left school prior to completing Year 12 and not undertaking Year 12 equivalent at TAFE	With completed nationally accredited other training	No current sources. could possibly be measured by an amended ABS Labour Force Status and Education Attainment survey (2).
	Undertaking nationally accredited TAFE course	TAFE student database
	Undertaking Higher Education course	DEET Higher Education Collection
	Undertaking other training (1)	No current sources. could possibly be measured by an amended ABS Labour Force Status and Education Attainment survey (2).
Total Population Aged 19	Number of persons	ABS, Estimated Resident Population by Sex and Age, Catalogue No 3201.0

Note: (1) Other Training includes courses provided by private Business, Secretarial and Commercial Colleges

(2) ABS surveys to be used as a short term measure, prior to the development of an administrative census of trainee enrolments by private providers.

The report of the Statistics Working Group contains some detailed discussion of the construction and data sources for a completion/participation measure. A summary of the elements and sources of a combined completion/participation measure is set out in Table 3.3.

### ***Target Level and Timetable for Achievement***

Table 3.2 indicates that about 73 per cent of 19-year-olds in Australia have completed or are participating in approved education or training programs. The Committee has proposed a target for almost all people by the age of 20 to attain a Level 2 qualification or progress to a higher level. To achieve that will require effectively full completion/participation for 19-year-olds. The numerical completion/participation target must therefore be close to 100 per cent. Increasing the proportion of 19-year-olds completing or participating in education or training to 95 per cent by the year 2001 would involve something in the order of 200 000 additional 15–19-year-old students or trainees on current levels. This is considered to be a realistic and measurable policy objective, consistent with the overall goal of enabling almost all young people to participate in and satisfactorily complete at least some level of post-school education and training.

#### **The Committee recommends:**

**The adoption of a new national completion/participation target that, by the year 2001, 95 per cent of 19-year-olds should have completed Year 12, or an initial post-school qualification or be participating in formally recognised education or training.**

The concept of a completion/participation rate overcomes most of the technical problems and distortion associated with the other measures outlined in this report. Alternative measures could potentially distract future evaluation in this important policy area by unnecessary and unproductive debates about the validity of statistical trends and comparisons. Most importantly, this kind of measure relates closely to the reality of involvement by young people in education and training in Australia and supports the policy objectives inherent in the Committee's terms of reference.

### ***State and Territory Targets***

The national policy targets proposed by the Committee include sufficient flexibility in their application to allow adoption at State and Territory level. The different demographic, educational and institutional configurations and conditions in the various States and Territories preclude the setting of a specific national policy target relating to each educational sector. States and Territories would need, in the context of the broad national target, to establish sectoral and regional target objectives appropriate to their own circumstances and priorities.

#### **The Committee recommends that:**

**State and Territory education and training authorities formulate targets that give appropriate expression to the proposed national target, taking into account distinctive agency organisational features and regional needs and responsibilities.**



### ***Implications for Statistical Systems***

The Committee's recommendations carry a number of significant implications for the statistical systems of education and training authorities, and the collections of the Australian Bureau of Statistics.

**The Committee recommends that:**

**The National Training Board and other education and training agencies, in conjunction with the Australian Bureau of Statistics, develop credentialing standards that would enable statistical measures of competency levels to be constructed as soon as possible.**

**That relevant institutional statistical systems be developed to enable the construction of the proposed national measure of completion and participation.**

**That statistical systems be developed to enumerate enrolments and graduates of accredited vocational education and training courses conducted by private providers registered with the appropriate State, Territory and national training boards.**

**That the Australian Bureau of Statistics be asked to develop educational and transition surveys to enable more precise measurement of persons undertaking or completing accredited vocational education and training courses conducted by private providers.**

### **3.5 Balance Between Education and Training Sectors**

The targets proposed by the Committee set goals for significant increases in the participation and attainment levels in post-compulsory education and training. They imply a major expansion of post-school education and training, but do not set specific goals for participation or attainment in the individual sectors which comprise the post-compulsory education and training system. The Committee believes that there is a need for a more comprehensive debate to inform decisions about the balance that should be established between the education and training sectors, having regard both to student demand and to the overall composition of skills and qualifications in the society and the capacity of the labour market to utilise those skills effectively.

In relation to supply of skills we know that the proportion of people with higher levels of education and training has increased very rapidly in recent years, and will continue to do so as a result of the significant increases in educational participation. For example, maintaining the current level of opportunities for participation in higher education would lead to a 50 per cent increase in the number of persons with qualifications at degree level or higher between 1991 and 2001. To give a longer historical perspective, the projected total of 1.2 million degree graduates in the work force in 2001 under this scenario is more than nine times higher than the number in 1971 (129 000). In proportional terms, degree graduates in 2001 would represent 13 per cent of the work force, compared with 10 per cent in 1991 and only 2.5 per cent in 1971. There has also been an expansion in the proportion of the work force with technical qualifications below degree level. Total TAFE enrolments grew steadily throughout the 1980s, increasing by 38 per cent to a peak of 952 000 in 1988 before declining in 1989 and 1990. If resources were available to allow a return to the trend growth applying up to 1988, total enrolments would grow by a further 27 per cent to 1.33 million in 2001. In this scenario, the number of

persons with technical qualifications would grow by 27 per cent over the coming decade, increasing as a proportion of the work force from 31 per cent to 34 per cent. The target advocated in this Committee's report would imply even higher numbers.

In relation to the capacity of the labour market to use increased skill levels effectively, we are reliant on forecasts and judgments which are, at best, broadly indicative. The Committee does not believe that the provision of education and training should be determined solely by forecasts of labour market demand. This would ignore the intrinsic value of higher levels of education for the individual and society. It would also give a degree of authority to this type of forecast which is not justified, given the rapidity and unpredictable nature of technological and societal change. Nonetheless, it is still important to attempt to draw some broad judgments about the appropriateness of the skills and qualifications being developed through our education and training systems for Australia's future. Labour market forecasting can play a role in informing such judgments.

At an aggregated level, it appears that the rate of growth in post-school qualifications will exceed that predicted, solely on the basis of industry and occupation change. Australia's *Workforce in the Year 2001* study examined the impact of likely industry and occupation shifts on the demand for qualified employees. This analysis pointed to an upward shift in the overall skill requirement in the work force, but not to the same extent as the projected increase in post-school qualifications.

In the *Workforce 2001* analysis, just over half of the growth in the number of persons with degrees and two-thirds of the growth in technical qualifications could be explained by changes to the structure of the work force. This raises the question, especially in respect of degree graduates, of how much of the remaining growth in qualifications will contribute to increased productivity and how much will contribute to credentialism (whereby the same task is performed by a person with higher qualifications).

There is no straightforward way of answering this question, and the analysis does not provide any insight into the extent to which changes in technology and the organisation of the workplace will hasten the demand for a more qualified work force. The *Workforce 2001* report simply notes that:

*Jobs or occupations are not classifications of unchanging sets of tasks performed at constant levels of efficiency. They are affected by the people performing them and the nature of the job may change with an increase in the number of qualified persons. In this way training and education contribute to economic growth through increased productivity and flexibility of persons within an occupation.*

The foreseeable future is likely to be marked by the increasing use of computer-based technology in design, manufacturing and information systems, and by the restructuring of workplaces in ways which increase the level of responsibility and range of tasks for each employee. These types of changes will increase the demand for higher levels of skills and qualifications and will enable individuals to make maximum use of their skills.

In a major empirical study of American workplace skill requirements, Levin and Rumberger conclude (p. 19) that while the evidence does not confirm a radical change in the level of job skills (or in the requisite level of education to learn these skills, p. 38), it is likely that types of skills required will alter, as new technologies and forms of work organisation demand different types of

skills. Even for lower-level jobs there has been a significant shift away from menial and physical tasks to a burgeoning service sector where jobs 'require good communication skills, reasoning, numeracy...proper work values and attitudes'. In addition, 'upward mobility depends crucially on the ability to learn new skills...(p. 27)'. Levin and Rumberger also advance two further arguments for renewed attention to entry-level skills training—changes in work processes for customised production, and worker participation.

Given this direction of change, it is reasonable to anticipate that much if not all of the increase in qualifications, over that explained by structural factors, will contribute to a productive deepening of the skills base of the work force. If there is a risk of credentialism, it would appear more likely to exist for degree graduates than for those with technical qualifications, given the greater disparity between the number of degree graduates and the projected demand for qualifications at that level.

No less important are the implications of such skill analyses for the balance between education and training sectors. The Committee noted that there has been little public consideration of cross sectoral issues in Australia, and some of the problems of inconsistency and imbalance that have afflicted post-compulsory education and training reflect this omission. The matter was too substantial to be taken far in this review, but certain assumptions have had to be adopted for the analyses of resources in Chapter 9 and further work is identified there.

The Committee is also mindful that some 70 per cent of the work force in 2000 are now already beyond the years of post-compulsory education and training. That is, while the reforms this review advocates will benefit many young people each year, the upgrading of the Australian work force over the next decade cannot be based simply on improving the education and training of youth. Action to improve the vocational skills and qualifications of adults will be at least as important.

The Committee is confident that this review will assist that large task by identifying the key competencies that individuals attain, and raising the possibility of setting targets for achievement for adults.

**The Committee recommends that:**

**VEETAC should consider how the key competencies might be best incorporated into the vocational education and training of adults, and whether a national target in vocational skills and competencies among adults might be a useful stimulus to achieving a better skilled work force.**

**References**

Levin, H. & Rumberger, R., *Education, Work and Employment: Present Issues and Future Challenges in Developed Countries*, presented at the XXVth Anniversary Educational Planning, 1989.



## **Chapter 4**

# **Curriculum Principles and Key Competencies**

### **4.1 National Curriculum Principles**

The Committee was asked to identify a set of appropriate national curriculum principles to enable all young people, including those with special needs, to develop Key Competencies. The Committee approached the issue of curriculum principles broadly as those which should underpin curriculum for 15–19-year-olds in general across schools, TAFE and other agencies. To encompass this breadth, the Committee has defined 'curriculum principles' as incorporating not just curriculum design and development, but a wide range of related aspects such as standards assessment, educational pathways and learning contexts.

In approaching this task the Committee was very conscious that the principles have to be appropriate to a new context, the determining characteristic of which is the proposed national target for (almost) full participation in education and training for all young people up to the age of 19.

**The Committee recommends that:**

**AEC and MOVEET adopt the following national curriculum principles for post-compulsory education and training:**

- **A commitment to at least two years of post-compulsory education and training for all young people means curriculum and programs must cater for ability at all levels and of all kinds, diverse interests and different initial vocational and educational destinations.**
- **Curriculum must be appropriate and relevant to the full range of students so that all students can experience success and satisfaction in their learning and the talented should be challenged to extend themselves fully.**
- **The curriculum must be broad and balanced with an appropriate mix of general and vocational education and theoretical and applied studies. The appropriate mix will vary for different groups of students.**
- **School programs should be coherent and incorporate the Agreed National Goals for schools and the employment-related Key Competencies. TAFE/training programs should be coherent and broad enough to incorporate the employment-related Key Competencies.**
- **The curriculum must allow for a range of learning styles and, in particular, for experiential learning. In the schools sector this will require a stronger commitment to integrated and appropriately structured work experience.**
- **Increasingly, accredited learning should take place in the workplace as well as in education and training institutions.**
- **Curriculum must be adaptable to flexible learning contexts including non-institutional community-based contexts.**
- **Vocational education and training must reflect the needs of industry as well as meeting national standards and promoting a higher level of general education.**
- **Curriculum must be structured across all sectors so as to maximise**

students flexibility in choices of pathways, re-entry capacity and articulation and cross accreditation.

- Curriculum must be clear as to the expected outcomes in terms of knowledge, skills and attitudes.
- Expected outcomes must be explicitly structured into standards frameworks which, where relevant, are compatible across the school and TAFE/training sectors to allow for consistent and credible assessment and reporting on student achievement in Key Competencies.
- Progression through curriculum stages/levels must be based on achievement or competence.

Most of these curriculum principles will be readily acknowledged as appropriate across Australia and already underpin recent reforms in educational policy and practice. Certainly most school systems have, for some time, been grappling with the need to provide a post-compulsory curriculum appropriate to a much wider range of young people.

The most significant implications for schools and the TAFE/training sector arise from the principles that: curriculum must be broad and balanced with an appropriate mix of general and vocational education and theoretical and applied studies; and that school and TAFE programs should be coherent and broad enough to incorporate the Key Competencies.

The implications are not only a greater convergence of general and vocational education but a breakdown in the hard distinction between compulsory and post-compulsory education. The notion that the need for general education ends at age 15 or that vocational education/training is only available post school is not consistent with the themes developed in this report.

The curriculum principles require an acceleration of the process under way in most school systems to give additional depth to the post-compulsory curriculum to incorporate work-related competencies. This will be as much, if not more, about pedagogy than new courses. A large and important task is for teachers to uncover the work related aspects of the existing curriculum.

The principles will also require significant change in the TAFE/training sector. Generally speaking, vocational training for this cohort has focused on preparation for specific vocational outcomes and has been relatively less concerned with providing for general vocational education or the acquisition of generic employment-related competencies.

In recent times, TAFE systems have begun to refocus much of their course provision on more generic outcomes. In many cases, though, this has been in areas outside its mainstream provision.

## **4.2 Key Competencies: The Committee's Approach**

The Committee explicitly limited its task to identifying the Key Competency areas related to a young person's initial and lifelong employability. This is a large task but it is a significantly lesser one than defining the totality of desired outcomes of schooling and education for young people.

School education has a range of purposes: the development of young people as individuals, as citizens and as participants in the world of work (as workers or employers or entrepreneurs). The AEC's Agreed Goals for Australian Schools is a useful reminder of the community's broad expectations of its schools.

Although the employability related competencies identified in Section 4.4 are broad they cannot and should not be equated with the overall purposes of school education.

Nonetheless the Committee believes that there is a great deal of overlap between the requirements for an effective and satisfying life as an individual or as a citizen, and the requirements for a productive and satisfying life at work in today's world. The Committee found that once it had identified what it regarded as essential competencies for the world of work, it had also incorporated many of the attributes required for individual well-being and for citizenship.

This outcome was a tangible manifestation for the Committee of the broader tendency identified in Chapter 1 towards a high level of convergence between vocational and general education.

In the school sector there is increased awareness and acceptance of the need for strong links with the world of work—especially in the post-compulsory years. Most school teachers today are comfortable with the notion that one of the key purposes of schooling is the preparation of young people for the world of work.

Apart from the introduction of specific vocational courses into the curriculum, there is general agreement that schools must equip all young people with the general knowledge, broad skills and understandings required by the world of work. If these significantly overlap with other purposes of schooling, so much the better.

In the training sector there is increasing recognition that our well-being as a nation is significantly dependent upon a well-educated and highly skilled work force. The awareness that technological and economic restructuring will force most people to change their jobs, and even careers, a number of times throughout their working lives requires a different approach to training. The ability to continue learning and acquiring new or higher level skills will be fundamental. The emphasis in our training system has to be both on the acquisition of the specific skills for the job/trade and on flexibility. The latter requires a strong grounding in generic, transferable skills.

It is therefore imperative for vocational education and training, wherever delivered, to give greater priority than hitherto to the ongoing development, especially in young people, of generic or key competencies.

The Committee considered it important and urgent to go well beyond a simple listing of essential competencies, although getting the list right is a high priority. It is the Committee's view that the Key Competencies should not only be listed but should be given depth of meaning and content. The operational significance for schools and the training sector must also be made explicit.

The way to achieve this is to identify the competencies and the major strands or elements within each; develop each Competency Area into a standards framework or profile; explore ways of assessing and reporting levels of achievement; and establish standards or benchmarks.

This is a major and complex exercise. It is imperative that it be done professionally and properly.

While there is no work under way in the Australian context which directly parallels this, there are related projects in the school, training and adult education sectors which are very relevant. It is obviously sensible to link in with these and build upon them where possible. There is clearly no point in duplicating or cutting across major, relevant work in progress.

The Committee had a limited time frame which did not permit completion of either the careful, detailed work or the extensive consultation that must be part of any successful development and implementation of major change in the areas of curriculum, assessment and reporting.

For these reasons the Committee decided that it would limit its work in this area to the development of a concept and a supportive model. The verification and finalisation of the model should be placed in the hands of a follow-up expert group with the specific task of bringing together the relevant work already under way and of consulting more widely than was possible for this Committee. To allow continuity, at least two members of this Committee should participate in this next stage of the work.

The Committee believes that the work should be undertaken and completed urgently. The timetable should be the minimum necessary to ensure the work is done professionally. For this reason the Committee is recommending an implementation date for at least some aspects of the overall enterprise.

The Committee was interested to note that its attempt to identify the most important broad competencies that all young people should acquire in the post-compulsory years of education and training is mirrored in at least two overseas projects. In the USA, the Secretary of Labor in 1990 set up a Secretary's Commission on Achieving Necessary Skills (SCANS) to provide advice on 'the level of skills required to enter employment'. The Commission was asked to:

- define the skills needed for employment;
- propose acceptable levels of proficiency;
- suggest effective ways to measure proficiency; and
- develop a dissemination strategy for the nations schools, businesses and homes.

SCANS interim report: *America 2000: What Work Requires of Schools* was released in June 1991. Its approach, interim findings and recommendations are broadly consistent with the directions of this Review. Its final report is due in February 1992.

In the UK the increased focus on gaining a coherent approach to vocational education and better coordination and cooperation between the school and training sectors has led the NCVQ to revive its interest in identifying ways in which core skills can be identified and explicitly referenced across general and vocational courses in the post-compulsory years.

### **4.3 Definition Issues**

The Committee's terms of reference use the terminology 'key competencies'. The Committee has stayed with this terminology although it is aware that this may cause some initial definitional difficulties particularly in the school sector.

'Competence' has been an unstable concept which requires explicit definition. The concept has been given somewhat different meanings and connotations in the TAFE/training and school sectors.

In the school sector 'competence' usually denotes a fairly narrow concept of demonstrated capacity to do a specified task. It is sometimes used interchangeably with 'skill' and sometimes denotes a broad grouping of skills. Knowledge, understanding and attitudes are referred to quite distinctly from



the notion of 'competence' even though most would concede that, in a broad sense, competence must be underpinned by relevant knowledge and understanding.

With award restructuring and the move to competency-based training and assessment in the TAFE/training sector, the emphasis is on 'competence' rather than knowledge or understanding per se. Therefore a precise meaning for the term has assumed a new importance. The NTB has followed the UK National Council for Vocational Qualifications in putting forward a broad definition which not only incorporates the ability to perform specified tasks, but also the possession of knowledge and understanding, and the ability to transfer skills and knowledge to new situations.

The Committee has adopted a broad definition of 'competence' in line with that of the NTB.

The Committee is conscious of the need for conceptual clarity in its approach to this area. Some of the areas of competence identified below have a stronger knowledge content than others; some are more skill oriented; some are more readily assessable by objective methods than others; and some are more suited than others to be placed meaningfully into a standards framework. For this reason the Committee recommends a range of approaches which it considers appropriate to each of the areas.

The lack of common language, concepts and therefore understandings around curriculum issues has emerged as a major issue with the move to greater curriculum, accreditation and institutional linkages between the school and TAFE/training sectors.

It is particularly important for school teachers as well as curriculum designers and assessors to understand the new competency-based training approach in the post-school sector. It is therefore important that both sectors become familiar with a common definition of 'competence'. This will be likely to happen quickly if there is an explicit, common set of employment-related competencies built into the curriculum in both sectors.

The Committee considers there would be merit in the NTB taking action to gain a wider understanding of its approach to competencies and the Australian Standards Framework. This matter is discussed further in Chapter 5.

#### **4.4 Key Areas of Competence for Post-compulsory Education and Training**

The Committee initially drew on its own expertise to compile a list of key employment related competencies which it considered were essential for all young people in post-compulsory education or training, regardless of the ability or vocational/educational destination of the young person or whether they were in school or in a training environment.

This initial list was then tested against similar lists in the literature, submissions to the Committee and in consultation with experts in the school, training and adult literacy areas.

**The Committee recommends that :**

**The AEC and MOVEET endorse the following Key Areas of Competence as essential for all young people engaged in post-compulsory education and training.**

- **Language and Communication**
  - Speaking
  - Listening
  - Reading
  - Writing
  - Accessing and using Information
- **Mathematics**
  - Computation
  - Measurement
  - Understanding mathematical symbols
- **Scientific and Technological Understanding**
  - Understanding scientific and technological concepts
  - Understanding the impact of science and technology on society
  - Scientific and technological skills including computing skills
- **Cultural Understanding**
  - Understanding and knowledge of Australia's historical, geographical and political context
  - Understanding of major global issues — e.g. competing environmental, technological and social priorities
  - Understanding of the world of work, its importance and requirements.
- **Problem Solving**
  - Analysis
  - Critical thinking
  - Decision making
  - Creative thinking
  - Skill transfer to new contexts
- **Personal and Interpersonal**
  - Personal management and planning including career planning
  - Negotiating and team skills
  - Initiative and leadership
  - Adaptability to change
  - Self esteem
  - Ethics

**The Committee recommends that:**

**All post-compulsory education and training programs for the 15–19-age cohort should include, within their overall expected outcomes, appropriate levels of competence in the six Key Areas.**

The list above is most correctly described as a set of Key Areas of competence, not individual competencies. Nonetheless, for simplicity and consistency with the terminology in the terms of reference, they are referred to elsewhere in this report as the Key Competencies.

While the Committee has not included knowledge of a language other than English (LOTE) in its list of Key Competencies, it is of the view that the knowledge of a LOTE, especially one of growing strategic economic and political importance to us as a nation, is an important employment-related skill and should be given greater prominence in the school and post-school curriculum.

Australia can no longer afford its essentially monolingual approach to education, the world of work, trade or diplomacy. In the developing global

context ability to communicate with others in their own language is increasingly imperative.

Nationally there is a major effort to increase the study of languages other than English in all years of schooling. A number of States have mandated the study of a LOTE for one or more years.

The Committee did not include LOTE as a Key Competency because it was not convinced that it is as yet an essential employment-related skill for all young people. The view was put that it is quite possible to function in the Australian workplace without knowledge of a LOTE and that it is possible to function at present internationally in English which is predominantly the international language of business and diplomacy.

It may well be that there will be grounds to amend this view in the future, and it may be appropriate to establish a national target for the number of young people studying a LOTE.

### **The Committee recommends that:**

**The AEC and MOVEET keep the status of LOTE as an employment-related competence under review, with the possibility of setting an appropriate national target for LOTE competence.**

While the Committee is confident that it has identified the right areas of competence, they could be organised differently. There is also an interrelationship between the areas and the strands within them. There are, for example, areas of overlap between the literacy and numeracy/mathematical areas. Reading scientific and technological texts with ease and understanding requires mathematical competence such as the interpretation of graphs and tables. The reverse also applies as one has to be able to read to acquire effective mathematics competencies.

Problem solving, critical thinking, analysis and the other strands of high order thinking competencies are integral to effectiveness in all other areas. Notwithstanding this, the Committee has classified Problem Solving as a separate Key Competency because it considers the area of sufficient importance to be profiled and assessed separately. There is some debate as to whether this can be done effectively. There is a professional view that problem solving/thinking competencies are inextricably bound up with the context in which they are applied. The Committee understands the ACER is investigating ways of banding, assessing and reporting on high order thinking skills. Its Scholastic Aptitude Test which is used by the ACT for higher education selection purposes can provide guidance in this area. Queensland is also in the process of developing a Core Skills Test for input into a Student Portfolio at the end of Year 12. It is proposed that thinking will be one of the designated skill areas in this process.

On the basis of expert advice to date, the Committee considers there is merit in attempting to develop a separate Competence Profile describing a broad continuum of Problem Solving skills.

### ***Developing a Standards Framework for the Key Competencies***

The most difficult step in the process of making the competencies operational is the development of each of them into a usable profile within a consistent framework describing different levels of achievement against which progress can be assessed and reported.

A Profile identifies the knowledge, skills and understandings of a Competency Area in an ordered and sequential way. Each profile will have defined levels indicating what a young person should be able to do in that area of competence at those levels.

None of the Areas of Competence represents a single dimension. They will all be broken into coherent component strands. Each of these strands will be constructed into a Profile. At any given time students may have different levels of achievement across the strands within an area of competence. Students' achievement can be assessed and reported in each of the strands giving a comprehensive picture.

**Figure 4.1 Key Area of Competence—Profile**

Level	Strand 1	Strand 2	Strand 3
4			*
3	*		
2			
1		*	

\* Possible profile of individual student achievement across different strands of one Key Area of Competence.

Note: A more complete example developed by the Committee for illustrative purposes is included in Appendix 1.

Since the competencies are considered essential for all young people engaged in post-compulsory education or training, the framework has to be relevant to the full range of individual abilities and to a wide range of curriculum pathways and destinations.

There is great diversity in the content of the curriculum followed by young people in their post-compulsory years. This is so even within the school sector; it is far more so when the TAFE/training sector is included. The Competency Profiles therefore have to be broad and generic enough to encompass this diversity. The challenge is to achieve this without reducing the profile content to superficial generalities.

There is also a conceptual challenge in constructing a standards continuum to encompass high level achievement. It would be easier to restrict the exercise to defining only a minimum standard or benchmark in all the Key Competencies which the majority of young people would have attained by the end of compulsory schooling. The Committee however rejected this approach.

The specification of minimum standards is useful. It does set a goal for those students who are currently failing to achieve and allows overall progress to be monitored against a clear minimum benchmark. It does not however provide appropriate benchmarks for the majority of students achieving above the minimum standard. It does not provide any stimulus for these students to strive for higher achievement, and it may actually depress standards. If achievements are only measured against a minimum standard there is a danger that teachers and students will slip into a complacent approach. Once the minimum is achieved no further effort is required. The Committee has therefore decided to recommend that any minimum benchmarks be placed in the context of a full range of achievement levels against which all students achievements can be assessed and reported.

There may be a difference in the approach of the TAFE/training and schools

sectors in this respect. The TAFE/training sector, as part of its competency based assessment, will continue to specify a minimum level of competence. In the school sector it will be appropriate to specify average expected levels of achievement at various ages/grades with a clear statement that there will be significant variation above and below this.

The framework is to apply to both the school and training sectors. It therefore has to be understood by practitioners and be compatible with the general approaches in both sectors.

The Committee considered existing and projected standards frameworks in both sectors to see if it could use them as a base.

In the training sector the NTB has developed the Australian Standards Framework. The NTB has described the purpose of this framework as being to establish reference points so that standards properly relate to the range of competencies required in particular occupations and classifications on the one hand and to formal vocational educational qualifications on the other.

The framework provides for eight levels ranging from that required by 'a competent operative or service sector worker' to 'a competent senior professional or manager'.

The Australian Standards Framework was released in January 1991. It is yet to become sufficiently known across industry. It is likely, and desirable, that it will gain a high degree of national acceptance fairly quickly. The Committee has been advised that on the basis of the intentions of industrial parties, the NTB expects significant progress in the implementation of a national-based training system around the Australian Standards Framework by 1993.

In the schools sector there is as yet no comparable, explicit articulation of a national standards framework. There is however significant, detailed work being undertaken under the auspices of the AEC, which can provide the content for a schools standards framework. The AEC has for some time had under way a national 'Mapping of the Curriculum' exercise. This has evolved into the development of National Subject Statements and Subject Profiles and now encompasses all the Learning Areas across the curriculum. These Subject Profiles are defined as 'an agreed description of student outcomes in relation to elements of a subject such that student progression can be recorded'. These profiles, which are well under way in English and Mathematics, are in fact establishing levels of achievement within each Learning Area for the schools sector. At the moment the draft profiles incorporate six levels of achievement. These six levels are considered adequate to encompass the range of achievement over the compulsory years of schooling.

As the Committee's focus is on employment-related competencies, it initially explored the possibility of using the NTB framework as a base and attempted to develop Key Competency profiles which were directly linked to the NTB levels.

This approach was abandoned for several reasons. There was unease with the formulation for Level 1 in the Australian Standards Framework which does not provide an appropriate description for this purpose. The Committee also found it difficult to link the generic NTB levels with the wide range of achievement that characterises Years 11-12 in school and the changing character of the world of work.

The most sensible approach is to establish the Key Competency standards framework directly in its own right and relate it to the profiles and

frameworks being developed for schools, TAFE and the NTB. The content of the Key Competencies Profiles will be developed collaboratively across the sectors.

While the great majority of the cohort is going to be in school, the approach to be adopted must be compatible with both schools and the TAFE/training sectors. There will have to be significant collaboration between the existing AEC Working Parties, the NTB and the Australian Committee for TAFE Curriculum (ACTC) project groups developing national training curriculum modules. They will have to identify elements from within relevant School Subject Profiles and national training curriculum modules to build up complete and compatible Competency Profiles. As the Key Competencies are explicitly employment related, there will be much within the school Subject Profiles which is not of direct relevance. There may also be the need to add new content or skill perspectives to the AEC approach.

For this to be effective, the AEC will have to ensure that the profiles are extensive enough to encompass the range of achievement up to Year 12. This would involve the addition of at least two further levels beyond those currently being developed for the school subject profiles. The Committee understands that the AEC Working Parties are currently exploring such an extension.

**The Committee recommends that:**

**The AEC extend the School Subject Profile levels to encompass the expected levels of achievement in Years 11 and 12.**

The Committee's preliminary work has indicated that, as would be expected, there will be a high degree of congruence between the elements in the Language and Mathematics Competence Profiles and the content of the AEC Subject Profiles in English and Mathematics. There is also a high degree of congruence between the content of the Language Competence Profile and the draft work under way on National TAFE Curriculum Communications modules.

There will be less direct congruence between the other Key Competence Profiles and the AEC Subject Profiles although there should be significant overlap. There will also be significant points of overlap with existing training curriculum modules—particularly in the Problem Solving area. These Competency Profiles will have to be developed as a collaborative effort by appropriate school and TAFE/training representatives.

Collaboration between school and training sector curriculum people on such a central and critical task is positive in itself. Both the process and the outcome should help to overcome the existing dichotomy in curriculum thinking and practice between the school and TAFE/training sectors.

There may need to be a different approach to those areas which are about attitudes and personal skills. It may not be appropriate to attempt to build up a national standards profile in all the strands within the Personal and Interpersonal area of Competence. The extent to which it can be developed into a national profile will become clearer when an effort is made to do so.

Once the standards framework with clear levels is established, the linkage into the training sector should be straightforward. Industry groups would indicate which Key Competency level is the appropriate one, at the same time as they are developing occupation-specific competency standards related to the NTB framework.

It will have to be tested in practice but it could be expected that there would be a reasonable correlation between NTB Levels 1-4 and the schools sector Levels 5-7. In the Language Area this could be extended to Levels 4-7 (presuming the AEC Working Parties extend their profiles to eight levels). Figure 4.2 provides a notional illustration of this relationship. The interrelationship between standards frameworks and education, training and employment pathways is examined further in Chapter 5.

At the moment the AEC Working Parties are working on a loose correlation between Subject Profile Levels and average achievement in age/grades. It must be a loose correlation because the range of ability and achievement across the school population is such that in any one age/grade there will be a spread of attainment across several Profile Levels. This spread will be more extensive at the higher levels and perhaps especially in the Mathematics Area.

In those school systems, such as NSW, where the move to outcome defined curriculum is complemented by an active encouragement for flexible progression through the curriculum at a pace appropriate to the students ability, it can be expected that the spread will become greater over time. This is consistent with the implications of competency based approach to training.

The implication is that some young people will be attaining the Competence Level in (say) Mathematics or Language designated by an industry as appropriate for the NTB Level 1 or 2 standard in that industry before they leave school and possibly before they complete the compulsory stage of schooling.

Others may not have attained the appropriate level at their point of exit from school in Year 10 or 12.

#### **The Committee recommends that:**

**AEC and MOVEET should establish an appropriate process to complete the work started by the Committee of the Review into Post-compulsory Education and Training in relation to Key Competencies. That process should:**

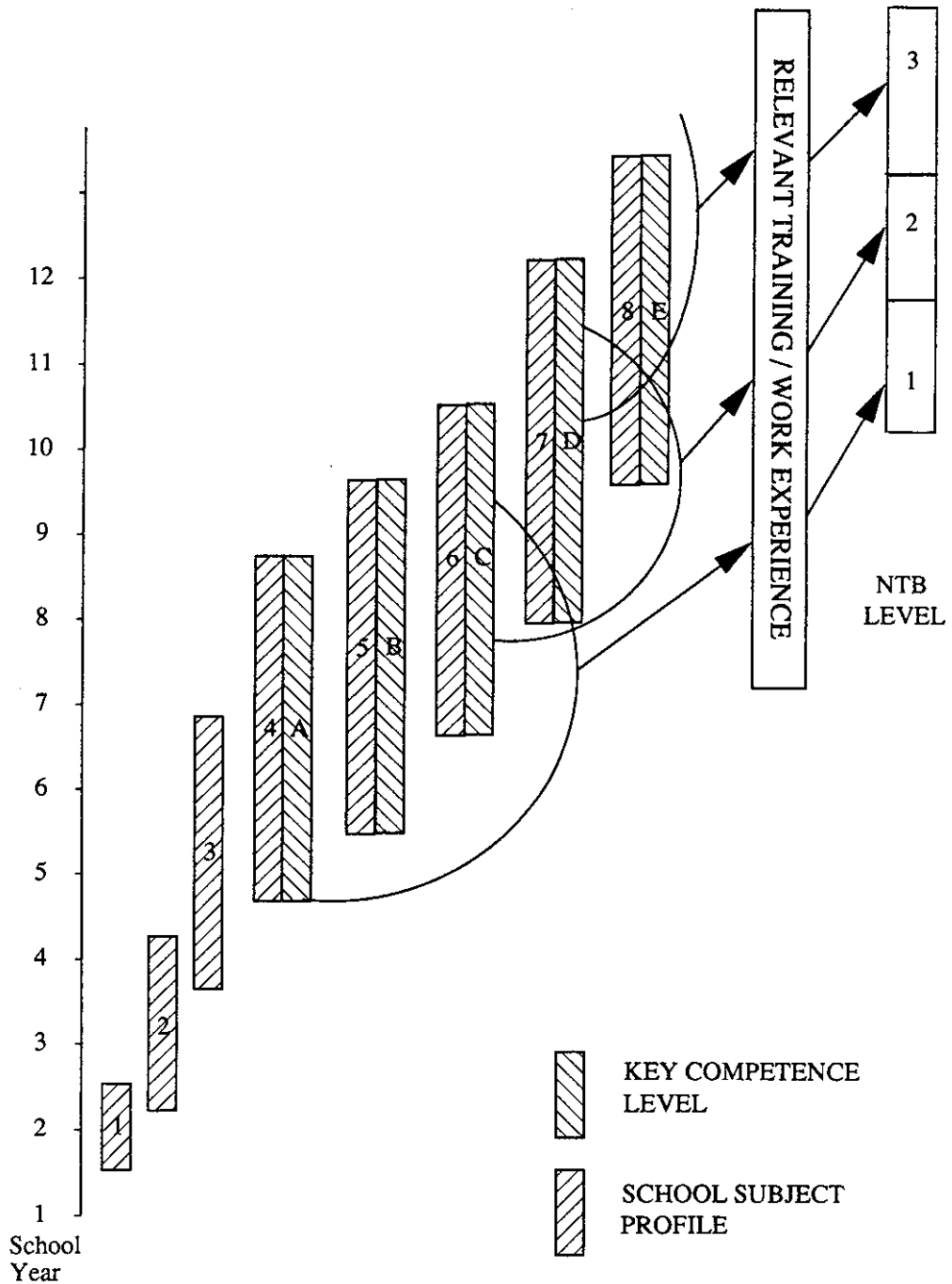
- **be capable of making substantial progress within a limited time frame;**
- **involve consultative arrangements which ensure that key groups including relevant State and national agencies accept the process and are involved in the formulation of outcomes;**
- **ensure that current AEC subject profiling and MOVEET work on national training curriculum and national skills standards are integrated appropriately with the development of the Key Competencies framework; and**
- **ensure appropriate continuity of membership with the Review Committee.**

**The Committee proposes that the process involve a steering committee with membership drawn from the groups represented on the Review Committee, plus the NTB and the higher education sector. The steering committee should maintain momentum and therefore include at least two members of the Review Committee and be supported by an expert group drawn from those currently working on the AEC Subject Profiles and the national training curriculum, the NTB, and the community and adult education area.**

**Terms of reference for the process should be along the following lines:**

- **Building on the work of the AEC Review of Post-compulsory Education and Training and taking into account relevant work on Subject Profiles**

**Figure 4.2 CROSS SECTORAL STANDARDS FRAMEWORK**



**Note:** The suggested relationships between the levels across the different frameworks should not be taken as precise. At this stage they are only notional.



**(AEC) and the national training curriculum (MOVEET) and national skills standards:**

- finalise the definition of employment related Key Competencies for post compulsory education and training
  - finalise employment related Competence Profiles for Language and Communication and Mathematics, encompassing a range of levels appropriate to Years 11–12 and all training leading to NTB Levels 1,2 and 3 standards
  - outline a schedule to implement nationally comparable assessment and national reporting on levels of attainment in Language and Communication and Mathematics in Year 10 and 12 in school and as appropriate in TAFE and private training agencies by 1993
  - develop appropriate draft Profiles for the remaining Key Competencies and specify a timetable and process for their completion
  - this timetable should allow for implementation by stages and should involve early completion of work on the Key Competencies of Science and Technological Understanding, Cultural Understanding and Problem Solving
  - the timetable should provide for overall completion of the process and implementation by 1995 in conducting this work, consult widely with relevant groups.
- Work should commence as soon as possible with a view to reporting progress and proposed work schedules to Ministers in six months.

#### **4.5 Assessment and Reporting**

School assessment issues stir more passion and professional debate than any other area of education in Australia. This is not surprising, as the way one approaches and reports achievement can profoundly influence curriculum, pedagogy and broader social justice outcomes.

The arguments are in part about the purpose of assessment, but the most heated debates—in the wider community and within the teaching profession—are about the type of assessment. At its extreme and most simplistic this debate is reduced to two falsely opposed options: should assessment be done in the classroom by the professional teacher who knows the student or by public—external testing. The sharp dichotomy between the views of many in the school teaching profession and sections of the wider community, particularly business and employers, on this has been strong for years. Arguments for greater external testing, including basic skills testing, put forward by business and other sectors of the community have been opposed by many teacher professionals and some union bodies. This has particularly been the case in relation to literacy. The community wants solutions including clear indicators of literacy competence and is genuinely baffled by the response that the area is too complex for standards profiles or accurate testing.

It is the Committee's view that the general climate of debate on this topic has significantly altered in the last year or two. The demand for general accountability in education—particularly for clear objective reporting on standards in key areas—has become irresistible. There are many indications that the teaching profession increasingly accepts and understands this. The result is an environment which has allowed major constructive work on new

approaches to assessment in a number of States.

The Committee's task of recommending appropriate assessment and reporting procedures for the Key Competencies has been facilitated by this more constructive environment and by the innovative work in some States.

As a general position the Committee strongly advocates assessment and explicit reporting of achievement in all the Key Competencies. For those Competencies which have been placed into a national standards framework, the assessment should be criterion referenced against the established national levels and should occur at appropriate stages in both the school and the TAFE/training sectors.

The Committee's reasons for this firm position are straightforward. The Key Competencies, and particularly Language and Mathematics, underpin all other achievement and yet there is little explicit information available on an individual's or the nation's attainment in any of them in the post-compulsory years. The existing Year 10 and 12 school credentials do not provide explicit data in these areas and it is not adequate to argue that school certificate results can be taken to imply certain levels of competence in, for example, the key strands of literacy.

The Committee believes the students themselves and the wider community want and should have such information. Employers and post-school education and training bodies need to know the level and kind of proficiency which school leavers have in the Key Competencies. Better and more precise information is needed to guide policy and planning for educational programs to lift achievement in the Key Competencies. At the broader level we urgently need accurate data to give us a national and international perspective on standards.

One positive outcome of such assessment and reporting will be a heightened sense of accountability. There is no doubt that education and training institutions will focus more sharply on teaching the Key Competencies if they are to be assessed and reported against nationally agreed levels/benchmarks. If the Competency Profiles are done properly this sharper focus will not undermine the broader curriculum and purposes of schooling. The Key Competencies are integral to general education. Emphasis on them will not undermine the broader school curriculum. Nor should assessment of these elements cut across ongoing assessment and reporting of the broader school curriculum.

The most important reason for assessment should be its contribution to good teaching and better educational outcomes. Its diagnostic function is critical, especially for those students experiencing difficulties. Good diagnostic assessment therefore has to be part of the education process from the beginning of schooling and throughout subsequent education and training. This is of overriding importance in the Language and Mathematics areas where failure to progress will inhibit all other learning. Assessment at the point of exit from education or training of course has a greater emphasis on summative reporting of achievement.

The Committee is conscious of the potential difficulties for disadvantaged groups that could be perceived to flow from its proposals for assessment and reporting on competence levels. Great care has to be taken to ensure that assessment tools are as unbiased as is technically possible. Educational experts in the field are far more experienced and successful in developing unbiased assessment tasks, including external testing, than hitherto.

Understanding the causes for poor performance is the most important dimension of remedial education, rather than assessment per se. This is not however an argument against assessing and, where appropriate, reporting the actual competence of individuals. It is important for the individual, their employers and teachers to know what they can or cannot actually do.

In many instances the additional reporting of achievement in the Key Competencies will be of benefit for young people who do not perform well in some school certificate subjects or who may emerge with a comparatively low mark in single dimension scales such as the Tertiary Entrance Rank used in NSW.

#### **4.6 Levels of Reporting**

The form of assessment will be a matter for individual States and Territories to decide but it must have public credibility and be nationally comparable. This is particularly important in relation to the Language area given the high degree of public debate and uncertainty about standards in literacy.

As indicated above, the Committee considers that, with the exception of some strands of the Personal and Interpersonal Competency area, all the areas of Key Competencies can be developed into a national standards framework with designated levels of achievement. They are all therefore open to assessment with explicit reporting for the individual student and on an aggregate basis at the national level. The Committee considers that this should be the goal.

The Committee recognises that the practical issues involved in developing these profiles will take longer in some areas than others.

There is far more relevant work already done or under way in the Language/literacy and Mathematics/numeracy areas than in any of the others. For this reason and because of the fundamental importance of these competencies, the Committee recommends they should be fully operational first.

The Committee's view is that there should be a staged implementation process which allows for Competency areas to be assessed and reported at different levels—institutional, state and national—pending the completion of appropriate national profiles in all areas. Eventually all areas in which national profiles can be developed should be reported nationally.

The Problem Solving Competency area does not have any direct AEC or TAFE/training curriculum or assessment work to build upon. There is of course a strong emphasis on developing problem-solving skills across the curriculum in both schools and TAFE. It should therefore be possible to construct a profile drawing from the AEC Subject Profiles across a number of subjects/learning areas (particularly English, Mathematics, and the Science and Technology areas) as well as from a number of areas in the TAFE curriculum. As noted above, the ACT Scholastic Aptitude Test and Queensland's planned Core Skills Test may also provide guidance. The Committee considers it feasible to schedule this area as the next for national reporting.

The Key Competencies which incorporate a strong knowledge base, Cultural Understanding and Scientific and Technological Understanding, pose specific challenges.

It is conceptually feasible to construct Profiles in these areas. The AEC working groups for these areas will be attempting to do so at least to the end of

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**Table 4.1 Key Areas of Competence Assessment and Reporting**

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<b>Competencies</b>	<b>Assessment/Reporting—1993</b>
<u>Language and Communication</u>	<u>National</u>
Speaking	
Listening	National reporting
Reading	against agreed
Writing	national benchmarks.
Accessing and using information	Objective, nationally
	accepted forms
	of assessment.
<u>Mathematics</u>	
Computation	
Measurement	
Understanding mathematical symbols	
<u>Scientific and Technological Understanding</u>	<u>State</u>
Scientific and technological concepts	Reporting at State Level
Impact of science and technology	against State benchmarks.
Scientific and technological skills	Objective forms of
	assessment accepted
	at State level. (Note: These
	competencies may
	progressively be reported
	on a National level as
	agreed national frameworks
	are developed.
<u>Cultural understanding</u>	
Australia's context	
Global issues	
World of work	
<u>Problem-solving</u>	
Analysis	
Critical thinking	
Decision making	
Skills transfer	
<u>Personal and Interpersonal</u>	<u>Institutional</u>
Personal management	
Negotiating, team skills	Reporting at institutional
Initiative, leadership	level on a personal basis
Adaptability to change	through individual
Self-esteem	reference or report. Judgments
Ethics	based on both objective and
Institutional	subjective assessment.

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compulsory schooling. Their exercise will be difficult because of the diversity of the curriculum particularly in the Social Sciences. This problem is accentuated in the post-compulsory years in school. Young people may currently opt to do very little study in either of these areas and those who do more can choose from a great range of courses.

In itself, this does not mean that the more specific enterprise of developing a national Profile around the employment related aspects of these two Competency areas is impossible.

It is certainly possible to do so up to the end of Year 10. Beyond that any Profile would have to be very generalised—even if it were done at a State system rather than National level.

The Committee believes that there should be a collaborative effort to develop appropriate national profiles and reporting arrangements in these areas, but believes that in the interim individual States/Territories should pursue their own assessment and reporting procedures.

Some strands of the Personal and Interpersonal area of Competence, for example self esteem, may not be appropriate for a national reporting framework. Other strands such as management, planning and negotiating and team skills could be developed into a Profile.

Pending more detailed work on this and the development of a national profile in appropriate strands, the Committee recommends that individual schools, TAFE Colleges or training agencies should develop appropriate approaches by which to assess an individual's competence level in each of the strands and to provide the student with an appropriate report.

In summary the Committee recommends the development of national profiles and national reporting by stages with the Language and Mathematics areas being fully operational first. The Committee considers it possible to progress this so that there can be national reporting on achievement in Year 10 and Year 12 and appropriate stages in relevant TAFE/training courses in both areas by 1993.

The proposed levels of assessment and reporting for each Key Competency in 1993 are set out in Table 4.1.

In the interim, Profiles in the other areas should be developed at an institutional or State level.

National standards and reporting should be in place for all the relevant Competencies by 1995.

**The Committee recommends that:**

**All States/Territories develop valid and publicly credible, nationally comparable ways of assessing young people's attainments in terms of the National Competence Profile Levels in the areas of:**

- **Language and Communication**
- **Mathematics**
- **Problem Solving**
- **Science and Technological Understanding**
- **Cultural Understanding**
- **Personal and Interpersonal**

**All States/Territories should provide young people with reports on their level**

of competence in these areas at Year 10 and 12 in schools and at appropriate points in the TAFE/training sector.

Reporting on students' achievement should initially range across institutional, state and national levels.

National reporting should be implemented for the Languages and Communication and Mathematics Competencies in 1993.

Problem Solving, Cultural Understanding and Science and Technological Understanding should initially be reported at institutional and State level with the aim of progression to the national level.

The Personal and Interpersonal area of Competence should initially be reported at an institutional level with the possibility of progression to the state and national level.

Appropriate assessment and reporting arrangements should be implemented for all Competence Areas by 1995.

#### 4.7 Type of Assessment

The Committee recognises that States/Territories will decide their own approaches to assessment. There are very different policies and practices across the country. Notwithstanding this the Committee believes that some form of external, objective test should form a part of the assessment process in each State/Territory in at least the Language and Communication, Mathematics, and Problem-Solving areas.

The Committee is aware that an external test approach to assessment of any of the Competencies is controversial. There are many educators who fully support credible, moderated assessment and reporting against agreed benchmarks but who oppose the use of a one-off test to do so. The major objections relate to the perceived inadequacy of the test format to assess the full range of Competence in areas as complex as Language and Problem Solving. For cost reasons, tests tend to concentrate on machine markable, multiple choice approaches which have obvious limitations.

There are other educational experts who argue that valid and reasonably comprehensive tests can be constructed in these areas.

In the Committee's view, external testing should be complemented by regular classroom-based assessment of competence against the profile levels. Ongoing assessment against established benchmarks, as is planned for example in South Australia with its attainment levels and in Victoria with its Literacy Profiles, is essential for effective diagnosis and assistance to students. It also allows assessment of competence across more of the strands/elements in the Key Competence areas than is possible in a one-off written test. A multi-strand assessment is important as young people may be at different levels in the various strands/elements of a Competence area.

An external test brings an element of objectivity to the assessment and reporting process which the Committee believes is important to the overall credibility of this enterprise.

Some business representations argued that there should be a national test in at least the Language and Mathematics areas. The Committee did not endorse this view. The Committee does however believe there should be a stand alone test available in at least these two Key Competencies which can be taken by any person wishing to have their competency level assessed and reported. Such a test could also be of use in the TAFE/training sector.

## **4.8 Language and Communication**

There can be no challenge to the designation of Language and Communication as a key area of Competence for all young people. Language and Communication skills, and more specifically, literacy skills, are of fundamental importance to all aspects of life including education, training and employment.

Perhaps because of its importance, it is an area surrounded by controversy relating to standards, definitions, teaching and learning. For this reason the Committee gave it particular attention.

The Committee is aware of the volume and complexity of the work recently completed, or under way, in the literacy area. The Committee does, however, believe that there are some major national issues in the literacy area which require urgent and concerted attention.

The Committee is also aware of the professional controversy around the trend to collapse the whole range of language and cognitive skills under the single term of 'literacy'. Literacy skills, in so far as they relate to reading and writing, are technically a subset of language skills. Speaking and listening are another subset. The Committee notes that sections of the education profession are opposed to this combination of hitherto distinct concepts, while others are comfortable with what they see as no more than a change in the contemporary usage of the word 'literacy'. The Committee does not wish to become involved in this debate and, for that reason, has used Language as the encompassing concept.

## **4.9 The Standards Debate**

The public controversy in the literacy areas turns around standards. There are persistent claims that literacy standards of school leavers are declining. These claims tend to provoke defensive reactions from school educators, particularly when they are based on anecdotal evidence.

Research data on this question is not unequivocal in its findings but there appears to be evidence that Australian schools are doing at least as well as they ever have and that our young people emerge from schooling with levels of literacy comparable to their peers in leading OECD countries.

The perceived decline in school-leaving standards can be explained by the significant increase in school retention, coupled with an equally significant increase in workplace literacy requirements. The issue however is not about whether schools are doing better or worse than hitherto. There is firm evidence that a significant number of school leavers do not have even very basic literacy skills and many more do not have skills adequate to their training or work contexts. This evidence comes from a variety of sources, most notably employers and TAFE teachers across the country.

There is a fairly vigorous debate as to whether this evidence is based on any clear sense of what is meant by 'illiteracy'. The debate however is not helped by the current inability of the school sector to provide a clear statement about the literacy standards of its school leavers.

Clearly the primary focus of effort must be on improving school outcomes so that school leavers have adequate Communication and Language skills. The complementary focus must be ensuring that TAFE and other training

agencies accept responsibility and have the capacity to remedy or extend the language skills of young people as necessary to their context and further learning and vocational needs.

The development of an appropriate Competency Profile with explicit explanation of expected outcomes will assist schools and the training sector to achieve this.

#### **4.10 Constructing a Language and Communication Competence Profile/Standards Framework**

Constructing Language Profiles is not straightforward and the outcome is certain to be challenged by some.

The literacy area has generated a great deal of academic attention. It is also a controversial area. One result is a major mismatch of expectations between the professionals and the wider community. The Committee, in common with anyone seeking to promote decisive action in the area, has had to sort its way through these somewhat antagonistic perspectives.

The general move to a more open and constructive debate on these matters has been particularly marked in the Literacy area. The Committee has therefore had the benefit of a great deal of innovative and constructive recent work undertaken around literacy profiles, assessment and reporting in a number of States.

The major argument among the professionals is about whether a continuum of hierarchical and transferable literacy skills can be constructed validly. There are conceptual difficulties in constructing a strict hierarchy of literacy skills. There will always be variations in the pattern of acquisition of skills across any defined hierarchy. Literacy skills are also fairly context specific.

The Committee is nonetheless confident that a valid and useful Language and Communication Competency Profile can be developed. There are now a number of precedents. Victoria has developed a set of school Literacy Profiles to help teachers assess and report on literacy development. South Australia is at an advanced stage in testing attainment levels in English as part of its overall plan to develop attainment levels in all eight areas of study covered by the AEC's national project.

NSW has made a start with the literacy achievement bands developed for its primary school Basic Skills Tests. In the adult area, Patrick Griffin and Anne Forwood have just published their Adult Literacy and Numeracy Scales.

These profiles have been developed via a pragmatic interaction of data drawn from research, observation and the experience of teachers. They demonstrate that the enterprise proposed here is feasible. None would be regarded as absolute or rigorously precise. The Victorian project suggests that their bands (levels) designate 'clusters of behaviour arranged in broad levels, reflecting growth towards the development of literacy' rather than tight linear stages.

The work of most direct relevance is the AEC's development of a national English Subject Profile for the school sector and the ACTC's National Communication modules. The AEC English Profile is not as advanced as the Mathematics profile. The early indications however are that it will be useful in developing the competency profile in Languages and Communication in that it has identified reading, writing and spoken English as key strands.

As indicated earlier, the AEC subject profiles will have to be extended to cover



the post-compulsory years. If this is done and if collaborative work with the TAFE/training sector can begin soon after the August AEC, the Committee considers it would be possible to complete the Competency Profile for Language and Communication by the end of this year. This would provide a set of national levels against which the achievements of young people could be assessed and reported.

Achievement in this Key Competency must be assessed and explicitly reported. Diagnostic assessment for such a critical area should run right through schooling to allow early diagnosis and intervention to overcome any learning difficulties in literacy. There is general agreement that students' Language Competence should be assessed and reported at the end of Year 10. The assessment should provide the individual student with a record of achievement in each of the Language strands both for summative and diagnostic purposes. It should also provide data for nationally consistent reporting by all the States and Territories of aggregate achievement against the profile levels. There should be a further assessment and national reporting on Competence in this area at the end of Year 12 and at an appropriate, comparable stage in training courses.

#### **4.11 Implications for Curriculum Development**

The overriding implication for curriculum development is the imperative for much greater collaboration and coordination across the school and TAFE/training sectors.

The current lack of effective collaboration and coordination is evident at all levels. For example at the National level there is little apparent consultation between the relevant bodies and working parties under the AEC and MOVEET.

The linkages between school education and the post-school training sector can only be fully effective if reflected in the curriculum. The current limited communication across the sectors manifests itself in misunderstandings, divergent definitions and concepts, wastefully mismatched courses and, all too often, sectoral recriminations rather than collaboration.

This collaboration is beginning to occur as a result of current moves towards joint ventures between TAFE and schools. For example, there has, of necessity, been considerable collaboration initiated in Victoria around the new VCE vocational courses; in NSW around the joint TAFE schools courses and in Western Australia around its school vocational courses. This collaboration has involved joint accreditation and work is under way in a number of States to establish formal cross credit arrangements for suitable courses in either sector.

The collaboration and coordination must happen at all levels. There must be significant dialogue between AEC and MOVEET bodies and working groups. Curriculum, assessment and credentialing bodies in each of the sectors need effective cross representation. This is happening in a number of States but needs to be more comprehensive and stronger. Some of these bodies in the school sector still have a stronger presence from higher education than from TAFE or industry. The higher education presence is critical but the balance should reflect the increasing significance for a very large number of senior school students of the TAFE/training sector. There tends to be limited school sector participation in TAFE or training sector agencies responsible for vocational courses and assessment.

It is important that there be deliberate and focused coordination at the planning and design stage for any school courses which are intended to attract credit or articulate into post-school training courses. It is not efficient to develop a course and then explore how it fits with relevant TAFE courses or whether or not it meets industry standards.

In practice this requires greater cross representation on bodies designing syllabuses and developing course materials in both sectors.

Teachers across the sectors must develop a better understanding of each other's language, concepts and methodologies. Increasingly there will be scope, in fact necessity, for common language, concepts and methodology. A common understanding of the concept of Key Competencies will be a start.

#### **The Committee recommends that:**

**Effective mechanisms be put in place to enhance understanding and coordination across the school and TAFE/training sectors on matters relating to curriculum development, assessment and accreditation:**

- **at the National level across AEC and MOVEET bodies;**
- **at the State level on relevant Boards, agencies and committees; and**
- **at the point of syllabus/curriculum design and development.**

#### **4.12 School Sector**

The Areas of Key Competency must be explicitly addressed in education and training curriculum. It is however critical that an explicit focus on the Key Competencies is properly integrated so it does not distort other broader purposes of the school curriculum. This will be a matter for professional judgment at the point of curriculum design and in the classroom.

It is also important that attention to the Key Competencies is properly spread across school subjects. For example, there is obviously a clear correlation between Language and Communication skills and the subject/learning area of English/Language. It would however be a deleterious outcome if the link with the English Subject Profile was interpreted as absolving other subject/learning areas from responsibility for developing the Language and Communication skills of their students. The Key Competencies must be reflected, as relevant, in curriculum design and teaching across all subject/learning areas.

The two areas of competence which have a strong knowledge base—Science and Technological Understanding and Cultural Understanding—imply all young people will include some relevant course work in their post-compulsory pattern of studies. If all young people are to continue formally to extend their knowledge and understanding in the broad cultural area, then in practice some general post-compulsory studies in Australian Studies, General Studies or a world-of-work type course must be available. The Business Council of Australia proposed that formal study and interaction with the world of work should be an integral part of post-compulsory education. Many students currently follow a pattern of studies consistent with this implication. Victoria requires all students to take Australian Studies and NSW requires at least one unit of study in the broad humanities/arts area.

The precise operational implications of the designation of these two areas as Key Competencies will depend on the final content of the Profiles. It may well

be that the school sector will have to adjust patterns of study in the post-compulsory years to ensure that all students have an opportunity for ongoing development in these two areas.

The school sector is moving towards more explicit statements of expected learning outcomes, just as the TAFE/training world is moving to a comprehensive competency-based system. The Competency Profiles will accelerate this movement in the school sector. There needs to be clearer understanding of these processes and their practical implications.

It is inevitable that schools will themselves move to a firm competency-based approach to curriculum and teaching in vocational areas. This will not be appropriate across all aspects of school vocational education because of the broad educational purposes involved. It will however be necessary where schools offer specific vocational training for which they want industry or training sector recognition. In these areas, schools will have to be able to demonstrate levels of competence students have achieved, against industry agreed standards.

The broad definition of 'Competency' used by the NTB and by this Committee is not very different from the approach used in schools to defining outcomes in separate skill, knowledge, understanding and attitudinal components. The major difference between the schools and training sectors is in the emphasis in training courses on outcomes associated with practical tasks. There are flow-on implications for the nature of assessment which in the TAFE/training context focuses on successful completion of the task/jobs. While this will continue to be a significant difference of emphasis between the school and TAFE/training sectors, even that difference should diminish.

The Committee believes that learning in schools should generally be more 'hands on'. Schools have already strengthened the practical as against theoretical in their curriculum. As the range of practical learning experiences increases in schools the old practical versus theoretical dichotomy will become less relevant.

Schools are moving to introduce a range of new vocational courses within the post-compulsory years—both school-developed and TAFE courses. Of equal, if not greater importance, is the need for the mainstream school curriculum to be more explicitly and usefully linked to the world of work. For example, it is more important for teachers to understand, and give students a sense of the practical applications of mainstream mathematics, than to develop a specific new course in vocational maths. This requires changes to teaching and the way the curriculum is presented. Teachers need a deeper and more practical understanding of the application of their subjects in industry. The Key Competencies Profiles will themselves assist this adjustment given their focus on the employment-related dimensions of the curriculum.

#### **The Committee recommends that:**

##### **School systems:**

- **integrate the Key Competency Profiles as appropriate across the curriculum;**
- **strengthen the 'hands on', practical dimensions of their curriculum;**
- **give more explicit emphasis to the relevance of mainstream curriculum to the world of work; and**

- where appropriate, and particularly in specific vocational courses, adopt an outcome/competency based approach to curriculum, teaching and assessment.

#### 4.13 TAFE/Training Sector

The impact of the Key Competencies on the TAFE/training curriculum, especially for entry-level training, will be major. The clear implication is that young people who come into TAFE/training courses without the appropriate level in any of the Key Competencies must be given the opportunity to gain it within the course.

To date, TAFE courses have assumed a level of pre-acquired competence in the key areas such as literacy and numeracy. When this has proved to be mistaken, the response has been a remedial one on an individual student basis. This will no longer be adequate. TAFE will need to provide more general opportunities for ongoing development across all the Key Competency Areas. This will be required especially for students entering from Year 10, but also for a minority of students who have completed Years 11–12 but still do not have an adequate level of competence in some or all of the areas.

The TAFE/training sector will have a direct responsibility for their students' level of achievement across all the Key Competencies. This will require changes in TAFE teachers' attitudes, but it will have to be directly supported in the training curriculum.

The Language, Mathematics and possibly Science and Technology areas will require some refocusing and strengthening of existing practice and curriculum. The other areas are not currently given much of a distinct profile in most TAFE/training courses.

There are several relevant curriculum projects under way which, with appropriate modification, could provide necessary support in some of the Key Competency Areas.

Mention has been made of the most relevant ACTC projects at the national level. Its National Communication Skills Project is developing a series of National Communication modules to develop various kinds and levels of communication skills. It also has in progress a National Project in Literacy and Numeracy.

This work needs to be linked with the development of the Language and Mathematics Competence Profiles. These ACTC projects may themselves have to adapt, (as may the school Subject Profiles), depending on the final content of the Competence Profiles, but it should be possible for them to generate direct, relevant curriculum support in these two key areas either as generic modules or integrated, industry specific modules.

The Cultural Understanding Competency Area will pose the most significant challenge to current TAFE/training course content.

As suggested earlier, the implication of identifying this area as a Key Competency for all young people, is that ongoing access to relevant curriculum must be available in the post-compulsory years. In the TAFE/training sector this would most sensibly be world-of-work type modules encompassing such areas as industry structure, work organisation, technological change, industrial relations, occupational health and safety and interpersonal skills. Many TAFE/training courses already have relevant strands and there are relevant initiatives integrated within specific industry

national curriculum projects. The National Metals Industry curriculum incorporates industry specific modules covering the industry structure and industrial relations aspects. The National Building and Construction Industry Curriculum will incorporate similar industry-specific modules covering occupational health and safety issues.

Again, effective linkages have to be established between these initiatives and the development of an appropriate Cultural Understanding Profile which is relevant across the TAFE/training as well as the schools sector.

This interactive process, through which TAFE/training curriculum developments influence the final content of the Competency Profiles and are in turn adapted to support the Profile requirements in TAFE/training courses, will have to be generalised across all the Key Competency Areas and all entry-level training courses.

As there is a high degree of industry ownership of the content of award courses, effective incorporation of the Key Competencies will depend upon widespread industry acceptance of their relevance generally and, most importantly, within industry-specific courses.

This can only be gained through extensive discussion and negotiation at both the peak levels and with the National and State Industry Training Advisory Bodies. This should be given a high priority both in the process of developing the Competence Profiles and in the follow-up curriculum work.

#### **The Committee recommends that:**

##### **The TAFE/training sector:**

- should adopt a more direct role in the development of young people's levels of achievement in all the Key Competencies;
- should ensure that its curriculum across entry-level training courses incorporates all the Key Competency areas of skill and knowledge in line with industry-determined competency requirements.

#### **The Committee recommends that:**

**The group with responsibility for finalising the Competency Profiles give a high priority to consultation with industry training committees/councils to ensure industry acceptance of the incorporation of Key Competency standards in statements of industry requirements.**

#### **4.14 Teacher Education and Professional Development**

The Committee was asked to look at the implications of its work on curriculum principles and Key Competencies for initial teacher preparation and continuing professional development for teachers.

The Committee's proposals in this and other areas will bring significant changes to curriculum, assessment, participation and organisational arrangements across the school and TAFE/training sectors.

The successful implementation of these changes is dependent upon the capacity and willingness of teachers in both sectors to deliver them. Teachers will have to update and expand their knowledge and skills and modify their pedagogy in quite major ways. This will not happen easily, particularly given the national context of an ageing school teaching force.

There will be major implications for pre-service teacher education and ongoing professional development for school and TAFE teachers. There will also be implications for the preparation and professional development of trainers in private vocational education and training institutions and for enterprise-based providers.

There is an obvious challenge for the teacher educators. They will have to adapt in quite fundamental ways to incorporate the new approaches. The issues surrounding the quality and competence/skills of the school teaching profession will not, however, be solved only by the intervention of the higher education teacher education bodies. Effective solutions will have to be largely school and college-based.

The Committee's time frame has not allowed it to pursue effective strategies to meet teacher development needs in any depth. Such strategies are, however, absolutely critical to the successful implementation of the proposed reforms and will have to be addressed as a high priority in other forums. This Committee has limited its focus to the identification of the major implications that flow from its proposals.

The proposed participation/completion target will bring almost all young people into post-compulsory education or training over the next decade, and will therefore dramatically accelerate the existing pressure for teachers, particularly in schools, to adjust teaching methods and the curriculum to a much wider range of students.

In so far as this development will coincide with more flexible and adult approaches to schooling, such as part-time school and part-time work, teachers will also have to adjust to major cultural and organisational changes.

In some States, there may be a significant increase in the numbers of young people moving from Year 10 school into TAFE for their post-compulsory education and training. This will require TAFE teachers and systems to incorporate a higher level of pastoral care into their broad responsibilities. The presence of large numbers of school students doing joint-schools TAFE programs has already highlighted this as an issue in some TAFE colleges.

The degree and type of changes to curriculum and teaching and assessment methods will be different for school and TAFE teachers.

School teachers already address most areas of the Key Competencies in the school curriculum. The major change for them will be the emphasis on the employment-related dimensions of these areas, which should be part of a broader process, linking the mainstream curriculum with practical applications, including in the world of work. The related increase in emphasis on practical, as well as theoretical approaches to learning, will itself require changes in teaching methodology.

Teachers can only make these changes effectively if they are given a much deeper knowledge of the applications of their subjects and the Key Competencies in industry. The Committee is aware that school systems have begun to address this need, but the challenge that remains is substantial.

The development of a standards framework with specified levels of competence against which students' progress is measured will bring major changes to the assessment practices in the school sector. There will be far greater emphasis on criterion referenced assessment than has previously been the case. This process of change is already under way in most States with the trend to greater definition of expected outcomes in curriculum.

The proposed requirement for assessment and reporting on achievement against the Key Competence Profile Levels in Language and Mathematics by 1993 greatly accelerates the need for teachers to develop a general understanding of Standards Frameworks and criteria referenced assessment practices.

All teachers will need a general understanding of the training sector's emerging emphasis on competency-based assessment. Those teachers involved in school-based, specific vocational courses seeking full-credit transfer in the training sector, will need to be skilled in the design and delivery of competency-based assessment.

Within the TAFE/training sector the major change will be around curriculum content. TAFE teachers will have to accept responsibility for development of their students to appropriate levels in all the Key Competence areas. They will require strong curriculum support and complementary professional development if all the Key Competency areas are to be appropriately incorporated into training programs.

This will have significant implications for curriculum development and implementation particularly in existing off-the-job components of apprenticeship programs. This can be catered for more easily in the traineeship area, where off-the-job curricula already target several of the Key Competency areas such as Personal and Interpersonal Skills, Communication and employment-related Mathematics.

Full-time mainstream TAFE programs at Certificate to Associate Diploma levels can be more readily adapted to incorporate the Key Competencies across general and vocational strands of the curriculum.

The discussion to this point has identified implications for teachers in the major delivery systems—schools and TAFE. With the expansion of the training market there will be significant implications for both private providers/institutions in the vocational education arena, and enterprise-based providers.

The impetus to ensure recognition of prior learning under the NTB Australian Standards Framework implies that the Key Competencies identified by this Review must also be incorporated into the in-house training context.

Therefore, it will be necessary to ensure that these trainers are provided with opportunities to develop appropriate skills. 'Train the Trainer' programs are already offered throughout the national TAFE network, particularly in rural areas. The Queensland TAFE system has also developed as a nationally sponsored project, a Train the Trainer program in literacy teaching at three levels: TAFE professional educators, volunteer tutors, and increasing numbers of enterprise-based providers.

Ability to handle the new requirements is likely to take individual teachers in all sectors into new work organisation relations of their own so as to effectively manage learning outcomes and this will bring the practice of key competencies into their own work.

An appropriately focused skills audit will be needed to gain a clear sense of the degree and range of reskilling needed for the teaching profession.

In the TAFE/training sector this has recently been done by the TAFE National Centre for Research and Development. Their draft report: *National Review of TAFE Teacher Preparation and Development: Skills and Competencies* was published in 1990. Although not done in the context of this review's proposal,

the report provides a basis for assessing the capacity of TAFE teachers to incorporate the Key Competencies into their traditional approach to training. The Committee considers that a similar skills audit of teachers should be conducted in the school sector.

There are currently national projects under way addressing issues relating to teacher education and the quality of teaching in both sectors.

In the school sector the National Project on the Quality of Teaching and Learning has a very wide brief. This includes a particular focus on work organisation of teachers, pedagogy and learning within the classroom as well as assessment issues.

In the training sector the National Review of TAFE Teacher Preparation and Development has completed its task. Ongoing work in the area has been taken up by the VEETAC Working Party on TAFE Staff and Related Issues. This Working Party had, as one of its terms of reference, the preparation of a project brief for a 'national project to consider skill standards and related issues for TAFE teachers'. This project is about to commence. Its purpose is to identify the key staffing issues that need to be addressed to enable TAFE systems to participate competitively in the training market. A second phase is planned which will identify skill standards appropriate to the functions of TAFE teachers and other TAFE delivery staff, and will also develop operational options and strategies for professional development and career paths.

In the Committee's view these two national projects provide the most appropriate forums for the necessary development of strategies to support school and TAFE teachers in the implementation of the proposed reforms. The AEC and VEETAC should refer the relevant recommendations of this review to these two national projects for their urgent attention.

It may be appropriate to broaden the scope of the consultancy project under the Working Party on TAFE Staff and Related Issues to allow it to address directly the implications of the proposals relating to the Key Competencies.

The National Project on the Quality of Teaching and Learning has a critically important and complex agenda. While it is clearly the appropriate forum for the follow-up work on the implications for teachers, it may be useful for the AEC to specify a high priority and clear time frame for the development of appropriate strategies.

The Committee also stresses the need for consultation and, as appropriate, collaboration between the two projects in this work.

Whatever strategies are eventually put forward by the two project groups, the Committee believes that successful incorporation of the Key Competencies will require significant and sustained professional development funding from governments.

**The Committee recommends that:**

**AEC and MOVEET should refer the relevant proposals from this Review to both the National Project on the Quality of Teaching and Learning and the VEETAC Working Party on TAFE Staff and Related Issues with a brief to:**

- **identify the immediate implications for professional development of teachers in the school and TAFE/training sectors;**



- identify implications for initial preparation of teachers in the school and TAFE/training sectors;
- develop strategies to support teachers in the pedagogical and curriculum changes resulting from the Committee's proposals;
- consult with each other to ensure appropriate consistency and cooperation in the development of strategies; and
- bring initial recommendations to the AEC and MOVEET at their first meetings in 1992.

**The Committee recommends that:**

**Governments should ensure adequate professional development funds are available to the schools and TAFE sectors for the successful implementation of the Committee's proposals.**



## **Chapter 5**

### **Provision and Pathways**

#### **5.1 Introduction**

The terms of reference called for consideration of the means by which links can be drawn between different education and training pathways and sectors to expand the options available to all young people, including those with special needs. Before examining the links between pathways there is a prior question to consider: are the existing pathways adequate given the needs and expectations of young people, employers and Australian society as a whole?

This chapter is therefore divided into two parts:

- Part One deals with issues relating to the adequacy and structure of post-compulsory education and training; and
- Part Two deals with the inter-relationships between post-compulsory education and training pathways.

#### **Part One Provision of Post-compulsory Education and Training**

#### **5.2 Adequacy of Current Pathways**

Perhaps the most fundamental question for this review is whether the existing array of pathways in the period following compulsory schooling is adequate given the needs and expectations of young people, employers and Australian society as a whole.

The issues paper supporting the terms of reference for the review identified that, 'despite the impressive achievements of recent years, Australia falls well short of achieving universal participation in education and training by the 15-19 age group'. The data in Chapter 2 demonstrate:

- considering full-time and part-time educational participation combined (including, for example, apprentices and trainees taking part-time studies in TAFE), participation falls from 96 per cent at age 15 to 40 per cent by age 19; and
- a significant proportion of young people, even 15 and 16-year-olds, are either unemployed or not engaged in any form of education or labour force activity.

#### **5.3 Entry-level Training**

The gap in provision, highlighted by these figures and by international comparisons, is the shortage of further education opportunities for the two-thirds of school leavers who do not enter higher education. The existing system of entry-level training\* only provides opportunities for somewhat less

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\* Entry-level training is training taken to gain entry to the work force. It generally involves structured on-the-job and/or off-the-job training leading to some sort of occupational qualification. The current entry-level training system in Australia is dominated by the apprenticeship system, but also comprises the Australian Traineeship System, full-time TAFE or equivalent and some other work-study combinations.

than half of this group. Of these, by far the largest group is made up of apprentices who are almost all male and who are concentrated in a limited range of occupations and industries.

It is clear that the existing arrangements for entry-level training do not provide sufficient opportunities for young Australians. In a general sense, therefore, the system may not provide the skilled work force to which Australia aspires for the future.

In its submission to the review, the Australian Chamber of Manufacturers noted that the implications of this situation are that:

- school leavers who do not wish to enter university are forced to enter the labour market immediately following school, without having acquired job-related skills;
- school leavers are the most vulnerable sector of the labour market in times of economic recession;
- school leavers who aspire but fail to gain entry to university have very limited choice of further education and training immediately after leaving school (this is further exacerbated in some states by the closing of TAFE course applications prior to university offers being announced); and
- there is frequently a sense of failure associated with those who do not secure for themselves a place in university.

Other implications of this situation include:

- there are periods of specific shortages in key skilled labour which are in part due to inadequate levels of entry-level training;
- major enterprises and industry sectors are not involved in structured entry-level training; and
- opportunities for post-school education outside of higher education are particularly limited for females
  - less than 10 per cent of apprentices are female and most of these are hairdressers.

Where entry-level training opportunities do exist there are also some concerns about the nature of that training:

- apprenticeships have been criticised for being based too much on time-serving rather than the achievement of competencies, and for failing to provide some of the broader general vocational competencies required for a flexible and adaptable work force;
- traineeships have not achieved the same recognition as apprenticeships among employers and young people and there have been significant dropout rates from some traineeships; and
- traineeships have been criticised by some employers for being too inflexible and not well enough matched to industry requirements.

Despite these weaknesses in the current system, some aspects of it have considerable strengths. For example, apprenticeships have provided remarkably resilient opportunities for young people:

- in the last twenty-five years apprenticeship opportunities for youth have increased by 70 per cent while the full-time youth labour market overall has declined by over one-third; and
- in the current labour market downturn, non-apprenticeship places have declined more sharply than apprenticeships.

This resilience is of course in part related to the restriction which applies in trade areas covered by apprenticeship whereby it is illegal to employ a person under 21 in the trade unless they are an apprentice or have completed an apprenticeship.

Apprenticeships and traineeships have the great benefit of providing a mixture of on and off-the-job training which enables young people to acquire a high standard of skills in a relevant environment while developing practical experience and earning income. Reflecting this arrangement, apprenticeships and traineeships involve a sharing of the costs and benefits of training between the individual, the employer and the society (through government funding).

### **The Committee recommends that:**

**MOVEET continue to give high priority to reform of current entry-level training arrangements as a key step in achieving the proposed national completion/participation targets.**

**A reformed entry-level training system should extend arrangements beyond the existing apprenticeship and traineeship occupations to achieve better coverage of young people, especially young women.**

An extension of improved entry-level training arrangements to industries and occupations not currently catered for by existing entry-level programs or higher education is essential to complete a comprehensive array of pathways for young people. International comparisons highlight this point.

For example, in his appendix to the Deveson Report, Sweet notes that:

*Given the selective occupational and industry focus of the Australian apprenticeship system, there is a substantial absence in Australia of initial vocational preparation arrangements in and for the service sector, in which two-thirds of 15-19-year-olds' employment is located. Indeed it is the ability of the dual system to penetrate the service sector, and not the extent of student training within manufacturing, that almost totally accounts for the very high level of participation by young people in vocational preparation programs in West Germany (Deveson, vol. 2, p. 228).*

Sweet goes on to note the specific example of sales assistants who comprise the largest single apprenticeship category in West Germany. In contrast Australia offers almost no systematic vocational preparation for sales assistants despite the fact that 10 per cent of all full-time jobs for 15-19-year-olds are in this area.

The inadequacy of vocational preparation in the service sector affects disproportionately on young women whose employment is concentrated in the service industries. Females make up only 15 per cent of all apprentices and trainees in Australia, compared with 41 per cent in West Germany.

An expansion of entry-level training opportunities would be of particular significance for the group of young people who currently do not participate in a formal education and training program after leaving school. Wider availability of structured work-study combinations, clearly integrated with employment, would provide greater incentives and opportunities for these young people to pursue valuable skills and to gain a more stable foothold in the labour market.

Commonwealth and State Ministers have already agreed to move towards a unified entry-level training system, incorporating and expanding upon the

apprenticeship and traineeship systems. The challenge is not only to expand opportunities, but also to improve the quality of the system and integrate it more effectively with industry needs and other educational pathways.

This points to some fundamental principles for a new entry-level training system:

**The Committee recommends that:**

**The proposed new entry-level training system should:**

- provide high quality education, involving general vocational as well as occupation-specific competencies;
- meet and relate clearly to industry needs and standards;
- integrate with other educational pathways, for example providing clear opportunities for movement from and to school, and to further educational and training programs with maximum credit; and
- provide opportunities for as many young people as possible who do not proceed direct to higher education.

The Committee has not had sufficient time to work through each of these principles to the point of detailed recommendations for implementation, but critical issues and some features of the new system which arise in respect of each principle are set out below. The Committee believes that the detailed implications of these issues must be addressed in consultation with the wide range of parties who will be affected. In this context the Committee notes that the Employment and Skills Formation Council (ESFC) of NBEET will be involved in an extensive process of discussion and consultation on these and related issues commencing around the time that this report is presented to Ministers.

***High Quality General Vocational As Well As Occupation-Specific Education***

The Committee has already identified the importance for all young people of attaining Key Competencies in preparation for the world of work. A feature of a new entry-level training system should therefore be adequate opportunity for young people to gain or upgrade these Key Competencies.

The Committee envisages that as part of award restructuring, industrial parties will be able to use the proposed framework of Key Competency standards to identify the levels of Key Competencies required as components of the national competency standards for their industry. Where that is done it will clarify the standards of Key Competencies which young people must achieve at the entry-level classifications for that industry. In all cases the design of entry-level programs should incorporate development of appropriate standards in the Key Competencies, particularly as entry-level programs are to be seen as steps on a potential career path for more advanced achievements.

Given that the majority of young people will have completed Year 12 before entering the entry-level system it could reasonably be expected that most would have attained the necessary standards in the Key Competencies. Some, however, will enter the entry-level system after Year 10 and others who have completed Year 12 will not have achieved the relevant standards. The system will therefore need to be able to provide education which can accommodate the needs of these students. Especially for occupations and industries with higher than average requirements in Key Competencies such as Language or

Mathematics it is likely that the entry-level program would need to offer a substantial component of general vocational education. This will be particularly relevant for early school leavers.

### ***Industry Needs and Standards***

The most critical determinant of the success of any attempt to expand the entry-level training system will be the extent to which it is perceived to meet industry needs. This will affect the willingness of industry to provide training places and to contribute to the costs of training, and the willingness of individuals to participate. At the same time, if they are not to limit their own future perspectives, employers must recognise that they have an obligation to participate in a system designed to improve the overall skills and productivity of the work force and to give young people access to training and employment. The system must therefore be flexible enough to adapt to the needs of different industries and occupations and even individual enterprises. There are clearly limits on the extent to which there can be flexibility in the system if fundamental objectives are to be achieved in all instances, such as the development of minimum competencies. There are also practical limitations on the extent to which individual variations can be accommodated by training providers. Nonetheless, the aim should be to allow maximum flexibility in the length and design of programs and the duration and mix of on and off-the-job training.

This can best be achieved in a competency-based system which specifies, assesses and certifies the ends not the means, that is, which identifies the competency standards to be achieved but does not dictate the training processes to be undertaken.

To make such a system work in a consistent way so that core skills are relevant and portable between enterprises and across the country, industry input in the development of competency standards would be critical. Greatest consistency would be achieved where those standards are set against the national framework provided by the NTB.

In terms of the NTB framework, the new entry-level training system could be expected to relate to competency standards up to and including Level 3.

### ***Integration With Other Educational Pathways***

An extended and improved entry-level training system has the potential to complete a comprehensive set of educational pathways for young people. If it is to do this effectively it must integrate with other pathways so that the transition to and from different educational experiences can be as smooth as possible and offer maximum recognition of competencies already achieved. For example, the system should be structured in such a way that Key Competencies and any more occupationally-specific competencies achieved at school can provide advanced status towards an entry-level qualification which can then be completed once further occupation-specific competencies are acquired. This suggests that the system may typically require some period of training for a student leaving school after Year 12, but a significantly lesser period than would be typically required for a student leaving after Year 10.

The competency-based nature of the system should also facilitate articulation with higher level vocational qualifications and credit transfer to higher education programs.

These issues are examined further in Section 5.4 of this chapter.

### ***Maximum Opportunities***

If entry-level training opportunities are to be significantly expanded it will be necessary to address the impediments in current practices which may constrain such expansion. These impediments relate in part to cultural and attitudinal factors such as the perceived need for and value of education or training in certain industries. Some industries have much more of a 'training culture' than others and are therefore more willing to provide on-the-job training opportunities and to recognise and reward skills obtained off-the-job. The 'training culture' is nonetheless penetrating all industries, accelerated by developments such as award restructuring and the Training Guarantee legislation, and powered by the general realisation of the benefits of a more highly skilled work force. International comparisons demonstrate clearly that there is certainly nothing inherently 'correct' about the historical differentiation in this country between industries which train and those which do not. The shape of the future is for all sectors of the work force to be involved in initial and lifelong education.

Some of the current impediments relate to employer dissatisfaction with training arrangements. These have been discussed above. It is imperative that new arrangements be developed which are understood by employers and which are attractive to them in terms of flexibility and meeting their skilling needs.

A further set of impediments relates to costs. First, there are substantial costs in providing publicly-funded training places within TAFE or other training providers. Secondly, where training arrangements for young people involve substantial periods of training off-the-job, or of training on-the-job other than in productive work, there are potential costs for both the individual and the employer. The first set of issues—the cost of providing publicly-funded training places—is addressed in Chapter 10 of this report. The second set of issues raises the complex industrial questions of training wages, wage subsidies and relativities within wage scales. If the system is to be accepted by all parties it must incorporate an appropriate approach to the balance of costs to be met by the individual, the employer and the government.

The Committee does not believe that it has the expertise or is an appropriate body to resolve these issues. That will require a process of wide consultation with relevant parties and discussion in the established forums. The way in which payments for young people should account for productive time on-the-job, training on-the-job and training off-the-job will be an important matter for consideration where training arrangements for young people involve substantial periods of training outside of productive work. Other related matters which will require consideration include:

- the existing policy on training wages agreed by both Commonwealth and State Ministers;
- the access of trainees to AUSTUDY or other income support programs
  - this will be a particularly pertinent issue if the system is to be flexible enough to allow for a high proportion of off-the-job training in certain circumstances; and
- the role of employer subsidies such as CRAFT and the ATS employer subsidy.

As noted above, the ESFC is to conduct the process of consultation which is necessary to progress these issues. The ESFC has been specifically asked to examine AUSTUDY, CRAFT and ATS subsidies and to advise on alternative



ways in which those funds can be reallocated or restructured to support training more effectively.

Submissions to the Committee emphasised that one of the great strengths of the apprenticeship system has been its resilience through economic fluctuations, a resilience which is significantly related to the requirement in apprenticeable trades that all employees under 21 must have completed or be taking an apprenticeship. Given this fact, and because of the special obligations to provide training opportunities for young people, it may be desirable to establish an expanded entry-level training system to extend a similar requirement, either universally as a legislative requirement, or on an award by award basis where agreed by the industrial parties.

The other form of education or training requirement which currently exists in Australia is the compulsion on individuals to attend school up to a certain age, generally 15. Several submissions advocated an extended requirement on individuals to participate in education and training, and such an extension could also be contemplated in the context of an expanded entry-level training system.

It is clear that societal expectations and the demands for a more highly skilled work force now point to a minimum desirable duration of education or training which is more like twelve or thirteen years rather than ten. The Committee's proposed target for 2001 implies, effectively, full participation in some form of education and training for at least twelve years. It would be possible to ensure this outcome by translating it into a legal requirement applying to individuals, that is, that all young people must take some form of full-time or part-time education or training for at least twelve years.

In the Committee's view, any significant extension of compulsory arrangements either on employers or individuals needs to be considered in the context of the nature and availability of education and training opportunities. At its simplest level, there is little point in contemplating extended compulsory arrangements if the necessary high quality education and training positions cannot be provided.

The Committee also believes, in general, that major changes to compulsory arrangements should not be adopted as a first course of action unless governments are satisfied that fundamental objectives cannot be achieved in other ways. The fundamental objective in relation to entry-level training is the expansion and protection of opportunities for young people to participate in some form of high quality, structured vocational training. Possible options to help achieve this objective, which stop short of general changes to compulsory requirements, could include:

- development and extension of innovative programs which attract employer and student support, such as the TRAC program in Newcastle;
- promotional campaigns, especially aimed at securing employer involvement;
- amendments to the Training Guarantee provisions to provide additional incentives for expenditure on the training of young people;
- campaigns and possible legislative measures in respect of employment and training of young people along the lines of the Equal Employment Opportunity (EEO) provisions; and
- specified targets for public sector employers in terms of recruitment of young people to training provisions.

Possible options which do involve general changes to compulsory

requirements include:

- extended legislative requirements of the type currently applying in respect of apprenticeships, that is, award-based provisions requiring that persons below a certain age can only be recruited into positions covered by the award if they have completed or are undertaking appropriate training;
- extended compulsory education/training requirements for individuals, for example to attend school, TAFE or equivalent at least part-time until they turn 19
  - this type of provision applies in German-speaking countries and the Netherlands.

It is clear that the issue of compulsion as it relates to entry-level training is bound up with questions of the provision of places and the balance of costs and incentives for individuals and employers.

**The Committee recommends that:**

**The ESFC should consider the issues raised in this Review relating to compulsion and incentives in its consultations around the proposed new entry-level training system.**

**The ESFC's consultations and report should be completed by early 1992 to enable Ministers to make decisions in the first half of 1992.**

#### **5.4 School Attendance to End of Year 10**

While the wider issues of any compulsory arrangements need to be considered as part of a comprehensive agenda for consultation, the Committee believes that there are grounds to proceed immediately with a relatively minor change to provisions for compulsory schooling.

Current legislation requires young people to attend school (unless exempted) until their fifteenth birthday in all States and Territories other than Tasmania, where the age requirement is 16, and Western Australia, where they must attend to the end of the year in which they turn 15.

The Committee believes that State and Territory Governments should introduce a uniform compulsory requirement to attend school (unless exempted) to at least the end of Year 10. Such a change would have no impact on the overwhelming majority of young people who already complete Year 10. However, there are some positive and important reasons for this proposal in relation to the remaining small percentage who, under current arrangements, leave school as soon as they turn 15 and without completing Year 10. This group is very seriously at risk in the labour market.

To varying degrees in different States, the end of Year 10 is an accepted credentialing point and, in general, represents the conclusion of an identifiable and coherent component of study. It is therefore desirable from an educational perspective for young people to complete the year. Furthermore, given the importance of some form of qualification in the labour market, it is also important from an equity perspective that all young people achieve at least a Year 10 certificate in States and Territories where that is offered.

It is notable that a parallel change has just been announced in Britain, for similar reasons. The British Government White Paper, *Education and Training for the 21st Century*, released in June 1991, established a single

school-leaving date at the end of the summer term rather than on the sixteenth birthday.

Completion of Year 10 in this country will become even more important if, as proposed by the Committee, assessment of Key Competencies is introduced as part of Year 10 certification. From a school and systemic viewpoint it will be highly desirable to be able to monitor the achievement levels of all young people after the first phase of secondary schooling. More significantly, it will be important for each young person who chooses to leave school to have received certification of their achievement levels in the Key Competencies as a basis for relating to other education or training providers and employers.

A final factor which should not be overlooked is the desirability of 'raising the sights' of the group of young people who have determined from an early age to leave school as soon as they are legally able to do so. Under current arrangements this generally means a process of disruptive time-serving until the merciful arrival of the fifteenth birthday, which is the young person's only target. If the compulsory period were to be set at the end of Year 10 and thereby associated with an assessment of achievement in the Key Competencies, young people themselves may see a greater purpose in continuing to study actively until the completion of the year. This could help enhance motivation and the likelihood of continuation with further education and training after Year 10, especially if opportunities for entry-level training are expanded and designed to build on achievement to at least the end of Year 10.

These considerations suggest that there may also be a case, albeit a much more complex one, for a more substantial extension of compulsory requirements for education and training participation, perhaps involving progressive increases over a period of years. This possibility would need to be examined as part of the consultative process outlined above.

#### **The Committee recommends that:**

**State and Territory governments should introduce a uniform compulsory requirement to attend school (unless exempted) to at least the end of Year 10.**

### **5.5 An Education and Training Guarantee**

The question posed at the start of this chapter was whether the current set of pathways provides sufficient opportunities for young people to take post-compulsory education and training in a comprehensive range of areas. In the schools sector, governments have been prepared to guarantee that opportunities will be available to any young person who wishes to attend up to and including Year 12. No such guarantee exists outside of schools and as noted previously there is a substantial level of unmet demand in TAFE and higher education (albeit not all from young people).

The Committee believes that, to support the proposed completion/participation targets, to meet community expectations and to ensure equitable access to education for all young people, the principle of guaranteed access to twelve years of education should now be extended beyond the school sector.

**The Committee recommends that:**

**Governments should agree to introduce a post-compulsory Education and Training Guarantee whereby all young people would be guaranteed a place in school or TAFE after Year 10 for two years of full-time education or training or its equivalent part-time for up to three years. The Guarantee should apply for all those who are under the age of 20 at the first of January in each year.**

Under this Guarantee, governments would undertake to fund the cost of a place in school or TAFE for each eligible student, trainee or apprentice.

Such a Guarantee is consistent with the Committee's proposed target that 95 per cent of 19-year-olds by 2001 should have completed or still be taking education or training equivalent to Year 12. It would provide a powerful statement of the commitment of governments to education and training, and would encourage young people to complete or return to post-compulsory study.

The detailed implementation of the Guarantee in practice including the specific terms of eligibility will require further consideration. The implications will be most significant for TAFE systems where some students who would be guaranteed a place under this proposal are currently being turned away. The Guarantee would not imply that all young people would have automatic access to the course of their choice at the institution of their choice. There must be some practical limitations on the operation of the entitlement.

**The Committee recommends that:**

**AEC and MOVEET establish a working party to examine the detailed implementation of the proposed post-compulsory Education and Training Guarantee.**

As part of that examination the Working Party should consider the 'training credit' approach recently adopted in Britain.

The British Government has just announced that, by 1996, every 16 and 17-year-old leaving full-time education will be offered a 'training credit' or voucher, worth typically, at least 1 000 pounds. The young person will be able to use this training credit to purchase post-school training with either a public or private provider. This move follows successful trials in eleven pilot districts. The White Paper states that the training credit system aims:

- to increase young people's motivation to train, by giving choice and control, and making obvious to them the scale of investment available to support their training;
- to enhance the market in training provision. Providers will be paid according to their ability to attract trainees holding credits;
- to enhance employer involvement. Where a young person with a credit is in a job, the employer can agree to organise the training; and
- to highlight the importance of enhancing careers guidance to help young people achieve a smooth transition from full-time education into the world of work, and to make the best use of their credit.

The Committee believes that there may be merit in the training credit system, especially the direct sense of obligation and control handed to the young person. There would, nevertheless, be some important considerations before

such a system could be introduced in Australia, including the implications for planning and the potential for transfers of public resources between sectors and between different types of providers.

The resource implications of an Education and Training Guarantee will depend of course both on the approach to funding and on the extent to which young people take up their entitlements. The 95 per cent target assumes that very nearly all of them will do so by 2001. The resources needed to support such a growth in post-compulsory education and training are examined in Chapter 10.

## **5.6 Recovery**

This examination of the adequacy of current education and training pathways has so far concentrated on pathways which involve a steady movement through education, training and employment in a sequential way. Most young people do follow an unbroken sequence from primary school to junior secondary school to senior secondary school, further education, training or employment. For a significant number of young people, however, this typical sequence is broken at some point for any one of a wide variety of reasons. Our education and training pathways will not be complete unless there are adequate ways for such young people to recover and resume their educational progress.

One point which came through very strongly from the consultations with young people is the importance of providing a second-chance opportunity to resume schooling for those who left early. The consultants spoke with a number of young people who, for a variety of behavioural or family reasons, have left the school system as early as age 14, but who decided a year or two later to return to schooling, with a renewed motivation and sense of purpose. For some of these young people, the traditional school setting does not provide a suitable educational environment. They are looking for an opportunity to learn at their own pace, with study often balanced around child rearing and employment responsibilities. They, therefore, opt for TAFE courses where available, or often study by correspondence.

There is a wide range of opportunities for re-entry to education and training provided on-the-job—in TAFE, in private and community providers and higher education institutions and, to a lesser extent, in schools. Of the opportunities outside the workplace, TAFE, private and community providers are the most important, offering programs including adult senior school certificate courses, adult literacy training and the variety of SkillShare and similar labour market programs for people who have been unemployed.

The Committee has formed the view on the basis of consultations and examination of best practice in this country and overseas, that the range of opportunities provided for re-entry to education and training is adequate in most respects, but needs enhancement in relation to:

- links between labour market programs and mainstream qualifications;
- entry into TAFE for young people who try unsuccessfully to enter university or who fail or drop out early in their university courses; and
- flexible access to schooling, for example for young people with children.

These issues are examined further in the remainder of this Chapter and in Chapters 6 and 7.

## **Part Two: Pathways Through Post-compulsory Education and Training**

### **5.7 Introduction**

One term of reference for this review asked for advice on the 'means by which links can be drawn between different education and training pathways and sectors to expand the options available to all young people, including those with special needs, and to achieve national coherence in entry and exit points between education, training and employment'. The previous part of this chapter has dealt with the issue of expansion of the options available to young people. This section focuses on the issue of linkages and national coherence between pathways through education, training and employment.

The concept of pathways implies movement through a coherent set of educational or employment experiences leading to some identified destination, which may also be a link into a subsequent pathway. In a fully consistent system it should be possible to describe each pathway, how and when it links with other pathways, and to identify the destinations which can be reached before a young person starts out on the pathway.

### **5.8 Pathways Between Education and Training Sectors**

At a local level the concept of pathways provides a means of describing the education, training and employment options available to young people. The concept in many ways is not a new one and has been applied around the country in different forms and with different degrees of sophistication in developing student programs and establishing credit transfer and articulation arrangements between related education and training courses.

In some fields the pathways are long established. For example, for a young person wishing to become a doctor, almost the only pathway (with some minor exceptions in respect of special entry arrangements) is through a Year 12 program involving relevant pre-requisite subjects followed by an appropriate undergraduate program at university. In other fields the pathways are less clearly established and not as well defined.

For example, a young person interested in electronics could follow a range of possible pathways after Year 10 at school. These could include:

- leave school and take a traineeship or apprenticeship leading to a certificate or advanced certificate;
- stay in school until Year 11 then take an advanced certificate (probably by an apprenticeship);
- stay in school until Year 12 then take an associate diploma; or
- stay in school until Year 12 then take a degree course.

To make sense of this range of choices a young person needs to know the implications of each option in terms of the time involved, the potential outcome for employment and the extent to which choices may be mutually exclusive. For example, would it be possible to stay on until Year 12 with a view to keeping open a range of other options, but then receive some credit into the TAFE course? If so how much credit could be developed by making appropriate subject choices at school? Alternatively, would it be better to go straight into the TAFE course after Year 10? If that pathway were followed,

what would that mean for subsequent admission to an associate diploma or a degree course? What do each of the options lead to in terms of employment levels in the industry? How easily can one step across from one pathway to another?

These questions can best be answered if the pathways are defined in a clear and consistent way, so that the extent of credit transfer or articulation between each is known, and so that the outcome of each is identified in terms of the competency standards required in the industry. This implies a responsibility

on educators and trainers in all sectors to develop courses which relate in an identified way to each other, provide maximum recognition for attainment in other courses, and link to identified industry standards.

### **5.9 Inter-relationships Between Pathways**

Young people, educators and employers need to know how competencies acquired at school relate to those which are acquired in TAFE or on-the-job, and how each of these should relate to the competency standards required for employment at a given level in a given industry. Ideally there should be a coherent and comprehensive set of pathways each of which relates to subsequent pathways and to employment in a predictable, consistent and rational way. This would enable young people to identify in advance the implications of any significant educational choice in terms of possible employment outcomes and opportunities for further education and training.

What is needed is some common language, some common framework of description of outcomes that can operate in all education and training institutions and in the workplace. The concept of competencies has the potential to provide such a common framework and thereby enhance the establishment and definition of effective linkages between education, training and employment. At its simplest level, the concept of competencies is about a focus on the outcomes of education, training and work experience as opposed to the processes or organisational structures providing those outcomes. If competencies can be defined and assessed, then the relationship between different education, training and employment pathways can be established more clearly and more consistently.

As set out in Chapter 4, the Committee has differentiated between two broad types of competencies:

- the Key Competencies required by all young people for employment; and
- the more specific competencies required for effective performance in a particular employment context.

The Committee has focused on the former type of competencies, while the latter type is the subject of extensive consideration under the auspices of the National Training Board.

The Committee has identified how a framework of standards can be developed for the Key Competencies. The NTB has developed the Australian Standards Framework to provide a consistent approach to the establishment of competency standards for occupations and industries. While the Committee believes that some aspects of the Australian Standards Framework warrant further consideration, it believes that these two frameworks together could provide a significant new opportunity to establish clear and consistent linkages between education, training and the world of work.

The simplest way to illustrate this is to take a practical example. In the tourism industry, agreement has been reached on the structure of a career stream in the food and beverages area, based on clearly stated skills requirements. There is a 'skill ladder' in which the rungs are clearly defined in terms of competencies which must be demonstrated at each level, and these competency levels are then related to gradations within the relevant industrial award. The skills ladder is constructed against the generic framework of the NTB's competency levels.

This sort of structure allows vocational courses, regardless of where they are offered, to be related to standards set by the industry. It also allows skills gained on the job to be recognised alongside those gained through formal courses. For the young person in the immediate post-compulsory period it means that the outcome of vocational programs taken at school can be related to those offered by TAFE and other providers, and also to the requirement for employment in the industry.

The framework of Key Competencies proposed by the Committee can also be linked to this type of competency-based structure. In the food and beverage stream of the tourism industry for example, the industrial parties could agree that a certain level of mathematics is required to achieve the NTB Level 2 standard. The Key Competencies framework will provide a method of identifying and defining the required level of mathematics in a way which will be meaningful to educators and to young people themselves.

This type of process is likely to be most relevant to the lower career levels in any given industry (up to say NTB Level 3) where the range of competencies required is more easily defined and more stable over time than at the advanced levels. Levels 2 and 3 are likely to be common entry points to employment and therefore are of particular significance to young people in the transition from education to work.

When an industry chooses to identify its entry-level requirements in terms of both Key Competencies and occupational competencies, young people will know the standards which they must achieve and educators will be assisted in developing and relating curricula to industry standards. This is not to imply that industry requirements alone should determine curricula or certification arrangements, except in respect of purely vocational programs. There are wider purposes for education which will properly remain the principal force behind general education of the type provided by schools. In many cases, it is also likely that industry entry-level standards will be defined, at least in part, by reference to satisfactory completion of a certain amount of general education.

The development of competency standards will take place progressively on a national basis. Ministers have recognised the desirability of pursuing development of the training system within a coherent national framework and have, for example, agreed to the establishment of the Australian Committee for Training Curriculum and of a framework for national consistency in recognition of skills, accreditation, recognition of training providers and promotion of credit transfer arrangements, all premised on the implementation of a competency-based training system.

While skills standards established by industry will provide a vital keystone for the development and structuring of many post-compulsory education and training programs, this will not be a rapid process and there will remain legitimate and valuable pathways for which entry standards are not explicit



and will be determined by the 'market' for labour in those areas. Community standards may also affect the actual level of entry requirements; for example, society norms may produce pressure for universal Year 12 completion even though that may not be formally necessary for entry to employment in some industry sectors.

In policy terms, the aim should be to devise consistent approaches which support the development of stronger and more explicit employment/education links. In principle, this will be achieved most effectively and comprehensively where industry standards are clearly identified in the context of a competency-based system.

While the development of explicit competency standards naturally forms part of the overall award restructuring process, it can proceed quite independently of that process. Specification of standards for an industry sector at the lower employment levels and implementation of corresponding developments in education and training programs can be achieved without necessarily establishing a full career path and skill ladder for that industry sector. Even in a deregulated labour market, the specification of entry-level standards would be desirable to clarify pathways for young people, to encourage appropriate levels of education and training, and to provide guidance to educators.

In its submission to the review, the ACTU provided a diagram showing the potential integration of pathways through school, structured training and work, using the example of the Metals Industry. This diagram is reproduced here as Figure 5.1.

The diagram shows three principal pathways for achieving Year 12 and further education/training levels:

- school;
- structured training; and
- work.

The 'school pathway' leads directly to Year 12 and education beyond (higher education and TAFE). It also intersects with structured off-the-job training, for example, through joint school/TAFE programs to achieve part vocational qualifications.

The 'structured education and training pathway' may involve:

- off-the-job (institution based) education and training;
- on-the-job education and training (structured training at the enterprise);
- active labour market training programs; and
- integrated on/off-the-job education and training such as apprenticeships.

This pathway may intersect with other school and work pathways.

The 'work pathway' can lead to the achievement of occupational competencies, but in general must intersect with the structured training pathway to achieve certified outcomes within the formal education and training systems.

The interrelationship between work and education/training is demonstrated by the vertical line in the middle of the diagram. It is the combination of work and structured education and training which leads to the achievement of competence levels as defined by the NTB and to a given industrial award classification (thus integrating all the elements into one system). The underlying assumption is that the necessary standard of competence at any

given level cannot be achieved without some work experience (although this may vary from competency to competency).

For example, an individual who takes structured training to obtain an advanced certificate in combination with relevant work experience would achieve NTB competence Level 5 and would be classified at C5 in the new metals award. The same person who obtained Year 12 at school and pursued an advanced certificate at a TAFE institution would achieve a lower NTB competence level and award classification until an appropriate period of work experience had been completed.

The diagram also assumes a completely articulated system between education and training in which advanced standing or an increased level of credit is awarded progressively for appropriate school programs toward TAFE courses and for all TAFE courses (and equivalent) towards a higher education award. The NTB believes that at least 50 per cent of the work force will be covered by NTB-endorsed standards by the end of 1992, and at least 90 per cent of the work force and the bulk of occupations will be covered by mid-1994. As coverage expands it will become possible to develop education, training and employment linkages in a systematic way and develop specifications for the integration of the various pathways relevant to each occupation or industry sector.

As noted above, the Committee identified some aspects of the Australian Standards Framework which warrant further attention. A first issue relates to the level of community and industry awareness of the NTB and its work. During the consultations it became clear that many groups were unaware of the NTB or did not have a clear understanding of its purpose or significance. In some ways this is understandable given the relatively brief period since its establishment. However, the level of understanding seemed surprisingly low given that the Australian Standards Framework was developed through a process of extensive consultation. General understanding of the Framework will be important in establishing the clearer, more consistent linkages between education and training and the world of work envisaged by the Committee. It is important that efforts be extended to improve understanding of its purpose and significance, in both industry and the education and training community. In this context, the Committee noted the intention to conduct a series of workshops around Australia commencing in September 1991. The NTB should continue and, where possible, increase its public awareness and consultative activities in all States and Territories, involving business, unions, educators and trainers from each education/training sector, including schools and higher education. As mentioned in Chapter 4, one way of achieving greater awareness would be through reissuing its guidelines in simpler language.

#### **The Committee recommends that:**

**The NTB should promote a wider knowledge of the concept of competency standards, including by reissuing its *National Competency Standards Policy and Guidelines* in a more accessible, plain English version.**

A second issue relates to the formulation of the levels in the Australian Standards Framework, especially Level 1, and the way in which education and training qualifications can best be related to it. As illustrated in the ACTU's pathways diagram (see Figure 5.1), the integration of education and training pathways with employment suggests that an NTB Level 1 standard in

POST COMPULSORY  
EDUCATION AND TRAINING  
FRAMEWORK

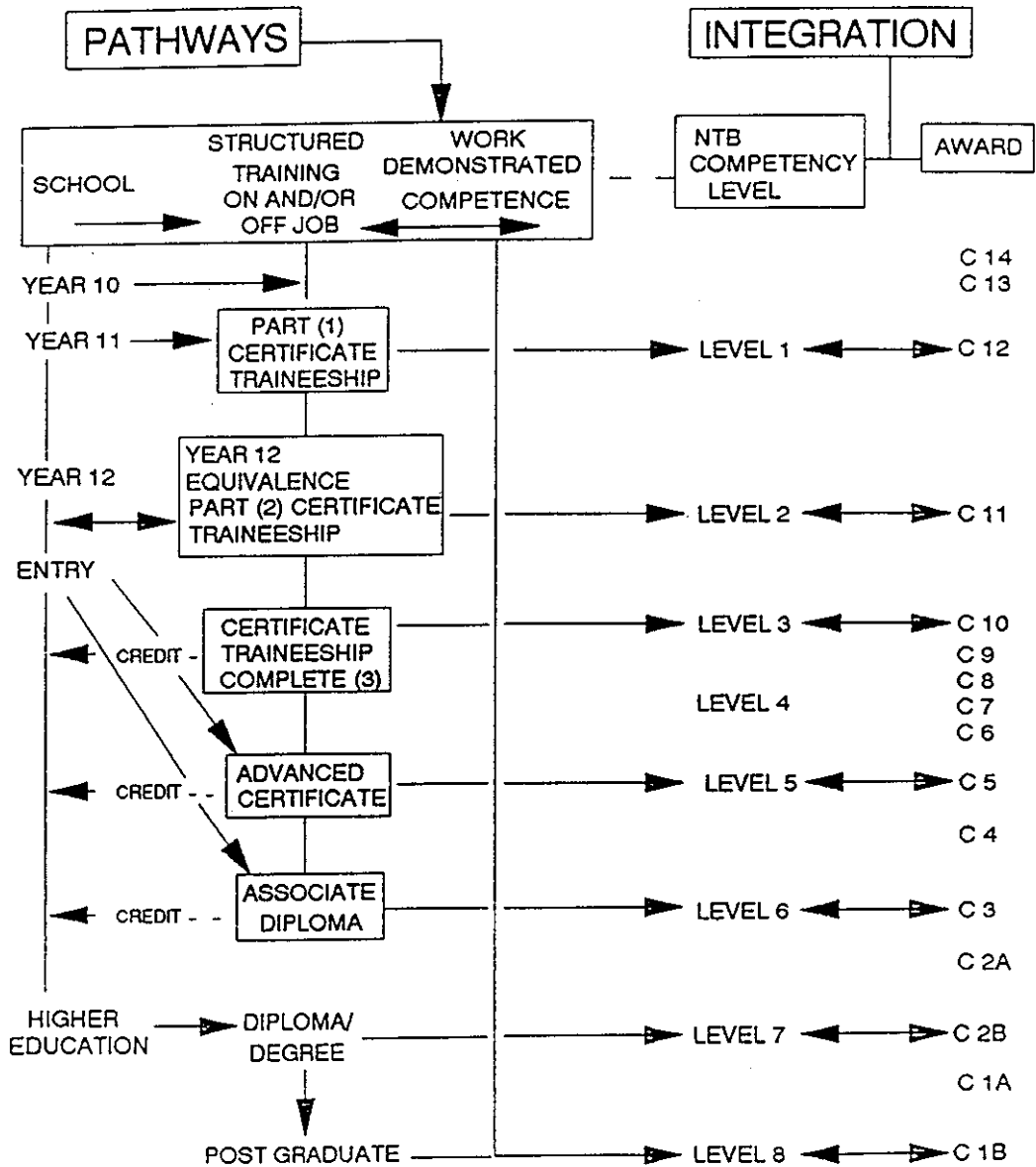


FIGURE 5.1

any given occupation should be achieved by a young person who has completed Year 10 or 11 and has received some relevant structured training or work experience. However, the Level 1 concept was not formulated with this sort of classification in mind. In a letter to the Committee, the Chief Executive of the NTB, Mr Alan Godfrey, stressed that Level 1 is not an entry level into the workplace. It was formulated to provide the bottom rung of a career ladder for people already in, or returning to, the work force with very low levels of skill. Accordingly, the description given in the NTB policy statement is of a lower level of competence than would be expected of school leavers who had received some structured training or work experience:

Level 1: The person has an established work orientation, and the knowledge and skills required to perform routine, predictable, repetitive and proceduralised tasks, involving very limited theoretical knowledge and motor skills, and under close supervision.

If the Australian Standards Frameworks is to provide a link between education, training and the world of work as envisaged by the Committee, then the formulation of the lower levels, especially Level 1, will need to be reconsidered in a new light, perhaps as a more developmental stage of skill formation.

It will be important to clarify the way in which competencies acquired through post-compulsory education and training should relate to industry standards set against the Australian Standards Framework. This will require further consideration and discussion, especially in the context of the development of a new entry-level training system. Part of this process should be a review of the general formulation of the Australian Standards Framework.

#### **The Committee recommends that:**

**The NTB review its generic formulation of the Australian Standards Framework, especially Levels 1 and 2, in consultation with relevant education and training authorities having regard to the appropriate integration of education, training and employment pathways.**

A final issue raised by some members of the Committee relates to the possible risk that establishment of competency standards may introduce undesirable rigidities and a focus on minimum standards rather than maximum performance. These concerns were strongest in relation to the more diverse and dynamic industry sectors where there is a wide and flexible set of responsibilities for employees even at lower levels and where there is rapid technological and organisational change. The NTB is already sensitive to such concerns, for example stating in its Policy and Guidelines that:

*Flexibility is required to accommodate specific industry and enterprise characteristics and necessary performance outcomes. Occupations can have a core of skills which are common across industries or regions but require industry or enterprise specific components. Flexibility is also critical to enabling standards to evolve as technology, work organisation and market structures change (NTB Policy, p. 6).*

Ultimately this is an issue which must be resolved in practice.

The Committee does not believe that these concerns negate the potential value or importance of the NTB's work. The concerns arise principally from the early stage of evolution of the concept and practice of competency-based approaches and from uncertainty about their applicability in some industry settings.

#### **5.10 Strengthening Links Between Education and Training Pathways**

The linkages between pathways through post-compulsory education and training can be conveniently divided into three sets:

- school to higher education;
- school to TAFE/training; and
- between and within TAFE/training and higher education.

Of these, the links between school and higher education are the most firmly established and probably best understood in the community. In the other two cases, while substantial progress has been made in recent years in strengthening and clarifying links, there remain significant areas which require further development. The Committee therefore focused its attention principally on those areas.

##### ***School to TAFE/Training***

All States and Territories have recognised the need for the senior secondary curriculum to include programs which lead to a wide range of post-school options. This has led to a closer examination of the school/TAFE interface which offers the potential to develop a greater variety of programs not available in either schools or TAFE alone. Many innovative arrangements have been developed, especially at the local level, to take advantage of this potential.

The best practice amongst such arrangements enables students to receive a school credential, which at Year 12 level is recognised for entry into higher education, and which provides significant credit or advanced standing in one or more TAFE courses. Examples cited in *What Works: Improving School/TAFE Links* (AEC 1990) include:

- mathematics options recognised for credit toward the Year 12 school certificate and meeting the requirements of the TAFE trades maths course;
- a student program in clothing and craft involving subjects recognised and accredited by both the TAFE and secondary sector, providing preferred entry into the relevant TAFE certificate course and counting toward Year 12 within the school system;
- a joint school/TAFE/industry devised course involving part school, part TAFE study in Year 11, providing exemption from Stage 1 of the TAFE automotive trade course; and
- structuring of programs in Year 11 and 12 at school to provide a Year 12 certificate and special entry to an associate diploma course in TAFE, the first year of which (if successfully completed) is accepted as equivalent to the first year of a corresponding degree course in a higher education institution.

The principal barriers to the development of more comprehensive school/TAFE credit transfer and articulation arrangements seem to arise from a lack of understanding and cooperation between school and TAFE

educators, for example in curriculum design; 'demarcation disputes' over which sector should pay, and from rigidities in regulations or procedures often designed for some other purpose. The Committee believes that the development of comprehensive arrangements must be encouraged and facilitated at a systemic level so that local area arrangements are supported and given much wider applicability.

**The Committee recommends that:**

**States and Territories review their policies and practices at the school/TAFE interface with a view to maximising credit transfer and articulation between the sectors. Policy and practice should involve:**

- **the establishment of formal advanced standing arrangements and the encouragement of local initiatives;**
- **the removal of unnecessary impediments to cooperation;**
- **the extension of local agreements across systems;**
- **two-way recognition so that school students are granted credit in TAFE for appropriate subjects completed as part of the senior school certificate and students returning to senior secondary studies are granted credit if they have undertaken an appropriate TAFE course;**
- **the recognition of advanced standing on a provisional basis where the degree of prior learning is not clear, subject to subsequent achievement of the required outcomes;**
- **the cooperative development and dissemination of information about school/TAFE pathways and credit transfer arrangements to students before the end of their compulsory education, and also to parents, career advisers and school and TAFE teachers; and**
- **means of reporting progress at the national level.**

The Committee also believes that there are opportunities to expand the application of school/TAFE credit transfer arrangements across States. For example, it should be possible to establish some ground rules whereby credit recognised in one TAFE or school system is given equal recognition in all others.

The Committee notes that, given the moves in the TAFE/training sector toward competency-based training, enhanced schools/TAFE credit transfer will be partly dependent on the vocational elements of school curricula also being developed and assessed on a competency basis. An essential underpinning for enhanced credit transfer and articulation is greater school/TAFE cooperation in curriculum design. This issue was examined in greater detail in Chapter 4.

An important benefit of improved schools/TAFE credit transfer arrangements is the development and clarification of education and training pathways. To be most effective in this way, the arrangements must be easily accessible and must be well publicised and understood by students, parents, career advisers and school and TAFE teachers. The Committee believes that a significantly greater cooperative effort is needed in the development and dissemination of information of this type. Perhaps the most significant single step which could be taken to improve school/TAFE links would be to improve the knowledge of TAFE amongst school teachers. This issue is picked up in greater detail in Chapter 6.

### ***Between and Within TAFE/Training and Higher Education***

Credit transfer between and within TAFE and higher education institutions is by no means a new issue. The Universities Commission established a Committee on Open University in 1974 and subsequently recommended (unsuccessfully) the establishment of a National Institute of Open Tertiary Education:

*to collaborate with existing and future tertiary institutions in establishing procedures for the transfer of students between institutions and the acceptance of credit among institutions, and to arrange for the publication of information and the provision of advice to students in that connection* (Universities Commission, 1975:84).

More recently, the TAFE National Centre for Research and Development in 1985 published a study on *The Articulation of TAFE, Middle-level and Higher Education Courses in Australia*. In 1987 the Commonwealth Tertiary Education Commission released the case study *Great Expectations: A Study of Cross-Sectoral Transfer from TAFE to Higher Education in Western Australia*. The Commonwealth has also supported several projects related to TAFE/higher education credit transfer under the Department of Employment, Education and Training's Education and Investigation Program.

These issues have received even more extensive examination in the last three years. In its reports, *Higher Education: A Policy Statement* (the White Paper) and *TAFE 1989: Commonwealth Programs and Priorities*, the Commonwealth Government strongly emphasised the need for improved credit transfer arrangements within and between the higher education and TAFE sectors. Prior to the release of the White Paper the Australian Vice-Chancellors' Committee and the Australian Committee of Directors and Principals had developed and released a series of guidelines for credit transfer. In August 1989, the National Board of Employment, Education and Training (NBEET) released *Credit Transfer: A Discussion Paper* following a joint DEET/NBEET study of credit transfer practices in higher education and TAFE, including cross-sectoral provision. The discussion paper outlined a range of measures which might be taken by institutions and State and Commonwealth authorities to bring about a national system of credit transfer within three years.

Three other NBEET reports in 1990 examined aspects of the credit transfer issue: *Higher Education Courses and Graduate Studies*, *The Recognition of Vocational Training and Learning*, and *Open Learning*. NBEET has an ongoing Working Party on credit transfer with a reference from the Commonwealth Minister to provide a national overview, monitor and report on progress for a period of three years.

There is a range of other national groups currently active to varying degrees in the field of credit transfer at TAFE and higher education levels including:

- NBEET Working Party on Skills Formation and Recognition;
- VEETAC Working Party on a Framework for National Consistency in Recognition of Training;
- National Training Board; and
- Australian Vice-Chancellors' Committee.

At the State level the Committee is aware of agreements on credit transfer negotiated so far between TAFE and six of the nine universities in NSW, and of the project under way in South Australia for a computer-based system of credit transfer, including recognition of previous TAFE study for entry to

higher education. There are also several credit transfer arrangements which have been developed individually between higher education institutions and local TAFE colleges.

One of the most innovative recent initiatives has been the development of the concept of a Credit Transfer Authority. The concept is for a national agency which 'would be a credit bank with the aim of facilitating credit transfer within higher education and industry'. 'Credit bank' or credit accumulation and transfer schemes exist in Canada and Britain. The proponents of the Australian scheme propose that, if established:

*the agency will assess students' qualifications and prior studies, issue certificates and transcripts, and advise on and accredit courses offered by bodies outside the Unified National System (of higher education) and TAFE systems. The aim will be to have the agency's judgments recognized as documenting a common and readily accepted standard, though individual institutions will naturally retain responsibility for assessing the implications of the agency's certificates for admission to the institution's courses. Where necessary and appropriate, the agency may award a degree in cases where teaching institutions may find it difficult to do so.*

The Credit Transfer Authority concept has been developed to pilot testing stage by a team from Monash University and the University of New England, supported by an NBEET innovative project grant.

The extraordinary level of interest and activity in different forums around the country underlines the degree of widespread and growing support for reform to credit transfer arrangements, especially within and between higher education and TAFE.

Pathways can only be considered adequate if as a result of achieving genuine quality standards there is opportunity to attract recognition of prior learning for credit transfer to higher levels of learning and competence.

There is general acceptance of the benefits which more effective credit transfer and recognition arrangements could provide:

- increased educational opportunity
  - by making it easier for individuals to pursue a wider range of courses without unnecessary barriers to entry and unnecessary repetition, time-wasting and cost;
  - by encouraging and facilitating entry or re-entry for those with unconventional backgrounds, including competencies developed on the job;
  - by effectively increasing the range of available and relevant education by allowing individuals to 'assemble' a recognised qualification from a range of different programs in different times and places;
- better educational choice and clearer pathways
  - students should know in advance the credit they will receive on moving from one course or institution to another;
  - appropriate recognition of TAFE courses for advanced standing in higher education courses is important in raising the status and value of TAFE pathways;
- greater equity of treatment for students
  - students with similar competencies should receive similar credit into similar courses; and



- greater efficiency
  - by saving the substantial academic and administrative time currently consumed by case-by-case decision making;
  - by saving students' time and cost through removal of unnecessary requirements to repeat or pursue study leading to competencies already attained;
  - by reducing unnecessary course offerings in some instances;
  - through 'spin off' benefits of improved linkages across and within sectors such as the sharing of facilities, personnel exchange, etc.

The discussion paper on the Credit Transfer Authority identified that, in summary, simple and straightforward credit transfer:

*will assist in incorporating many forms and sources of education, training, and experience into an increasingly powerful agency for enhancing the life-chances of Australians.*

This observation explains why credit transfer issues at this level have become increasingly important in the context of award restructuring. Award restructuring is about the removal of unnecessary barriers and providing flexibility and incentive for career development through the progressive acquisition and updating of skills. The award restructuring process therefore produces pressures for improved credit transfer and bridging arrangements, greater articulation of training and the recognition of training taken and skills and knowledge acquired outside the formal system of education and training (NBEET, *Strategies for Credit Transfer*, December 1990: 2)

There is no doubt that this range of activities and pressures for change have improved credit transfer arrangements significantly, especially at the local institutional level. However, it appears to the Committee that progress has not been commensurate with the level of activity and that important issues of change at a systemic level have not been adequately confronted.

There has certainly been a move away from the proposals in the August 1989 NBEET discussion paper for a national system of credit transfer within three years. NBEET itself has effectively adopted a 'watching brief' and is intending to conduct further investigations and monitoring. This contrasts with the view expressed in the discussion paper by the consultant on credit transfer on higher education that:

*there appears to be little need for further collection of data or pilot programs. A clear enough picture has emerged from these studies, and it is time to put forward proposals for action. The picture from these studies is of much activity by institutions at present, but with each institution acting unilaterally, making its own arrangements without caring for any consistency within a sector or State, let alone the nation (p. 6).*

This may overstate the position, but does highlight a concern that the progress which is being made is random and inconsistent, at least in the higher education sector and between higher education and TAFE. For example, in its most recent discussion paper *TAFE in the 1990s: Developing Australia's Skills*, the ESFC notes that 'despite many useful initiatives (between higher education and TAFE institutions)...credit transfer arrangements are neither systemic nor widespread'.

Recent developments in the TAFE and training sector, in particular the establishment of the VEETAC Working Party on a Framework for National Consistency in Recognition of Training, suggest that national consistency will

be achieved within that sector. The apparent lack of an equal determination to achieve a similar outcome in higher education and between higher education and TAFE reflects the reasonable desire of higher education institutions to preserve their own autonomy. However, the possibility of establishing comprehensive credit transfer arrangements without compromising institutional autonomy has been effectively demonstrated by the establishment in several universities of general policies on credit for TAFE awards and for awards of all Australian higher education institutions. The full potential benefits of improved credit transfer will only be realised if all higher education institutions move in this direction and participate within a nationally consistent system.

The Committee was therefore concerned to note that the proposal to pilot the Credit Transfer Authority has been 'put on hold' by the AVCC. In the Committee's view, the concept of a national agency operated by representatives of both TAFE and higher education sectors presents an appropriate balance between the desire for institutional autonomy and the need for national applicability. It could also provide an appropriate vehicle for developing effective approaches in difficult areas, such as the accreditation of prior learning.

The Committee understands that the AVCC intends to conduct a further examination of the credit transfer arrangements already in place in individual institutions, rather than proceed with a pilot of a Credit Transfer Authority approach in the fields of business and computing science. These fields had been selected because they are areas which are important for student mobility, involved significant numbers of entrants with advanced practical experience, and are offered in both TAFE and higher education institutions.

The Committee believes that it would be unfortunate if the momentum to establish a national agency were to be lost. The Commonwealth Government, in conjunction with TAFE systems and any interested higher educational institutions, should continue to support the further development and piloting of the Credit Transfer Authority concept over the coming year. The results of that pilot, plus the further AVCC study, could then inform the establishment of an appropriate national agency which should be controlled jointly by the TAFE and higher education sectors with appropriate involvement of private providers. Governments should not need to be actively involved in the ongoing operations of the agency provided that institutional support and commitment is forthcoming.

To encourage the establishment of an appropriate agency the Commonwealth Government should offer significant seeding funds to be made available if appropriate arrangements are established within a fixed time frame, for example by 1 January 1992.

The Commonwealth should also consider the establishment of minimum targets to be achieved either at individual institutional or State level for the number of students granted advanced standing with at least a specified proportion of credit on movement into higher education from TAFE or unconventional backgrounds. Any additional places above the minimum target level should be funded separately and additionally to an institution's base grant so as not to add to demand pressures. The minimum targets should be set close to, but slightly above current institutional performance.

The Committee does not underestimate the difficulties at institutional level of the implementation of improved credit transfer arrangements between and

within TAFE and higher education, nor does it overestimate the potential benefits. Credit transfer is not an end in itself and should not be pursued to the point of distorting any fundamental purpose or structure of a program simply in order to enhance the degree of credit transferable to some other program which not all students may wish to take.

Credit transfer is also only one of a range of linkages which need to be strengthened between TAFE and higher education. The Committee believes that it is essential to forge much closer links between the two sectors in terms of:

- cooperation on curriculum design;
- full articulation of courses; and
- provision of bridging arrangements to facilitate access or advanced standing for TAFE students into courses at higher education institutions.

**The Committee recommends that:**

**That the Commonwealth Government should:**

- in conjunction with TAFE systems and higher education institutions continue to support the piloting of the Credit Transfer Authority with a view to the early establishment of a national agency;
- offer significant seeding funds if significant progress has occurred within a specified time frame—say 1 January 1992;
- consider setting minimum targets for the level of credit transfers at institutional or State level.

### **5.11 Issues Requiring Further Attention**

The extensive debates on credit transfer have focused strongly on arrangements within TAFE, within higher education, from schools to TAFE, and from TAFE to higher education. Far less attention has been directed to credit transfer from schools into higher education and from higher education into TAFE.

The Committee believes that it is possible and desirable to extend the recognition given by higher education institutions to high level studies and achievements at school. In the first instance, NBEET should be asked to investigate and provide advice on the extent to which reform in this area may be possible and useful.

The recognition in TAFE of higher education study also requires further attention. This is important not only for those who wish to enter TAFE after partial completion of a higher education course, but also for higher education graduates wishing to take a TAFE program as additional preparation for employment. The Committee believes that these pathways are currently under-utilised and under-emphasised. Consideration of higher education to TAFE credit transfer would assist in identifying and highlighting these pathways as well as making them more accessible. This matter should also be referred to NBEET in the first instance for further development of the issues.

### **5.12 Recognition of Competencies in Higher Education**

As noted above, it is expected that a nationally consistent approach to the recognition of training will be achieved in the near future, facilitated by the work of VEETAC. Such an approach has been strengthened by the move toward competency-based assessment and certification throughout the TAFE and training system. In any system, once competency standards are established, the focus shifts away from the content and process of the educational program to the competency standards achieved. Credit transfer therefore becomes a matter of testing and recognising competencies, not the detailed educational experiences of the individual.

Higher education institutions have an internally inconsistent approach in this respect. Higher level courses such as Masters degrees can often be entered by people with appropriate employment backgrounds even if they do not have a bachelor's degree, that is, entry to the Masters program is granted on the basis of the demonstrated competencies of the individual. The same individual, however, would often not be given much or even any credit toward the bachelor's program which is the normal prerequisite for the Masters course.

The Committee believes that the higher education sector must give urgent attention to the development of competency-based approaches to entry selection and credit transfer. This will be required to deal effectively with the demand from older students associated with award restructuring and to establish consistent inter-sectoral relationships with TAFE as it moves progressively to competency-based assessment and certification. NBEET and the AVCC could play catalytic roles in leading discussion on this issue.

**The Committee recommends that:**

**NBEET and the AVCC give urgent attention to the development of competency based approaches to university entry selection and credit transfer.**

### **5.13 Credentials**

The terms of reference raise the issue of 'national coherence in entry and exit points between education, training and employment'. This draws attention to the nature of the credentials issued on exit from education and training and the degree to which they are coherent nationally.

#### ***School Credentials***

In Chapter 4 the Committee recommends that some Key Competencies be reported in a nationally consistent way in Years 10 and 12. If this recommendation is accepted it will establish an important dimension of consistency in school credentialing around the country. The increasing level of cooperative work on school curricula, especially the curriculum mapping and profiling work under the AEC auspices, also suggests movement toward increased commonality across States and Territories in the context of school credentials. The development of national TAFE curricula to which school vocational programs will be linked is likely to add a further element of 'national coherence' to school credentials.

The Committee believes that the logic of such developments and the

Committee's recommendations will lead inevitably to sufficient commonality between States and Territories to allow consistent reporting of student achievement against nationally established benchmarks. The greater commonality between school systems may even allow the establishment of a single national school certificate at the completion of Year 12 if this were considered desirable. In submissions and during the consultations, employer groups emphasised the potential benefits they see in a single certificate in relation to improved employer and community understanding. The Committee believes that the possible establishment of such a certificate should be kept under review.

### ***TAFE/Training Credentials***

A range of issues in the TAFE and private training sectors suggests a need to review the system of vocational qualifications. These issues include:

- the increasing number of private providers offering an increasing range of courses;
- the development of competency standards and the need to relate vocational qualifications directly to NTB standards;
- varying levels of public recognition and acceptance of different credentials;
- the potential benefits of adopting credentials with greater international recognition.

The VEETAC Working Party on a National Framework for the Recognition of Training is addressing some of these issues. MOVEET should extend the terms of reference of this Working Party to conduct a review of the system of vocational qualifications with a view to establishing the best possible set of national vocational credentials for the requirements of the developing training market and the competency based system. The Working Party should also consider the relationship between the set of national vocational credentials and school credentials.

### **The Committee recommends that:**

**MOVEET should extend the terms of reference of the Working Party on a National Framework for the Recognition of Training to include a review of the system of vocational qualifications and its relationship with school and higher education credentials.**

## **5.14 Principles for a Comprehensive and Effective System of Post-compulsory Education and Training Pathways**

The considerations set out in this Chapter suggest that in principle the most effective system of pathways will be one in which:

- a complete set of pathways is available which provides sufficient opportunities for young people to take post-compulsory education and training in a comprehensive range of areas;
- access to high quality education and training is guaranteed for all young people for twelve years;
- competency frameworks are established for both Key Competencies and occupational competencies, and industry skills standards are identified against those frameworks;

- entry-level training arrangements and, when relevant, higher education programs relate clearly and effectively to those standards;
- relevant school curricula programs mesh with those standards and with corresponding TAFE programs;
- the linkages and pathways between school, TAFE/entry-level training, higher education and employment are clearly identified, comprehensive and consistent;
- systems are very flexible, allowing young people to achieve the necessary standards through a range of different education, training and employment combinations;
- recovery programs are available for those wishing to return after a break from mainstream education and training; and
- young people have access to the best possible information on pathways and student programs.

## **Chapter 6**

# **Roles and Responsibilities for Delivery of Post-compulsory Education and Training**

## **6.1 Introduction**

About two out of every three young people now complete senior secondary schooling. Only ten years ago it was just one in three. Over roughly the same period the role of upper secondary schooling has been progressively recast to encompass a broader range of activities. These broader activities have been characterised as the introduction of a greater vocational orientation into the traditional general education offered by schools.

At the same time there has been a renewed focus on the expansion of the skills base of the work force as a key component of overall strategies to improve the nation's productivity and competitiveness. Governments and industry have identified the need for continuing improvements in the quality of goods and services, innovation, effective application of technology, and labour efficiency and production systems. Advances in each of these areas will be conditioned by the range, quality and depth of vocational competencies at all levels of the work force. This draws attention to the role of the nation's vocational education and training system, both private providers and TAFE, and the extent to which the system is able to respond to these imperatives.

Similar themes feature in the reforms to higher education, matched with concerns to enhance the nation's cultural, artistic and intellectual wealth. The higher education sector has been called on to play a role in an agenda for reform which spans all elements of the education and training system.

Industry, too, is confronting major changes to its role in relation to education and training. Award and industry restructuring and workplace reform are part of a changing environment which involves an increasing role for industry in education and training, both in the workplace and through interaction with educational institutions.

Finally, an increasingly important role in education and training is played by community providers, especially in relation to the groups most at risk, who are also often most averse to institutional forms of provision.

This chapter examines the changing roles and responsibilities of industry and the different education and training providers as they relate to post-compulsory education and training. It also highlights some key issues for the delivery of education and training at the post-compulsory level and identifies principles arising from the Committee's examination of best practice around the country.

## **Overview of Roles and Responsibilities**

## **6.2 Industry**

While governments have the major role to play in the provision of education during the compulsory years, industry has an increasing responsibility through the post-compulsory period as education and training becomes more vocationally related and ultimately enterprise specific. For example, *Skills for*

Australia argued that:

*beyond (the basic education and training system), it is primarily the responsibility of employers and workers themselves to develop the skills required for effective industrial performance and individual development. The rewards to higher level performance in this area have both a national and a private, individual dimension. Moreover, skills so developed as an integral part of the productive process will be the more relevant, responsive and up-to-date.*

All elements of industry should be involved in and understand the contemporary requirements of the education process: employers, professional associations, unions and individual workers each have a role to play.

Qualitative enhancements to the education process depend on the effective interaction of all of these players from their distinctive perspectives.

The Deveson Committee noted that both employers and unions broadly accept that much of the enterprise-specific training which arises under award restructuring will be done on-the-job or in-house and that employers will meet the cost. That Committee advised that this is likely to occur in one of three ways, or in combination:

- enterprises will deliver their own enterprise-based training program;
- enterprises will purchase training products from external training providers, including but not exclusively TAFE; and
- enterprises will meet the costs (fee, charges and materials) of individual workers attending external training courses at TAFE and elsewhere, where this is agreed at the enterprise level and/or required by restructured awards (Deveson, p. 41).

In addition to this expanding role, there is a significant responsibility for industry to be closely involved with public providers of education and training. This role has also been expanding, and industry links with all education and training sectors are becoming increasingly diverse, ranging from cooperative involvement in research and development, through contributions to curriculum development, to provision of work experience opportunities for school students.

A further aspect of industry's role is in the provision of training opportunities for young people undertaking entry-level training through apprenticeships and related programs. This aspect of industry's role is also likely to increase if the entry-level training system is revised and expanded as envisaged by the Committee. Issues relating to the enhancement of industry's role are taken up further in a later section.

### **6.3 Private Training Providers**

Governments have consciously supported a significant role for private training providers by endorsing the concept of an open training market in which there will be a range of provision, in order to ensure for individuals:

- greater choice;
- greater flexibility in access; and
- more equitable outcomes, irrespective of where the service was acquired.

The training market will include:

- TAFE and higher education institutions;
- non-government training providers (including non-government business



- colleges, private correspondence schools and private tertiary institutions);
- community and voluntary groups;
- employers who offer training to their own employees and to other organisations on a host basis;
- professional organisations; and
- Industry Training Advisory Bodies.

A number of VEETAC working parties are now addressing issues which are central to the development of more efficient and effective training markets. Of particular importance is the Working Party on the Recognition of Training. This work has involved detailed consideration of issues involving public and private providers in relation to accreditation, recognition of training providers and promotion of credit transfer arrangements. The establishment of consistent standards will facilitate the portability of qualifications, allow for credit transfer and will build more effective pathways between different types and levels of education and training providers.

As demand for training services expands, the role for private providers can also be expected to expand, filling niche opportunities and competing successfully with TAFE for industry support. This expansion should be encouraged and supported, but must occur in a controlled way which ensures the quality of educational offerings. In its submission to the Committee, the recently formed Australian Council for Private Education and Training endorsed a process of planned, orderly growth to ensure that students' interests are safeguarded.

#### **6.4 Community Providers**

Community agencies include government-funded SkillShare groups, councils of adult education, welfare agencies, voluntary community groups, neighbourhood houses, church groups, youth organisations and so on. These agencies play an important role in the delivery of education and training to young people in metropolitan areas and particularly in rural and isolated regions. The Committee felt that community organisations have an especially important role in relation to the 'recovery' of those who have left the education, training and employment mainstream, through programs in basic skills, self esteem and personal development which are essential prerequisites to success in other pathways.

The strong local identity of community providers and their capacity to provide education and training outside of an institutional setting gives them a significant role in the management and delivery of programs of both vocational and general education and training to people who would otherwise not participate. This role can include delivery of senior school certificate programs to adults and basic vocational training which leads on to mainstream qualifications.

There is increasing interest in the potential role of the adult and community education sector in the context of the much broader training agenda associated with award restructuring and increased skill formation generally. There are reviews currently under way for Department of Employment, Education and Training and the Senate Standing Committee on Employment, Education and Training. It seems likely that community providers will play an increasingly important role as part of the open training market, especially

for people seeking to re-enter the work force. This is an area which warrants further attention by governments and relevant agencies, particularly as it relates to competency standards.

## **6.5 Higher Education**

Higher education offers the principal pathway into most of the professions as well as providing more general opportunities for the acquisition of higher level learning in a wide range of fields. It plays a major role in the preservation and advancement of knowledge through basic and applied research.

Higher education institutions' most significant role in the immediate post-school period is in the delivery of undergraduate programs to school leavers, a role which has been increasing as Year 12 retention has risen and transfer rates from school to higher education have been maintained. At the same time, universities have been playing an increasingly important role in providing educational opportunities for older adults, many of whom failed initially to gain a place as school leavers.

Despite current high levels of unmet demand, the Committee believes that higher education institutions have a responsibility to provide access via pathways other than the traditional route directly from successful completion of Year 12. Of particular importance are effective and comprehensive articulation arrangements with TAFE, and special entry provisions for disadvantaged groups.

## **6.6 TAFE**

TAFE's role is substantially determined by factors beyond the immediate post-compulsory years. It must be remembered that 15-19-year-olds represent only a small proportion of TAFE's total student population. Nonetheless, the character and mission of TAFE is strongly influenced by its responsibilities for providing young people with the initial vocational qualifications required for many occupations.

TAFE has become a central component of strategies to develop a well-trained and flexible work force. Several broad and interrelated sets of policy have been developed in pursuit of this goal, of which three have particular implications for the role of TAFE. First is the set of policies designed to encourage greater investment by industry in training and skilling generally, for example through the linking of income policy with productivity and with training and retraining of the work force in industry (that is, award restructuring). Second is the general encouragement of young people to participate in post-compulsory education and training. Third is the removal of barriers which restrict the effective participation of some groups in post-compulsory education and training and represent an economic cost through wasted human potential as well as social inequity.

These three complementary aspects of policy correspond closely to the complementary key aspects of TAFE's role:

- as the public provider most directly responsive to industry and best equipped to provide training in a flexible way to meet industry standards
- TAFE plays this role as part a wider training system involving private providers and industry itself;

- as the largest, most geographically and educationally accessible provider of post-school education and the most important provider of entry-level training; and
- as the provider of the greatest range of post-compulsory courses for groups disadvantaged in the labour market and for adults seeking to upgrade basic education or develop additional skills.

The Committee believes that, because of their complementary nature and their centrality to overall policy, these three aspects of TAFE's role should be maintained. TAFE must continue to provide high quality entry-level training, to service industry and enterprise training needs, and to ensure equitable access to vocational training.

For 15-19-year-olds, TAFE has particular responsibility for the off-the-job component of entry-level training programs. These programs are characterised by work-based training, usually under indenture or contractual arrangements. The off-the-job curricula should incorporate specific vocational elements which are structured and delivered to industry standards, as well as general vocational elements as necessary to enable trainees to acquire the Key Competencies to appropriate standards. The curriculum and assessment processes as a whole should be competency-based.

TAFE also has specific responsibilities for this age group for trade and vocational pre-employment programs which articulate with mainstream vocational training courses, provide substantial work/practical experience and are recognised for employment.

TAFE pathways for young people should, as far as possible, link into higher level education and training programs both in TAFE and higher education institutions.

Issues relating to the clarification and enhancement of the role of TAFE are taken up further in a later section.

## **6.7 Schools (Post-compulsory Level)**

Submissions received by the Committee revealed a high degree of commonality in views on the broad role of schools in the context of increasing retention rates. This common view is that, in general:

- schools must retain their traditional role of providing an education for all young people which develops their talents and capacities to full potential;
- given increasing retention, Years 11 and 12 must be made a meaningful and relevant experience for a broader, more heterogeneous student population, amongst whom there is a proportion who are disenchanted with formal education; and
- this reinforces the need for quality education which integrates both general and vocational elements in Years 11 and 12, and which incorporates the opportunity to pursue studies in broadly conceived vocations, as far as possible without limiting options for future studies in higher education or TAFE.

In a joint paper to this review, six leading employer organisations argued that the principal role of schools should be to provide students not so much with narrow, occupation-specific skills but rather with:

- strong levels of competence in literacy and numeracy;

- analytical thinking and problem solving abilities;
- creative and expressive talents; and
- personal qualities or responsibility, initiative, creativity, adaptability, cooperativeness and self confidence.

(Joint paper from Australian Bankers Association, Australian Chamber of Commerce, Australian Chamber of Manufacturers, Australian Mining Industry Council, Business Council of Australia, Confederation of Australian Industry.)

Young people themselves emphasise the role of senior secondary school in providing 'a good education' which they associate principally with basic skills (especially literacy and numeracy) and with enhanced employment prospects. Research among former Year 12 students indicates that the most highly valued aspects of Year 12 study in retrospect were:

- communication skills;
- capacity to work both independently and collegially; and
- capacity to organise time and plan tasks.

(McKenzie and Alford, 1990.)

The Committee considers that schools should continue to be regarded as institutions which directly specialise in general education, which, in the terms set out in Chapter 1, must increasingly include general vocational education. They should offer a comprehensive curriculum which opens up a wide range of post-school pathways, including both higher education and TAFE. This means that the curriculum should not be dominated by preparation for any one post-school option.

There is a policy question as to how early young people should be encouraged and enabled to follow vocationally specific pathways. This is a choice that has to be made, taking into account the needs and aspirations of young people and the community.

When there is a policy view that substantial vocational specialisation before Year 12 should be discouraged, then there will be a greater emphasis on schools as the predominant providers of education for young people in the immediate post-compulsory years. This policy position implies that schools should offer vocationally orientated curriculum units integrated within a broader, general curriculum. In order to maximise the outcomes from these vocationally oriented units, they should be competency-based and, where standards are agreed, provide credit transfer and articulate to post-Year 12 vocational programs.

When there is a view that more substantial vocational specialisation before Year 12 is an appropriate option, there will be a greater emphasis on providing opportunities for training which directly meets industry standards. This policy orientation suggests a stronger role for TAFE for pre-Year 12 students, both through fully TAFE-based programs and through joint school-TAFE programs. It also suggests a more extensive direct role for industry in the provision of education and training opportunities to pre-Year 12 students, in conjunction with formal education and training providers, including schools.

Under either policy orientation, schools have a responsibility to enhance students' understanding and knowledge of the world of work and of post-school education and training options. This responsibility entails the organisation of work experience opportunities for all students and provision of a comprehensive program of careers education.

## **6.8 Roles of School and TAFE in the Immediate Post-compulsory Years**

The submissions received by the Committee were strongly consistent in supporting an enhancement of TAFE's role after Year 12, but varied widely in relation to the roles of schools and TAFE in the two years following Year 10. The variations reflect differences in view on the question identified above, that is, how early should young people be encouraged and enabled to follow vocationally specific pathways?

One view stressed the primary role of school-based provision and therefore a long-term objective of 100 per cent retention to Year 12 in schools (acknowledging that some young people will be engaged in part-time rather than full-time study). The strongest proponents of this approach argued that:

- it is critically important to raise the attainment levels and aspirations of all young people;
- all young people should receive a broad general education to at least Year 12 as preparation for a rapidly changing world and work force;
- vocational specialisation before Year 12 is inappropriate as it closes off options and results in streaming;
- the current strong trends towards increasing retention to Year 12 in schools indicate community support for schooling
  - twelve years of schooling is now the community expectation;
- there are presentational and policy advantages in clearly emphasising school as the primary provider up to Year 12, with TAFE and other pathways usually commencing after Year 12
  - this will enable TAFE to sharpen its focus as a provider of training for industry and send clear signals to students, teachers, parents and employers;
- a 'mixed' system with TAFE and other providers running parallel to schools after Year 10 will allow schools to relegate their responsibility for low achievers. It will also will perpetuate the historically lower status of 'technical education'; and
- the training system needs to build on the highest possible levels of school attainment if it is to achieve equal esteem with higher education.

The policy aim of this model is to emphasise the prime role of schools to Year 12 and transition to other pathways, including TAFE, thereafter.

A second view is that there are significant alternative pathways for young people outside school which provide faster access to vocationally specific training and which would be more appropriate for many, if not most, young people staying on to the end of Year 12. These alternative pathways could involve school/work combinations but would mostly be based in TAFE or other suitable training providers, in combination with on-the-job training where appropriate. The strongest proponents of this position argued that:

- the increase in school retention includes a significant proportion of young people who are remaining in school unwillingly;
- young people should be offered a variety of pathways, including strong, more directly vocational pathways, both to meet the needs of young people and to enhance the development of a more highly skilled work force
  - such pathways should allow entry into higher level professional and vocational courses in both TAFE and higher education systems

- the inclusion of more general vocational components in the existing school certificate programs will not adequately meet the needs of students not wishing to pursue academic studies;
- It is neither feasible nor cost effective for schools to offer the range and quality of alternative pathways which are necessary
  - attempting this would involve an expensive and unnecessary duplication of resources with TAFE
  - school teachers generally are not qualified to teach vocational courses to industry standards; and
- there is a need to establish more flexible attendance modes and a more adult ethos in educational institutions. This cannot easily be provided in schools given established staffing practices and the age range of students in comprehensive schools.

This view leads to the conclusion that it is more cost-effective and more appropriate to pursue a mixed model of provision whereby students have the opportunity at the end of Year 10 to choose from a range of options, including a vocational path in TAFE or with some other suitable provider. The policy aim of this model is to develop and promote TAFE, schools and other pathways to utilise a range of institutions in the two years immediately following Year 10.

The extent to which either model is pursued in practice is a question which should be confronted and resolved, not left to work itself out through the gradual accumulation of minor day-to-day decisions.

It is important that each State and Territory government resolve this policy issue in order to define more clearly the respective responsibilities of schools and TAFE in the provision of education and training for young people in the immediate post-compulsory period. Clearer definition of responsibilities will then guide decisions on appropriate delivery arrangements.

The Committee has recognised two essentially different approaches to the role of schools and TAFE in the education of young people in the immediate post-compulsory period.

**In this context, the Committee recommends that each State and Territory:**

**Define clearly the respective responsibilities of schools and TAFE in the provision of education and training for young people in the immediate post-compulsory period.**

**Define the inter-relationships expected of schools and TAFE in implementing those responsibilities.**

The Committee notes that it is appropriate to have a variety of approaches to education and training delivery provided that there is a consistent set of national competency frameworks around which curriculum and assessment are structured.

Certain institutional delivery arrangements will sit more logically with one of these policy approaches than the other. Nonetheless, in practice there will need to be considerable flexibility.

For example, in the mixed model of provision it would be most common to provide specific vocational training opportunities through TAFE or through combinations of TAFE and school or TAFE and industry. However, especially given the limited geographical availability of TAFE colleges in most States, schools in some regions may also become involved with industry or private

training providers to offer programs which provide opportunities for substantial vocational specialisation. In such circumstances it is conceivable that schools could be involved in the delivery of some forms of entry-level training.

In general, the specific nature of the physical delivery arrangements may be less significant than the nature of the programs being delivered. The types of education and training programs which are developed will be influenced by the policy orientation adopted; those programs can then be delivered by the most appropriate and economical institutional arrangements available at the local level.

There are also substantial areas of overlap between the two policy orientations which mean that many delivery practices are equally relevant to both. For example, each policy orientation incorporates an ongoing role for private and community providers and a concern to maximise access for all students, especially those from disadvantaged groups.

Under either policy orientation, the issues of more flexible attendance modes and more adult ethos in institutions are important. Even when vocational pathways in TAFE and other providers are promoted as valid alternatives to school, those young people choosing to take Years 11 and 12 at school will still seek flexible attendance options and a more adult environment. These issues are examined further below.

These considerations point to a set of principles for delivery of education and training in the immediate post-compulsory years:

- the system must effectively develop the competencies required for entry to employment;
- governments must determine their policy to the immediate post-compulsory period and must clarify the responsibilities of schools and TAFE accordingly;
- if students are encouraged to stay in school in preference to other pathways, vocational offerings in school must be of acceptable range and quality;
- if vocational pathways in TAFE or with other training providers are to be promoted as valid alternatives to school, those pathways must ensure acceptable standards in literacy, numeracy and other key competencies;
- delivery arrangements should ensure equitable access for disadvantaged groups;
- curriculum, assessment and certification arrangements should facilitate articulation into further education and training;
- arrangements should facilitate participation of community and private providers in both education and training;
- arrangements should be readily understood by the public; and
- arrangements should be cost-effective.

## **6.9 School/TAFE Delivery Models**

In the course of the Committee's consultations, young people themselves expressed strong notions about the most desirable kinds of post-compulsory education. They look forward to a more adult learning environment. Some were keen on flexible options such as combining study with employment of some kind. They would like their courses to be 'relevant', and in particular,

help them to get jobs. Teenagers also put greater emphasis on self-directed learning and expressed a preference for flexible attendance patterns.

Such preferences are consistent with the general principles followed in a number of useful overseas models of post-compulsory education and training and in a number of innovative schemes in Australia. It is clear that more convergent general and vocational education delivery arrangements would suit the needs of a large number of young people.

The following pages discuss a range of delivery options for schools and TAFE in post-compulsory education and training. A number of the recommendations of this review are intended to promote greater cooperation and integration between school and TAFE systems. The Review Committee identified a range of possible relationships between school and TAFE varying from complete separation to maximum collaboration between the systems. Table 6.1 illustrates the range of areas for collaboration between TAFE and Senior Secondary Schools.

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**Table 6.1      Areas for Effective Collaboration between TAFE  
                         and Senior Secondary Schools**

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Educational Collaboration	<ul style="list-style-type: none"> <li>• Sharing of students</li> <li>• Joint development of curriculum and assessment procedures</li> <li>• Joint or complementary certification of student achievements</li> <li>• Articulation of study programs</li> <li>• Joint accreditation of curriculum/programs</li> <li>• Cooperation in student information services</li> </ul>
Resource Collaboration	<ul style="list-style-type: none"> <li>• Shared access to specialised workshops/laboratories etc.</li> <li>• Shared access to libraries, sports facilities</li> <li>• Cross teaching</li> <li>• Colocation of separate institutions</li> </ul>

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It should be remembered that in some States, schools have taken up the provision of vocational education for students up to Year 12 through comprehensive curriculum reform. The link to TAFE in such circumstances comes principally from credit recognition for students leaving from Year 12 and going directly into TAFE courses. In these circumstances issues of school/TAFE colocation are perhaps less significant.

Bearing in mind this qualification, the following models of possible delivery options acknowledge the distinction between the different policy contexts identified above. 'Mixed' models are more appropriate in a context which encourages a mix of school and TAFE provision to give early access to specific vocational training for teenagers. 'School-Based' models sit more comfortably within a context where school retention to Year 12 is encouraged, specific vocational education is deferred until post Year 12, and general vocational education is provided mostly within the school itself.

The models reviewed below have been chosen because they emerged from an



examination of existing Australian models. The Review Committee initiated an examination of various 'case-studies' in post-compulsory education and training. A more detailed report of these cases appears in Appendix 1. A wide range of innovative arrangements were also reviewed in the AEC 1990 Report *What Works : Improving School/TAFE Links*, a few of which are reiterated here. Given the fact that the models represent existing institutional developments across a number of States there can be no question of the models being too abstract, or unsuited to Australian conditions.

The Committee acknowledges that, in evaluating delivery systems there are a number of issues which need to be examined, such as:

- resolution of certification, accreditation, moderation and assessment issues between the different providers;
- industrial issues between school and TAFE teachers;
- logistical problems related to term lengths, flexibility of hours, date of holidays, etc.;
- lack of interaction between school, TAFE and industry trainers;
- resource issues (who pays and how);
- different status of courses; and
- involvement of non-government sector.

However the Committee has not had the time nor the resources to undertake such an evaluation in relation to all the delivery examples identified here. Before extending the application of any of these examples, close evaluation of such issues would need to be undertaken by the agencies responsible.

#### **6.10 'Mixed Models'**

##### ***School students attending TAFE courses—(the Joint Secondary Schools TAFE Program)***

This model provides for TAFE courses/subjects being taught to school students by TAFE teachers. NSW has pioneered a system-wide approach to such provision through the NSW Joint Secondary Schools TAFE Program (JSST). The case studies reviewed in Appendix 1 refer to Hornsby and Glendale TAFEs in NSW. Courses are taught by TAFE teachers, mostly using TAFE facilities. The courses are drawn from established TAFE subjects which are part of major award courses. Courses are also accredited by the secondary school accreditation authority (The NSW Board of Studies).

The model has a number of advantages. Students have the opportunity to gain dual credentials from the secondary school accrediting authority and from TAFE. They are also experiencing a more adult learning environment. Expensive resources/facilities necessary for the provision of vocational courses are not duplicated. Arrangements to meet costs are dealt with on a state-wide system basis by the respective authorities. Curriculum development, accreditation, funding and articulation issues are negotiated collaboratively at a system level. Classes can be formed by drawing students from many high schools (both government and non-government) or by students 'topping up' with community classes. This allows students to participate in courses for which there would not have been significant numbers if drawing from one school only. A state-wide evaluation of JSST found that 90 per cent of personnel from schools and TAFE rated individual JSST courses as successful or very successful. The most successful features cited were the

relevance of courses to post-school goals and community needs, student enthusiasm, and the practical nature of the courses. There has also been a significant increase in students who continue on to tertiary study, including TAFE, in fields related to the courses.

There are some constraints on this model such as the fact that TAFE Colleges do not have unlimited capacity to cater for secondary students. The proportion of the TAFE system's overall provision that should be devoted to secondary students is also a contentious issue requiring close consideration by State authorities.

There is a potential for the vocational elements of the curriculum to be too narrow. In most cases vocationally oriented subjects are accepted as valid for the completion of the various secondary certificates but not as contributing to a tertiary entrance score. In this situation, the community perception of the status of vocationally oriented subjects is lower than for so called 'academic' subjects. The lower status of vocational courses is often reflected in a lack of flexibility in timetabling which results in courses being offered outside school hours.

If TAFE courses are to be used to broaden school curriculum options on the scale current in NSW (11 300 students, 694 courses) a number of key issues need to be addressed through a joint policy framework, such as TAFE capacity, funding sources, curriculum licensing. It should be noted that even given such a framework in NSW only about 10 per cent of each Year 11 and Year 12 cohort has a broadened school curriculum through enrolment in TAFE courses. The major limitations to increased participation are the cost to the schooling sector and the capacity of TAFE colleges to cater for further demand. The status of vocational subjects also clearly needs to be enhanced. This would be assisted by the successful negotiation of credit transfer with higher education institutions and the acceptance by universities of vocational courses contributing to a tertiary entrance score.

#### ***The combined TAFE secondary college (Hervey Bay College in Queensland)***

Hervey Bay Senior College demonstrates the potential for integrated education and training delivery offering both senior secondary academic/general subjects, vocational education units attracting TAFE certification, and entry-level (first year) university subjects across six faculty disciplines. The College's primary mission is to offer as wide a range of programs of study as possible to students in their post-compulsory years. The current enrolment includes secondary students studying Board of Senior Secondary School Studies or Pre-vocational courses, Associate Diploma students, apprentices and some people in labour market programs.

Hervey Bay allows a wide range of courses to be offered, including vocational courses, because of large student numbers and available resources. Students' subject choices can be accommodated in most cases. The development of the 'emerging adult' learning environment provides greater freedom for students and takes into account the relatively young age of many of the students. A high level of responsibility is given to students for planning work. The College also allows relatively open access to teachers and resources.

Hervey Bay is more effective because of its 'ownership' by a single agency, in this case the Bureau of Employment, Vocational and Further Education and Training. The single funding and administrative arrangement has given the facility greater autonomy and encouraged initiatives such as hybrid courses and cross accreditation to proceed at the local level.

Professional collaboration between TAFE and secondary teachers in curriculum development and teaching is assisted by the single negotiated industrial award. Queensland has developed a discrete award for teachers in Senior Colleges. The State also pioneered the teaching of TAFE subjects in high schools, based on the agreed formula of ensuring that teachers so involved had experience and/or qualifications which would be acceptable to TAFE's Industry Training Advisory Bodies and associated accreditation bodies. This was essential to ensure that students selecting these options were able to gain industry recognition of the qualification, and for articulation purposes with advanced standing in TAFE programs. It must be acknowledged that the industrial relations issues related to the negotiation of a similar single award in other states may be more difficult.

The status of vocational courses appears to be higher at Hervey Bay College. However the acceptance by higher education institutions of these courses as eligible for inclusion in a Tertiary Entrance Score would greatly enhance their status. The college must be able to attract large numbers of students and be well resourced and funded in order to continue to provide a wide range of curriculum and to have the flexibility to accommodate most student choices. This involves the use of an extended day. It should also be noted that the Hervey Bay complex is a relatively expensive post-compulsory education and training provider. While Hervey Bay is something of a special case, given its funding and resources, the underlying philosophy of the broad cross-sectoral post-compulsory model should be capable of translation into other contexts.

## **6.11 'School-Based' Models**

### ***A dual credit subject***

In Western Australia, the South West College of TAFE and Newton Moore Senior High School have jointly developed a dual credit course. The course provides a Year 11 Mathematics subject which is recognised by TAFE as a meaningful alternative to the existing school-based subject. Prior to the course being developed students who wanted to enter a trade course had to take a bridging subject 'Trade Maths'.

Developing the course involved a close assessment of the separate TAFE and school courses, to identify common elements and to ensure appropriate recognition for the course under the separate secondary school and TAFE accreditation arrangements.

These developments resulted in a course which was given to TAFE students who did their study at the high school and were taught by secondary teachers. TAFE staff helped secondary teachers to maintain TAFE standards in Trade Maths. The evaluation noted that 'school teachers expressed surprise at the high standard of mathematical knowledge required for trades and they began to develop a greater appreciation of the nature of TAFE learning and the importance of sound preparation in secondary school' (*What Works*, p. 61).

### ***TAFE support for development of school courses (Hawker College, ACT)***

At Hawker College, a secondary school in the ACT, TAFE curriculum expertise has been drawn upon in the design of employment-related ('E') courses. The school and TAFE course designers had to take into account the fact that the role of secondary colleges in the ACT was to provide general education. The course had to form a useful part of the student's study program regardless of ability or future aspirations. It could also qualify for

tertiary entry. The course was designed not to merely provide a 'pre-vocational' strand in Year 11 and 12.

One of the courses developed was in Child Care. The course integrated TAFE Certificate subjects with complementary school units such as Career Pathways, Legal Studies and First Aid. Successful completion of the two-year course meant that students received an Employment Course Certificate as well as a Year 12 Certificate. Students were entitled to 50 per cent advanced standing and places in the TAFE Certificate of Best Practices in Child Care.

By the end of 1989, thirteen secondary colleges and private schools in the ACT were involved in the development of employment courses. However these developments were not always done in cooperation with TAFE. Only Hawker College was using TAFE facilities and teachers at the time of the *What Works* report. Therefore more comprehensive system-level cooperation remains to be secured. Hawker College itself has made 'E' courses a priority of the College.

### ***Articulated Pathways (STIPIT at Holmesglen TAFE)***

Victoria has, in the context of its Victorian Certificate of Education, pioneered curriculum developments through which vocational education options are available in school at Years 11 and 12. A number of these courses have been developed in close consultation with TAFE in order to maximise articulation between high school and TAFE.

The Victorian Schools/TAFE Integrated Program in Technology (STIPIT) is one example developed between Holmesglen TAFE and four secondary schools through cooperation and negotiation between teaching and administrative staff. The Year 12 program allows students to take a full VCE with a technology emphasis leading to further study in the Associate Diploma in Technology or other TAFE/tertiary courses. Three TAFE units of study are provided, making up three-tenths of the full year's work. Technology-related studies are also provided at school as a major component of the VCE. The course also offers a pathway into a Bachelor of Technology degree at the Chisholm Institute of Technology. Successful completion of all subjects in the first year of the Associate Diploma is accepted as an equivalent of the first year of the Bachelor of Technology at the Chisholm Institute of Technology.

## **6.12 Models Applicable in Both Policy Contexts**

### ***Multi-campus Facilities Incorporating Senior Colleges***

In Victoria, the Sandringham Secondary College provides a good example for the creation of a senior college in concert with two junior (Years 7-10) high schools, from the amalgamation of four previous schools including a technical high school.

South Australia's Hamilton Secondary School (senior campus) is a similar example. A Year 8-12 High School, it is the product of the amalgamation of two existing high schools and the establishment of a senior campus on the Hamilton site. One of its most impressive features is its adult re-entry campus facility which now services an expanding group of young and older adults. The concept was developed as a joint initiative of the Departments of Education and TAFE, whereby students are able to study South Australian Certificate of Education subjects or choose from a range of vocational certificate courses accredited through the TAFE system.

A wide range of courses can be offered, including vocational courses, because

of large student numbers and available resources. Student subject choices can be accommodated in most of cases. The campuses also provide a more adult learning environment with the various advantages accruing from such an arrangement.

While most vocationally related courses are provided in the school as part of the VCE comprehensive curriculum, Sandringham College has links with Moorabin TAFE for the provision of a few courses where the College does not have the necessary equipment (robotics for instance). In South Australia, secondary schools are taking over areas of pre-vocational study that were previously provided by TAFE. Hamilton now offers the most comprehensive range of courses of any secondary school in South Australia. This range includes a number of Technology-related courses, and various vocational certificate courses (accredited towards TAFE studies).

It is likely that senior colleges would be in a better position than normal high schools to provide a broader range of courses in the absence of TAFE provision for vocational courses. However, there may be problems in gaining TAFE credit for vocational courses where school resources, whilst adequate at the secondary level, may not meet TAFE requirements. Senior colleges must be able to attract large numbers of students and be well resourced and funded in order to continue to provide a wide range of curriculum and to have the flexibility to accommodate most student choices. In most cases this involves use of an extended day. The model also requires that guidelines and structures for curriculum development, accreditation, funding and articulation be developed collaboratively at the State, industry and systems level.

Lastly, the issue of the development and resourcing of the middle or junior high school/campus must be addressed if the senior college model is to be generalised.

### ***Resource Sharing (Collie Federated School of Mines, WA)***

There are many examples of resource-sharing arrangements which have been developed between schools and TAFE.

Collie, a small town which is at the centre of coal production in Western Australia, has developed a resource sharing arrangement between local companies, the senior high school, TAFE, and the Western Australian Institute of Technology. The first stage of the Collie School of Mines was established in 1981, initially funded by industry. The State Government then contributed funding towards the development of the school as a coordinated facility, combining the resources of TAFE, the Western Australian Institute of Technology (now Curtin University), the high school, as well as industry facilities and expertise. The school is administered under a joint management structure to facilitate sharing of facilities and personnel. Senior industry, TAFE and university representatives sit on the school's advisory council, which is responsible for policy formulation.

Teachers from TAFE, Curtin University and the high school are interchanged as the need arises. When a staffing imbalance appears in the course of these reciprocal arrangements, appropriate funds are transferred between the systems. The main buildings and facilities of the school, TAFE, university and School of Mines are sited around the same street, allowing easy sharing of these facilities.

The school has proved to be a successful mechanism for promoting effective use of scarce resources in an isolated community. The needs of local industry

and the community proved to be more important than traditional barriers between the different education sectors.

### **6.13 Enhancing Delivery Arrangements**

The preceding discussion highlighted some examples of good practice models and the issues which need to be considered in extending those models more broadly.

#### **The Committee recommends that:**

**State and Territory Governments examine exemplary and innovative models of post-compulsory education and training delivery arrangements with a view to determining the extent to which the general principles such as cooperation, resource sharing, and joint curriculum provision and development can be applied more broadly within the overall educational contexts for each State and Territory.**

In particular, the Committee is persuaded, on the basis of Australian and overseas experience, that it is desirable to separate the education and training delivery arrangements for students at the post-compulsory level from those for younger students. This will not be practical or economic in all circumstances, but appropriate options to achieve such a separation should be examined wherever new institutions are being considered or existing institutions are being rationalised.

#### **The Committee recommends that:**

**State and Territory governments should consider options to separate the education and training delivery arrangements for students at the immediate post-compulsory level from those for younger students when new institutions are being planned or existing ones rationalised.**

As illustrated in the discussion above, there are several different ways in which separate delivery arrangements can be established for post-compulsory students. The Committee believes that one effective form of delivery involves colocated senior school/TAFE or senior school/TAFE/higher education provision on a single campus and considers that this form of delivery should be established when resources permit and where it is consistent with rational planning requirements.

A consistent theme in the case studies examined by the Committee is the advantages which flow from greater cooperation at the local or regional level of schools, TAFE, higher education institutions and local industry. The Committee believes that processes for cooperation and collaboration between these parties must be established to ensure that the most cost-effective and efficient delivery of services can occur. Both the TAFE and higher education systems have experience in interaction with industry, particularly in matters relating to curriculum design or modification. Throughout Australia the schools sector has also developed strong community consultative networks with parents and citizens groups, and school councils. All these networks can be built upon for the coordinated provision of post-compulsory education and training.

## **6.14 Clarifying and Enhancing the Role of TAFE**

The consultations with young people revealed a worrying lack of understanding of the role and functioning of TAFE and, particularly among those aiming for university, a much lower esteem for TAFE programs and qualifications than for higher education.

The extent of general community understanding and acceptance of TAFE can be gauged by the high levels of demand for its courses. The level of demand is increasing both from individuals and employers, indicating an increasing interest in skill formation across the work force and a corresponding increase in the value placed on TAFE services there is anecdotal evidence of a strengthening community recognition of TAFE as an educational sector alongside higher education. This suggests that the historical perceptions of TAFE are changing and its status and esteem in the community are rising, perhaps related to the increasing numbers of people who have taken TAFE courses.

Despite this there is still a surprising degree of ignorance of TAFE's services as a whole and the real nature of TAFE's role. Accompanying this is the strong preference overall among school leavers and their parents for higher education rather than TAFE. The ESFC suggests that the reasons for this are varied and complex and include:

- increasing school retention to Year 12 channels secondary students toward higher education, because curriculum in upper secondary school is still largely concerned with tertiary entrance;
- secondary school teachers are largely ignorant of TAFE. It is seen largely as an option for early school leavers;
- the occupations available through higher education, particularly the professions, are often valued by the community more highly than careers in industry; and
- society does not culturally value and reward the skills and knowledge required for many careers in industry.

There is also perhaps a more significant cause of the historically lower esteem for TAFE relative to higher education.

In the past TAFE colleges recruited many young people who were considered unable to cope with or benefit from the academic curriculum of secondary schools or unlikely to persevere. They were to be trained in industrial and domestic arts. The possibilities of broad general schooling for working class children were restricted. At the same time the advantages of narrow academic training for the traditional users of secondary schools were protected. Vocational training had low esteem, not so much because of the pre-eminence of the academic curriculum and its professional outcomes, but because it was established for working class children. This social dimension underlying the historical role of TAFE must be understood or attempts to improve the status of vocational and technical training in Australia may remain ambiguous and ineffectual.

The ESFC suggests that, in the longer term, the relatively lower level of community esteem 'threatens the development of a quality vocational education and training system and consequently competitive industries'. While this may be overstated, it is nonetheless important for the long-term strength of the vocational education system that TAFE courses should be

highly valued in the community and capable of attracting the very best students.

Attempts to lift the esteem of vocational training must go hand in hand with raising the intellectual standards and vocational aspirations of lower achieving children. There is a need to continue to improve community understanding of the role and importance of TAFE, but there is also a fundamental need to change both the reality and the perception of TAFE as a pathway reserved for lower status groups. Building the esteem of TAFE must therefore be part of a wider effort to improve the educational level of all children.

It was suggested to the Committee that the prominence of stream 1000 courses in TAFE advertising has contributed to a distorted public image of TAFE's function and detracted from its perceived value as a post-school pathway. This view may have some validity given that these courses do tend to dominate TAFE advertising because they can be provided on a fee-for-service basis, whereas there is a sense among TAFE colleges that advertising the other mainstream courses will simply add to the already high levels of unmet demand.

The Committee was concerned that the diversity of TAFE's activities may have detracted from its capacity to identify and set priorities and develop common goals for the system such priorities and agreed goals are important in developing a clear sense of purpose for TAFE and in communicating that sense of purpose to the community and to TAFE's employees. In this context, the Committee welcomes moves by VEETAC to identify national objectives for TAFE.

Several of the recommendations already set out in this report will contribute to improved community understanding of and esteem for TAFE, for example, the renewed emphasis on vocational education and revised and expanded entry-level training, and improved credit transfer and articulation between sectors. Of particular importance are improved linkages between TAFE and higher education through cooperative curriculum design, bridging arrangements, course articulation and maximum credit transfer. These improvements are needed to open up new pathways and provide extended opportunities for skill and career development. This in turn will increase the value of vocational qualifications and the esteem in which they are held.

In addition to these measures, the Committee believes that there is a need to define the principal role of TAFE more clearly and communicate it better to the community. In particular:

- Governments should identify unequivocally that TAFE's primary role is to provide high quality entry-level and advanced training relevant to the needs and standards of industry
  - TAFE systems must continue to strengthen their links with industry and seek to overcome any residual perceptions of a lack of responsiveness to industry needs;
- As a matter of priority, State and Territory governments should introduce (or extend existing) programs to enhance the understanding of TAFE among school teachers;
- State TAFE systems should cooperatively develop public relations campaigns to enhance public understanding of the nature and purpose of TAFE
  - the emphasis should be on TAFE as a provider of education and



training with direct vocational outcomes, attuned to the current needs of industry; and

- stream 1000 courses should be rationalised such that purely recreational courses are delivered under separate organisational coverage from mainstream TAFE.

**The Committee recommends that:**

**Governments and TAFE systems should:**

- **identify unequivocally that TAFE'S primary role is the provision of high quality education and training relevant to industry needs and standards;**
- **introduce or extend programs to enhance the understanding of and support for TAFE programs among school teachers, particularly careers advisers;**
- **develop joint public relations campaigns to enhance public understanding of the nature and purpose of TAFE; and**
- **rationalise stream 1000 courses so that purely recreational courses are delivered by agencies other than TAFE.**

#### **6.15 Enhancing the Role of Industry**

The Committee was encouraged by the strength of statements of commitment to education and training contained in the submissions received from key industry organisations, both business and unions. The ACTU reiterated the commitment of the union movement to education and training and the development of opportunities for lifelong learning. Of the peak employer bodies, the Confederation of Australian Industry (CAI) was perhaps most direct in its observation that:

*in simple terms, there is a recognition within the employer community that employers must become more involved with the education system to assist educationalists' efforts in shaping the future of that system. Industry must devote far greater time and resources to participation in the education system than has occurred over the past two decades (CAI: Submission, p. 21).*

This increased evidence of commitment is welcome and overdue. Both sides to the partnership—industry and education—must ensure that this positive approach from peak bodies is translated into maximum practical benefit.

Effective structures are already being established to strengthen the industry-education partnership. Each State has established some form of education/industry forum. At a national level, two major new bodies have been established; The Business/Higher Education Round Table and The National Industry Education Forum.

The Business/Higher Education Round Table was incorporated on 28 November 1990 and now consists of forty chief executives of major companies and eighteen vice-chancellors. Its purpose is to pursue, jointly, initiatives that will advance the goals and improve the performance of both business and higher education. The Round Table has commenced an examination of Australia's skill needs by the end of the decade, established a task force to examine the university research/industry interface, and initiated a Corporate-Academic Professional Program for business people retiring early who are interested in working in universities.

The National Industry Education Forum was established in January 1991 to develop policies and conduct projects in education which will enhance Australia's competitiveness in world trade and commerce. The Forum includes many of the major employers and industry organisations in the country. The Forum is focusing its efforts initially on K-12 education.

The establishment of these forums is a major step forward in establishing closer and more effective industry-education relationships. One matter of some concern is the apparent under-emphasis on TAFE and other training providers. The Committee noted that submissions from peak employer bodies were surprisingly quiet and, in some instances, silent on the role of TAFE and the training sector. This is in contrast to the very strong interactions between business and the training market at the local level. This suggests that there may be a need to raise the profile of the training sector in the major national/education forums.

**The Committee recommends that:**

**The National Industry Education Forum should strengthen its coverage of and involvement with TAFE and the training sector.**

At a State and regional level, close links already exist between industry and training providers. At a formal level, there are currently 125 Industry Training Advisory Bodies (ITABs), of which 103 are State bodies and twenty-two are national, covering twenty-two major industries and occupational groupings. These bodies include industry training boards, industry employment and training councils, and project teams. Their membership represents employer associations as well as Commonwealth and State Governments. In total the network covers more than half of the private sector work force.

The function of ITABs is to develop systematic training programs for the industries they cover, and to provide advice to governments to ensure that vocational education and training is relevant to their industries' needs. Despite the importance of this role, some significant industry sectors are not covered by ITABs and not all of the existing ITABs function effectively.

The Committee believes that there is an onus on the partners in each industry and on governments to ensure that there is an appropriate and effective industry training advisory body or other relevant structure in each industry sector, capable of representing the sector in the establishment of competency standards and the development of training programs.

At the immediate post-compulsory level, there is a range of areas in which industry is already involved, and where its role should be enhanced and extended. Several of these are discussed elsewhere in this report.

Perhaps the most significant is the role of business in providing the training places necessary for the proposed extension of entry-level training. This matter was discussed in some detail in Chapter 5. In its submission to this review, the CAI emphasised its commitment to increasing the supply of training places in industry:

*we believe that there will need to be a greater vocational focus in the types of education offered to about two-thirds of the students in the post-compulsory years. Clearly the fundamental requirement on industry is to provide these training places...in proposing this increased vocational focus, CAI is committed to using its resources to assist in gaining acceptance within*

*Australian workplaces, of the need for employers to make training places widely available to students in their post-compulsory years (CAI: Submission, pp. 22, 23).*

The role of industry in providing training opportunities does not stop with the comprehensive vocational training programs of the type envisaged for the new entry-level training system.

At the school level, for example, there is a need to give all students the opportunity to experience the world of work, to improve their understanding of the workplace and inform their decisions about post-school options. It can be in the direct interests of industry, and even of individual enterprises, to provide work experience opportunities so that students become better informed and motivated to pursue pathways leading to employment in the industries or enterprises which they have experienced. Similarly, it is in the interests of both the education system and industry to establish closer partnerships in the provision of careers education generally, including enhancing teachers' understanding of the current industry environment. These issues are examined further in Chapter 8.

There are also opportunities to go beyond the accepted models of work experience to develop more substantial partnerships between schools and industry, especially in local communities. Practical Australian examples drawn to the Committee's attention, which have been developed with varying degrees of success, include:

- the training for retail and commerce (TRAC) program which has operated on a limited trial basis in the Hunter region. TRAC occupies one day per week over four school terms. Roughly two-thirds of this time is spent on the job with local businesses in the retail, commercial and hospitality industries and the remainder in an off-the-job training centre. Successful TRAC students receive credit towards the HSC and advanced standing in some TAFE courses;
- the Botany 'compact' which is a partnership between employers and schools in a region, aimed at developing a range of business/school links including work experience, teacher placement in industry, business visits to schools, vacation job experience, curriculum enrichment and so on. Each partner—students, employers and schools—makes a commitment to achieve certain agreed goals under the 'compact'; and
- direct involvement of industry in the development of school-based programs. For example, the Metal Trades Industry Association has been involved in the development of school-based manufacturing technology programs in several States. The programs are designed to mesh with school certificates, meet industry standards and articulate with TAFE courses.

The appropriateness of such models and their linkages with schools and TAFE will depend on the education and training delivery arrangements applying in each state and territory.

In the TAFE and higher education sectors, industry involvement is long established and is increasing in significance under the influence of factors such as award restructuring and a wide range of reforms designed to encourage closer industry/education relationships in both sectors.

One issue which arises from this increasingly extensive range of industry/education relationships is the proliferation of educational agencies wishing to deal with enterprises and industry associations. Business

representatives emphasised strongly to the Committee that the willingness of business to contribute to education and training is actually undermined by this proliferation of contact points. They argued that both the quantum and effectiveness of business input would be improved if the number of interfaces could be rationalised and more streamlined, better understood processes established.

**The Committee recommends that:**

**Governments should examine arrangements for contact between education and industry with a view to rationalising procedures and lines of communication. The NIEF should provide advice to governments to aid this process of review.**

**References:**

McKenzie, P. and Alford, K., *The Labour Market Relevance of Secondary Schooling: Perspectives from Year 12 School Leavers Who Do Not Enrol in Higher Education*, ACER, Report to Department of Employment, Education and Training under the Projects of National Significance Program, September 1990.

## **Chapter 7**

# **Participation in Education and Training by the Disadvantaged**

### **7.1 Introduction**

The terms of reference for this chapter referred to 'current barriers to the effective participation of disadvantaged young people including those with disabilities, in post-compulsory education and training, and strategies for increasing their participation and improving their educational and labour market outcomes'.

The Committee commissioned consultancies to provide expert advice on three aspects of this term of reference:

- education and training for disabled young people—Robert J. Andrews and Associates;
- education and training for disadvantaged groups—Australian Council for Educational Research (ACER); and
- barriers to participation from the perspective of disadvantaged groups—John Freeland, University of Sydney.

These reports appear in Appendix 2.

### **7.2 Definitions of Disadvantage**

The ACER report focuses on five broad groups: women, those affected by socioeconomic disadvantage, Aborigines, teenagers from non-English speaking backgrounds, and those from rural and isolated areas. Those groups are, of course, not mutually exclusive and some young people will fall into more than one of these categories. The paper also addresses those with poor school achievement, including early school leavers. The paper systematically correlates these characteristics to aspects of poor educational performance such as under-achievement, low participation in post-compulsory education and training, early school leaving, and particular subject choice. The Freeland paper pays more specific attention to some cultural/ideological barriers to participation as well as addressing a few highly disadvantaged groups such as homeless young people.

It has been argued, with some justification, that all those teenagers who leave school early and who do not continue in any form of education or training should be classified as disadvantaged. Comparisons of the educational and employment outcomes for Year 12 achievers with those with who leave before Year 12 make this clear (see Chapter 2). Historically, the labour market has absorbed minimally educated school leavers in low-skill jobs but such opportunities are disappearing. Using unemployment and educational participation data, Freeland estimated an 'at risk' group in August 1990 of about 14 per cent of the teenage population.

This group includes those who are unemployed, in part-time employment, or not in the labour force, and at the same time not in full-time education. Freeland points out that the number in this category is roughly equivalent to an earlier estimate of those at risk in June 1983. This implies that despite the very significant increases in post-compulsory education and training, participation rates since the early 1980s, the number of the 15 to 19-year-old population failing to make a trouble-free transition to adulthood has not

significantly diminished. Using stricter criteria, which recognise that a substantial proportion of those initially experiencing difficulties in the labour market eventually make a successful transition to employment, the *Workforce 2001* report gives a lower estimate for the 'at risk' group of about 6 per cent. About 2 per cent of the teenage population are unemployed for six months or more.

It is important to note that the full range of recommendations of this review address the educational problems of those teenagers who might be included under broad definitions of disadvantage. If the strategies recommended elsewhere in this review are successful then many of these teenagers will be effectively involved in post-compulsory education and training. Many of the recommendations which will assist broader participation by the teenage cohort in post-compulsory education and training will be of direct benefit to those who may be defined as disadvantaged.

As a consequence, the Review Committee decided that this chapter should focus on a smaller sub-group of the 'at risk' group identified above—those who would be classified as deeply disadvantaged in relation to their educational participation—Aboriginal youth, some NESB young people, some young women, the homeless, the long-term unemployed, those in isolated communities, young offenders and disabled young people.

The Committee was not in a position to attempt a comprehensive assessment of the range of programs available or desirable for these groups. An attempt has been made to summarise generic strategies, promote some 'best practice' examples and recommend further development of the most useful.

In particular, given the enormous range of detailed policy and program work around the country, the Committee has focused its recommendations on a very few areas where it appears that greater effort may be warranted, such as:

- the disabled;
- the process of transition from school for some 'at risk' young people; and
- the coordination of education and training systems with other support structures for young people.

## **Barriers to Effective Participation in Post-compulsory Education and Training**

### **7.3 Early School Achievement**

The ACER Report concludes that earlier school achievement is probably the strongest single factor influencing the completion of a full secondary education and participation in higher education. Those who do well at school are more likely to continue their education. Even subject choice in senior secondary school is strongly influenced by earlier achievements especially in numeracy.

This barrier could in part be a consequence of the similar selection and assessment processes used in both early and later stages of schooling. Another factor might be that students who are high achievers are recognised as successful, develop a sense of competence, and choose to continue to pursue their education because they do well. School achievement measures could also reflect the mastery of skills which are a necessary foundation for learning more complex material in the post-compulsory schooling phase. A further interpretation is that higher achieving students have a greater opportunity to

learn in areas relating to further education and training, and are more likely to experience an environment where further education and training is expected.

The strength of the link between early school achievement and subsequent participation suggests that measures to reduce differences in earlier school achievement could reduce differences in post-compulsory participation. It seems clear that programs which identify, diagnose and assist underachieving students in the course of their compulsory education should be consolidated and extended where possible in primary and secondary schools. Such programs should be school-based and focus on timely remedial assistance to individual students. The staged assessment of Key Competencies such as literacy and numeracy is an important component of such programs. Those responsible for early identification programs should be thoroughly trained in the factors which affect school participation.

#### **7.4 Attitudes to School and School Culture**

There is also evidence that positive attitudes towards school are associated with continuing at school and that favourable views of school life are not necessarily dependent on high achievement. A general satisfaction with school and a sense among young people that school work is relevant to their future are important influences on the decision to stay in school. Therefore programs aimed at raising achievement but which have the unintended consequence of reducing students' satisfaction might prove counterproductive.

The Freeland paper and a number of submissions to this review made the point that school culture and, in particular, teacher attitudes have a significant influence on the willingness of disadvantaged young people to remain at school. Freeland points out that the education system bears a heavy responsibility for countering sexist and racist attitudes, for instance. He argues strongly that these issues should be addressed at the heart of school teaching methods and teacher preparation programs. It is also important to recognise that aspects of the school environment such as curriculum, organisation and assessment policies contribute powerfully towards a favourable school culture.

#### **7.5 Expectations and Orientations**

Interpersonal support and the expectations of 'significant others' play a crucial role in shaping educational participation. These expectations are not only built up during the schooling process, but are part of a broader social and economic framework. For instance, the ACER Report suggests that building up expectations about the need for continuous training in a wider variety of occupations than at present would help to broaden teenage involvement in and motivation for post-compulsory education. Further education and continual learning is still popularly associated with a limited number of professions rather than with occupational skill in general. This points to a need to promote a wider expectation of the role of education and training in the continuing development of occupational skills.

Special attention needs to be given to raising expectations and motivation among the increasing number of young people now participating in post-compulsory education and training. There is no doubt that a minority of young

people are remaining in school because they perceive it as a necessary evil ('if you don't get Year 12 you can't get a job') or because it is an alternative to unemployment. Many of the recommendations elsewhere in this report will contribute to the motivation of this group. It may also be possible to develop additional, innovative strategies to enhance their 'achievement orientation'.

Options might include more active forms of income support and reward structures which recognise individual achievement which is outstanding relative to personal capacities or background. Such options might include scholarships and other special awards, including university scholarships for TAFE students. The Disadvantaged Schools Program, which is summarised in a later section on school systems, has been very successful in raising achievement and expectations among disadvantaged students, through a wide range of school-based programs. In the USA, the Government has gone a step further in providing incentives for a similar program. The Government has experimented with strategies to provide additional resources to whole schools in disadvantaged areas which set and achieve high goals for collective student achievement (*America 2000: The President's Education Strategy*).

## **7.6 Financial Factors**

The influence of financial factors has been examined in a number of respects. For example, the Victorian 'Social Justice in Schools' report argues that poverty substantially reduces students' chances of completing full secondary education and that while wealth has an effect on participation in all types of tertiary education, there is a very strong link between being better off and participating in higher education. These factors influence both the completion of secondary school and the transition from secondary to higher education.

The ACER Report notes that financial factors act as a barrier to participation and training in two ways. Firstly, participation might be impeded by costs involved in the course; such as fees, books, tools, materials and transport. Secondly, participation might be impeded as a result of income foregone by not being able to work full-time. Income foregone could be a barrier for young people living away from home and for those whose supplementary income was especially important to the well-being of the family. The issue of income foregone may create strong barriers to educational participation for those young people keen on achieving financial independence and for teenagers who are expected, or needed, to help support their family.

Both costs and income foregone affect, to a greater extent, those with more limited financial resources. Costs could act as a barrier for the very poorest members of the community and yet not differentiate between groups of differing income levels above this level.

It may be that these factors are more important for higher education than for secondary education, given an expectation of financial independence among older adolescents. Between the late 1970s and the early 1980s, higher education participation dropped most among those of lowest socioeconomic background, suggesting that the economic recession of the early 1980s had a more severe impact on those who were most vulnerable.

In TAFE the evidence on the effect of financial constraints is more contradictory. During the late 1970s it seems that greater wealth favoured participation. In the late 1980s it appears that the less wealthy participated in TAFE to a greater extent than the more wealthy. A possible interpretation of this change could involve the increased role of programs directed to the



disadvantaged in TAFE. The ACER Report concludes that financial factors may be a barrier to participation in vocational training in TAFE to a greater extent than is commonly supposed.

While this review has not attempted to canvass broader welfare issues it should be noted that consultations revealed concerns about the level and breadth of income support for young people in post-compulsory education and training. Appropriate income support arrangements are of course an important factor in securing more comprehensive participation in post-compulsory education and training. Both Commonwealth and State support measures are available for post-compulsory students experiencing financial difficulties in education, but by far the most important is the Commonwealth's AUSTUDY program.

AUSTUDY was established following a comprehensive review of income support arrangements for young people in 1985-86. There was a major increase in the level and scope of student income support following this review, but both ACOSS and the Youth Affairs Council of Australia (YACA) made strong representations to the Committee concerning the current adequacy of allowances and the stringency of eligibility criteria. The Committee understands that these matters will be addressed in a comprehensive review of AUSTUDY arrangements recently announced by the Commonwealth.

## **Strategies for Specific Groups**

### **7.7 Women**

Since the mid 1970s young women have participated in post-compulsory schooling to a greater extent than young men. From the early 1980s enrolments in higher education by young women have been greater than young men, and since the late 1980s there have been more female than male students in higher education overall. In the twenty years since 1970, the increase in participation by young women in these forms of education and training has been substantial. On the criteria used to define disadvantage for the purpose of this chapter, gender is not an indicator of disadvantage, though there are equity issues associated with gender which remain to be addressed in the education system.

One of these issues is the balance of courses taken by males and females. In both post-compulsory schooling and higher education young women participate to a lesser extent than men in courses based on physical sciences and advanced mathematics, although there is evidence of a narrowing of the difference. Young women are under-represented in the vocational and preparatory courses of TAFE by comparison with young men, and there are substantial differences between types of course.

A second issue is the imbalance between males and females in vocational training arrangements. Young men predominate in initial trades (apprenticeship) and trade technician training. Young women are represented in greater numbers than men in other forms of initial vocational training, and there is a more even balance in preparatory and para-professional technician courses. Young women are also more likely to be enrolled part-time. Just as apprenticeships remain an almost exclusively male area, traineeships (which mainly involve office and clerical work) are

predominantly taken by females.

Apprenticeships are of longer duration than traineeships, involve greater numbers of people, and provide a qualification which is valued more highly in terms of further study and future earnings. Higher proportions of young women than young men participate in in-house training courses.

A great deal of work has already been done on the issue of female participation in education and training. Three annual reports on the implementation of the National Policy for the Education of Girls in Australian Schools have been published to date. A fourth report is being prepared on the 1990 school year.

The Policy aims to consolidate and coordinate the provision of activities in support of girls' full participation in education. The third report, which summarised contributions from each State and Territory and the major non-government school authorities noted that the principal objectives of the National Policy had been incorporated into all relevant aspects of system and school operations and practice, including the provision and allocation of resources. For 1991, the fifth year of the reporting cycle on the Policy implementation, a major review of all elements of the Policy will be conducted in order to prepare a comprehensive report to Ministers and to provide an opportunity to reconsidering policy directions for the next cycle.

Women's involvement in TAFE and trade training has been promoted through such projects as 'Tradeswomen on the Move'—under a joint Commonwealth/State strategy for increasing the participation of women in non-traditional trades—and the National Plan of Action for Women in TAFE which addresses a wide range of issues for securing more effective participation by women in TAFE. Several recommendations have been prepared on the issue of entry-level training in a report endorsed by VEETAC and submitted to Ministers responsible for vocational training in States and Territories for their consideration. The Review Committee strongly endorses measures to break down gender segmentation in entry-level training arrangements and considers that appropriate strategies be built into the introduction of a new entry-level training system.

## **7.8 Non-English Speaking Background**

Evidence does not support the common belief that young people of non-English speaking backgrounds are disadvantaged in terms of participation in post-compulsory education and training. There is consistent evidence from the mid-1970s that young people of non-English speaking background have higher rates of participation in Years 11 and 12, and completion of Year 12, than their peers. Among students from Years 11 and 12, those of non-English speaking background participate in mathematics and science courses to a greater extent than other students.

During the late 1970s and early 1980s, there was a lower than expected participation by those of non-English speaking background in TAFE, especially in apprenticeships. However, by the late 1980s that pattern had changed to produce higher levels of participation.

While the overall participation performance of NESB students is good, there are some areas for concern. There are differences between particular ethnic groups in school performance. For instance, Victorian studies indicate that Yugoslavs, Lebanese, Turks, Vietnamese and female Italians have lower than average participation rates at the post-compulsory level. Recent arrivals who came to Australia from Indo-Asia, or who have interrupted schooling,

are performing well below average.

Therefore, there are specific sub-groups of NESB young people who require enhanced assistance. In particular, while English language and literacy skills are important for all students, these skills may be the critical determining factor for effective educational participation for some NESB students. Therefore, school systems should closely monitor the adequacy of these skills in NESB students and have sufficient ESL teaching resources to address identified problems. These subgroups of NESB students are also targeted in higher education Equity Plans, and need to receive appropriate support for their effective participation. Some groups of recent refugees such as those from Cambodia and Vietnam include young people whose English skills are extremely poor and some who have experienced severe trauma in their lives prior to arrival in Australia. A number of schools are experiencing difficulty in coping with their problems. For these people it is critical that support services, including specific English language training, be coordinated with appropriate welfare services.

There are several innovative arrangements to assist NESB students with the transition to post-compulsory education and training. For example, in South Australia, a joint TAFE/school project, based on Regency TAFE, has introduced NESB school students to TAFE pathways and prepared students for access to pre-vocational courses. The project was coordinated through ESL teachers in the metropolitan high schools. ESL teachers accompanied students to TAFE and, in effect, became TAFE 'ambassadors' who could communicate information about TAFE options to NESB students.

## **7.9 Low Socioeconomic Status**

There is clear evidence that young people from poor socioeconomic backgrounds participate to a lesser extent than others in post-compulsory schooling and higher education. Much of the observed relationship between socioeconomic background and participation in these forms of education arises from its association with earlier school achievement and forms of interpersonal support such as parental encouragement. However, even after allowing for these associated influences, there is clear evidence of the effect of wealth on continued participation in post-compulsory schooling and higher education.

During the 1980s the extent of disadvantage in post-compulsory schooling associated with low socioeconomic status has reduced somewhat as general levels of participation have increased. By contrast, among higher education students during the same period there have only been minor changes in social composition.

Within post-compulsory schooling students of low socioeconomic background tend to have lower participation rates than others in courses based on physical sciences and advanced mathematics. Since students from these courses tend to enter higher education in greater proportions than students from other courses this constitutes a source of disadvantage. However, the influence is observed mainly among female students. In particular, female students of high earlier school achievement participate in mathematics-science courses to a smaller extent than would be expected. Among male students who reach Year 12, socioeconomic background does not appear to be strongly related to participation in mathematics-science courses.

Differences between socioeconomic groups participating in TAFE are smaller

than for higher education. In the 1980s, participation increased among the middle and, to a smaller extent, lower SES groups but declined for the upper SES groups. The overall effect was a slight narrowing of the range. In apprenticeships there was a decline in participation among both the upper and lower groups and an increase for those from middle (skilled trades and white collar) socioeconomic backgrounds. There is some tentative evidence that participation in TAFE provides a link to higher education for some young people and thereby facilitates access to higher education for those of low socioeconomic background. This adds to the significance of TAFE as a vehicle for securing access to education and training for these students.

It is clear that education is one of the most powerful mechanisms for ameliorating social and economic disadvantage over the course of a generation. Therefore measures which assist effective participation in education and training are of crucial importance to children of poorer families. Many of the recommendations of this review are intended to offer greater opportunities to this group. Strategies which encourage increasingly comprehensive participation in post-compulsory education and training draw in young people from disadvantaged socioeconomic backgrounds. As noted above, appropriate income support is particularly important in this context.

### **7.10 Rural Areas**

Young people from rural areas participate in post-compulsory schooling and higher education to a lesser extent than their peers from urban locations. For instance, Year 12 completion rates remain about five percentage points lower in non-metropolitan areas than in metropolitan areas (although they are rising more rapidly). In higher education, young people from non-metropolitan areas participate at a slightly lower rate than their metropolitan counterparts. This is partly attributable to the fact that those who live in rural areas are more likely to come from lower socioeconomic backgrounds. It is also a consequence of lower levels of interpersonal support (particularly encouragement from parents for continued education) and lower levels of earlier school achievement.

The patterns of subject choice in the senior secondary years are not substantially different between those from rural as opposed to city locations, although there is a tendency towards lower participation in mathematics, science and business-oriented courses and higher participation in courses with a technical or practical orientation. Higher education participation by those from rural areas is relatively stronger in education and agriculture but weaker in arts and architecture.

Participation in TAFE does not differ greatly between young people from rural and urban locations. Indeed participation rates in TAFE in general, and apprenticeship in particular, appear to be greatest in semi-rural, but not remote, areas.

The education and training disadvantage of those in rural areas have been addressed in a number of reports. The most recent national work has been done by NBEET.

NBEET evaluated the Country Areas Program (CAP) in a report published in 1990. The report concluded that CAP has had a significant positive impact on the quality of rural schooling. It made a number of recommendations for further enhancing the program, including a funding increase of \$3.5 million, to bring the total commitment to \$15.0 million. The major funding

recommendations were implemented by the Commonwealth Government in its 1991 Industry Statement. The NBEET Report also noted that there were no established mechanisms by which information about successful strategies could be disseminated across Australia and recommended further efforts in information dissemination and national reporting on evaluation of major CAP programs.

The Committee noted a further NBEET paper *Towards a National Education and Training Strategy for Rural Australians* was published in June 1991. It argued that provision of post-compulsory education and training for non-metropolitan Australians remains uneven and inadequate and recommended development of a comprehensive national education and training strategy to secure equality of access for rural Australians. NBEET suggested that this AEC Review Committee should examine the resource implications of providing all rural young people with access to education and training in the immediate post-compulsory years. Given its strict time constraints, the Committee has not been able to assess the priority of the NBEET recommendations, nor weigh up their resource implications.

### **7.11 Aboriginal People**

In all sectors of post-compulsory education and training young Aboriginal people participate to a lesser extent than other groups. Although the gap in participation rates in post-compulsory schooling has narrowed in the 1980s, it remains substantial. The retention rate to Year 12 for Aboriginal people is about half that of the national figure. In higher education there is also a very large difference despite a relative improvement over the 1980s. The concentration of Aboriginal students in teacher education courses, as well as arts, may provide the foundation for further improvement in learning and participation by Aboriginal students. The relatively low levels of participation in post-compulsory schooling and higher education by Aboriginal people are not compensated by higher levels of participation in TAFE. Young Aboriginal people participate in TAFE at less than one-quarter of the rate for young Australians as a whole.

Many sources of disadvantage, such as socioeconomic background, living in remote areas, and low earlier school achievement are present to a greater extent among Aboriginal people.

However, it must be recognised that many of the assumptions about Aboriginal disadvantage may, in themselves, reflect and reinforce the patterns of cultural and economic disenfranchisement that Aboriginal people have experienced. Therefore the Committee appreciates that observations about the educational participation of Aboriginal young people must be sensitive to their unique cultural concerns, particularly in relation to matters of appropriate curricula. For these reasons in particular the Committee acknowledges the extensive consultative process which led to the publication of the National Aboriginal and Torres Strait Islander Education Policy which was released in 1989. It recognised that education is fundamental to enabling Aboriginal people to exercise their rights and participate fully in Australian society. The Policy set the framework of common agreed goals for a concerted national effort to redress the educational disadvantage of Aborigines and Torres Strait Islanders. The State/Territories and the Commonwealth together with non-governmental education authorities and educational institutions have agreed to a set of arrangements for policy implementation.

Strategic plans of the States/Territories for Aboriginal education are to be developed and annually reviewed in consultation with the Commonwealth. The first of these reports is currently being compiled by DEET for review by Ministers. A full public report is due in mid 1992.

Under NAEP, at present, support programs in schools have strategic objectives such as strengthening Aboriginal perspectives in the curriculum, improving employment and specialist training opportunities, enhancing consultation and liaison with Aboriginal communities. TAFE has been developing additional facilities in remote centres and it is planned to provide accredited courses for Aborigines in isolated communities. A number of programs are also in place to foster increased participation by Aborigines in higher education.

States and Territories have been developing innovative programs to extend post-compulsory education and training opportunities to Aboriginal young people in remote areas. In Queensland, for instance, the delivery of remote area education particularly for Aborigines and Torres Strait Islanders has been enhanced through the establishment of the Queensland Open Learning Network, which incorporates the TAFE Queensland Distance Education Network. The network has made some significant advances in the delivery of open education.

The far north of Queensland and the Gulf is serviced by external education for Aboriginal and Torres Strait Islanders through James Cook University, Townsville and Cairns Colleges of TAFE and the Queensland Distance Education College, employing Aboriginal instructors to deliver services on remote sites and through the distance education network. In the Northern Territory, Tennant Creek High School and the Northern Territory Open College have jointly provided alternative and flexible learning options at the post-compulsory level which emphasise a sense of ownership and commitment to the local Aboriginal community.

The Northern Territory has provided a range of useful models in the education of Aborigines and Torres Strait Islanders. Batchelor College, for example, has developed some exceptionally successful education programs for Aborigines, particularly in servicing the educational requirements of Aborigines living on traditional tribal grounds. Through a strong support network, teacher training of Aborigines by Aborigines, and through a visionary mix of short, community-based residential programs and open-ended distance education, the educational opportunities for young Aboriginal people have been significantly improved.

The Committee believes that such 'best practice' models for encouraging greater Aboriginal participation in education and training should be evaluated and the results widely disseminated by the relevant State and Territory Governments.

It was pointed out to the Committee that, despite some excellent education programs, even high standards of achievement among Aboriginal young people might be wasted because of the sheer lack of employment opportunities available in many Aboriginal communities. Young Aborigines often do not wish to abandon their communities in search of suitable employment and may be 'at risk' if they do so. Therefore education opportunities must link in with community and economic development projects in such communities.

## 7.12 Young People With Disabilities

The Committee was concerned that there was no recent comprehensive public review on the issue of educational participation by young people with disabilities and therefore commissioned a consultant to examine this issue. The consultancy report prepared for the Committee by Robert J. Andrews and Associates (Appendix 2) analysed a comprehensive range of issues relating to the educational disadvantage of people with disabilities. Andrews argued that not enough has been done to ease the difficulties which these young people face in achieving a full secondary education, and in maximising their opportunities for further education and training.

While there have been important initiatives in the transition to post-secondary education and training for people with disabilities, these initiatives have tended to be isolated developments, without wide application, and without planning and coordination across the education sectors.

Participation during the compulsory school years is very high among children with disabilities. Children with profound and multiple disabilities are today provided with developmental programs designed to assist their communication, physical, social, and cognitive development in school settings, on the same basis as other children. As a broad estimate approximately 4 per cent of students enrolled in Years 9–12 of secondary schools in Australia, or students of equivalent age in special schools, are reported to be students with disabilities.

When students with learning disabilities and those supported by specialist staff in regular classrooms because of learning problems are excluded, the percentage of students with disabilities in this age group reduces to approximately 0.8 per cent. This represents about 35 000 nationally if the proportion of 4 per cent is used and about 7 200 students if the proportion of 0.8 per cent is used.

The number of students with disabilities within the TAFE sector is more difficult to estimate. For six States and Territories, not including Victoria and South Australia, the number of students reported in 1990–91 is approximately 6 500, compared with approximately 7 500 for these States in 1986. The data for higher education institutions are also incomplete, but it is estimated that identified disabled students make up less than 1 per cent of all students in higher education.

The Andrews paper identifies four main barriers to participation by teenagers with disabilities in post-compulsory schooling. In brief these are:

- a shortage of appropriate programs in the senior secondary school which lead to further education and training options for students with disabilities;
- inadequate support services for students who seek to continue their schooling past the compulsory period;
- a lack of transition planning; and
- insufficient links between schools enrolling students with disabilities and higher education and TAFE institutions providing future education and training options.

Additional barriers to the participation in post-secondary education and training by students with disabilities are:

- a lack of clarity about the role of tertiary authorities in providing for

students with disabilities;

- a low level of identification of students with disabilities, thus impeding planning and support service development for these students;
- a reactive approach to individual student circumstances;
- a lack of liaison and recruitment programs; and
- inadequate physical access.

Many of these barriers are being addressed in the sector, in particular since the development of the Commonwealth's higher education equity program and the publication *A Fair Chance For All: Higher Education That's Within Everyone's Reach* in 1990. In Queensland, for instance, the Higher Education Disability Network, which has representatives from both the university and TAFE systems is working towards establishing support networks within the tertiary sector. Yeronga College of TAFE is developing a resource unit for vision-impaired students to study to university level, and to facilitate employment options.

It is evident that education and training institutions in all sectors need to examine their level of support to the disabled and the degree of flexibility in course provision which is available to enable greater involvement of disabled young people.

In his report, Andrews identifies a substantial list of possible initiatives to boost opportunities at the post-compulsory level for young people with disabilities. The Committee considered the following to be the most significant:

- modified and alternative curriculum development projects in the senior secondary school and tertiary institutions, with the proviso that these be coherently articulated into mainstream further education and training opportunities;
- individual transition planning for students with disabilities;
- links between secondary schools and tertiary institutions for planning and student support;
- establishing collaborative disability support centres or units among groups of tertiary institutions to promote options and support services in post-secondary education and training; and
- continuing efforts to remove barriers to physical access on tertiary campuses.

The Committee was particularly interested in those proposals which relate to the transition of young people with disabilities from compulsory education to post-compulsory education and training (including training associated with employment). The Committee received a proposal on a 'National Agenda for Transition' for young people with disabilities. The proposal is based on the successful trial of school and community-based transition teams in New South Wales. The purpose of the community-based transition teams is to identify gaps in service provision and to promote comprehensive planning and effective service delivery for all students with disabilities in a particular area. There is a need for a more detailed assessment of the feasibility, costs and benefits of these proposals.



**The Committee recommends that:**

**The AEC and MOVEET establish a working party to examine possible initiatives to enhance the practicable participation of young people with disabilities in post-compulsory education and training with particular regard to the process of transition. The working party should be established as soon as possible and be required to report within six months.**

### **7.13 Homeless Young People**

During the consultations conducted by the Committee, several groups emphasised the need for special attention to the problem of homelessness among students. The Youth Affairs Council of Australia (YACA), for instance, referred to the Burdekin Report's identification of a major role for schools in identifying those students at risk of homelessness and providing support for those who are already homeless. YACA also recommended an expanded role for school counsellors, and a special training program for teachers to assist them in helping homeless students. ACOSS suggested a special school community accommodation program to cater for the emotional, accommodation, education and training needs of school students forced to leave untenable family situations.

The Committee has not attempted to address the range of welfare issues surrounding this problem. However, from the great deal of work which has already been done it is clear that homelessness has a major impact on the likelihood of students being able to continue their education. The Committee is also aware that many homeless young people see education as a significant means for regaining some control over their futures. Given that community expectations about education are increasing, the need to secure educational opportunities for homeless teenagers can only intensify. It seems clear that an integrated approach is required at the local level so that education and training institutions, especially schools, become part of a more coordinated network of housing, youth health and welfare services. Local schools could be involved in referral and respite arrangements for these students. Various models for this exist such as Queensland's targeted programs for homeless young people.

Victoria also has a number of pilot projects under way and is developing an education/accommodation kit to provide information to schools, youth workers, housing groups and homeless young people. This is a joint initiative of four Government departments. A number of projects for assisting homeless students are being evaluated under the Students at Risk (SAR) program. Tertiary institutions are also engaging in action-research and projects around some of the preventative measures needed for students at risk. In the new Victoria University of Technology, where the Footscray Institute of Technology already sponsors WESTPACT, an integrated housing and education initiative, there is a proposal to set up a Home, School and Community Studies Centre which will work actively with schools and other groups to lessen educational estrangement. There is an important role to be played by tertiary institutions and other organisations in conducting cutting-edge research that can inform new developments (Anwyl, p. 9).

Despite these various initiatives, the nature of the role that schools can play in relation to homeless students is not well-documented and understood. This is

another instance where information-sharing on 'best practice' could contribute to an overall improvement in the services available to young people at risk.

#### **7.14 Young Offenders**

For young offenders there is a gap in current provision of access to post-compulsory education and training. Some State initiatives have attempted to improve provision through, for example, the development of more effective curriculum in youth training centres which allows young offenders to gain credits toward TAFE qualifications. Queensland TAFE has developed strong links with corrective services facilities, particularly for young people. Many programs are offered by TAFE personnel and appropriately qualified Correctional Services officers in correctional institutions. These programs are offered within maximum security facilities through Bundamba (Ipswich) College and regional colleges. Westbrook Correctional facility, for example, provides literacy and numeracy, self esteem and personal development programs, and specific vocationally related programs to young offenders. Several thousand student-contact hours in Queensland TAFE are dedicated to young offenders, with promising student outcomes for youth upon release.

The Committee is of the view that this is the most appropriate strategy, that is, young offenders should have access wherever possible to educational opportunities which are part of, or articulate directly with, mainstream courses. This will require a high level of coordination and cooperation between different agencies. The issue of the education of young offenders is an 'in principle' agenda item to be discussed at the Youth Ministers Council. It is important that Education Ministers be involved in discussions about specific initiatives.

#### **7.15 Strategies for Education, Training and Welfare Systems**

##### ***School Systems***

There are three national programs which provide support for 'at risk' students in the school system: The Disadvantaged Schools Program (DSP), the Students at Risk Program (SAR) and the Country Areas Program (CAP). The CAP has been referred to above. DSP assists schools serving communities with the greatest degree and concentration of socioeconomic disadvantage. The program provides supplementary funding for projects to improve educational participation, learning outcomes and personal development of disadvantaged young people. Most projects focus on primary to middle secondary years. However, there are some projects at the post-compulsory level focusing mainly on alternative curriculum development. Such projects provide a range of models which can be built on for extending the range of involvement of disadvantaged people in post-compulsory education and training.

The Students at Risk Program was established as one of the measures in the social justice package for young Australians in the 1989-90 Budget. The program aims to identify and encourage participation in education by those students most at risk of not completing secondary schooling. At present SAR is aimed at identifying 'at risk' students in Government schools and encouraging their participation by supporting school-based projects. Most funds have been used at the school level to employ or enable the release of

project teachers/coordinators. The program is due to be terminated at the end of this year. An evaluation of the program conducted by DEET in 1991 found that:

- schools were more aware of their 'at risk' students as a consequence of the program;
- there had been considerable successes at an individual student level, but it is too early to judge whether the programs directed more broadly at junior secondary students will be effective in increasing retention; and
- better focusing of the program can be achieved.

SAR has a strong innovative flair, and is oriented strongly towards individual students. It should be extended and further refined on the basis of current evaluations. Its more effective strategies could also be pursued under projects funded through the DSP. The program should continue until there is clear evidence that its objectives have been consolidated in services established at the local school level.

**The Committee recommends that:**

**The Students at Risk Program should be extended and maintained until there is clear evidence that its objectives have been consolidated in services at school level.**

The Committee concentrated on the role of post-compulsory education and training in the transition from education to work life. A number of submissions pointed out that the transition is often painful and risky for those who abandon the 'pastoral care' environment of the school for the more adult environment of post-school institutions or employment. Indeed this transition process is critical in determining the immediate and longer-term life chances of the individual, especially for those young people from disadvantaged groups.

Too often the transition process is a matter of leaving school with insufficient information about subsequent pathways, and being left to search for assistance in an unfamiliar environment. The Committee believes that there could be merit in a more coherent and direct approach. One possibility would be the establishment of Transition Coordinator positions in schools where retention rates are low.

Coordinators would be directly responsible for monitoring the immediate post-school experiences of students leaving school. They would also be responsible for developing 'transition plans' through which a realistic career path is negotiated with the student and outcomes are followed up in the immediate post-school phase. Coordinator positions should be dedicated to this task rather than using teachers with a normal teaching load. Coordinators should receive appropriate training.

The establishment of these positions could occur in conjunction with a rationalisation of career counselling and other welfare positions at the school level. In some cases coordinator positions might be established by extending the career counselling function to include post-school monitoring. In other circumstances, coordinator positions could be shared between a small number of schools. The Students at Risk program could provide one source of funding for these positions. As an alternative or additional strategy the proposed pilot program should also trial the development of closer linkages between schools and Youth Access Centres. The aim of the links would be to

utilise the resources of the Centres to support transition planning for students leaving schools in the local region.

**The Committee recommends that:**

**The Commonwealth Government in conjunction with interested States pilot the establishment of Transition Coordinator positions in schools where retention rates are low and where there are low levels of youth participation in training and employment.**

### **7.16 TAFE and Entry-level Training**

Apart from the issues already dealt with in relation to the specific groups identified above, a number of more general points should be made about TAFE. TAFE is a crucial source of education and training provision for a wide range of disadvantaged people in the community. Its students include many with low school achievement, including early school leavers. The majority of those who enter TAFE have a schooling background which does not extend beyond Year 11. A trend towards higher enrolments from this group has been evident in the past two decades (ACER, p. 28). This could be attributable to the increasing provision by TAFE of pre-vocational, basic employment skills and preparatory courses. TAFE is also a key bridge to higher education for some disadvantaged people.

TAFE clearly plays a major role as a provider of 'second chance' education particularly for adults and older teenagers. It is a vital site for the educational 'recovery' of some disadvantaged people. TAFE's role as a provider of vocational training which responds directly to industry requirements makes TAFE an important agency in improving labour market prospects for those who are 'at risk' in the transition from school to work.

The experience leading to the development of the TAFE National Plan of Action for Women for example, has shown the usefulness of comprehensive commitments to equity targets in TAFE as well as specific purpose equity programs. System level targets allow individual colleges to respond flexibly in local management plans appropriate to their own circumstances. Most TAFE/training systems have equity targets set under resource agreements and for entry-level training. However, these targets do not commonly identify factors such as age participation. TAFE systems should identify components within their equity targets for the participation of disadvantaged young people. Such targets could be specified across a range of indicators—such as overall participation, participation in accredited vocational courses, and participation in courses with a strong scientific/technological content. Targets could also differentiate between different groups of disadvantaged young people. For instance, for young people with disabilities it would be useful to have specific targets relating to matters such as physical access, and the establishment of support services.

**The Committee recommends that:**

**TAFE systems should identify separate components within their equity targets for the participation of disadvantaged teenagers.**

The issue of participation of disadvantaged groups will be important in the development of the new entry-level training system. In this context employers

as well as TAFE colleges and other providers must be involved in the provision of apprenticeships for disadvantaged trainees. VEETAC will need to take up this issue further in its work on the proposed entry-level training system.

The Committee has made clear its enthusiasm for improving the links between school and TAFE. Closer cooperation between school and TAFE will help to broaden the range of post-compulsory course options for students and promote wider knowledge of these options. Measures which increase the awareness of TAFE among school students are very important for disadvantaged students and particularly for those students who would, in previous circumstances, have left school without pursuing any form of further education or training. The ACER paper, for instance, noted one study which reported success with a school-TAFE program focused on female students who had not had much success in mathematics.

Given the ACER observation that financial constraints may be a stronger disincentive to students in TAFE (or wishing to enter TAFE) than in other forms of post-compulsory education and training, the AUSTUDY review should pay particular attention to the issue of participation in TAFE.

**The Committee recommends that:**

**The Commonwealth Government should ensure that the Austudy Review pays particular attention to TAFE participation issues.**

### **7.17 Labour Market Programs**

The Committee's consultations revealed a concern among some groups that young people are being displaced from labour market programs as attention shifts to the long-term unemployed. It was argued by these groups that a focus on young people needs to be maintained because of the:

- precarious transition from education to work which is specific to young people;
- high opportunity costs of unemployment and insufficient education and training for this age cohort; and
- long-term cycles of underemployment and unemployment which disadvantaged young people are likely to undergo unless their labour market skills are consolidated at an early stage.

It must be acknowledged that, historically, labour market programs have had a strong bias toward young people—for the precise reasons listed above. While young people experience the highest rates of unemployment, their duration of unemployment is far shorter than for older workers. Education and training opportunities are also more readily available to this age cohort. The Committee is of the opinion that a balance must be struck in the distribution of labour market program opportunities among the unemployed of all ages, without introducing any further deliberate bias toward young people.

There is significant debate about whether training courses for disadvantaged young people should be 'mainstreamed' in order to bring non-participants into the system, or whether more flexible (and less rigorous) forms of training should be available. On the one hand, it is recognised that some of the most successful programs for dealing with the disadvantaged are very flexible, localised and delivered in non-institutionalised settings. On the other hand, as the Australian Teachers Union argued in its submission:

*A major barrier to effective participation of disadvantaged groups...has been the propensity for many targeted programs to further marginalise the people participating in them...programs to overcome disadvantage should be integrated within the national standards based curriculum and award framework.*

The Committee believes that, as far as practicable, courses aimed at offering education and training opportunities to the disadvantaged should aim to provide a 'bridge' into formal mainstream education and training. Labour market programs, such as SkillShare and JOBTRAIN for instance, would benefit from closer linking to further education and training opportunities. In the best circumstances, some of these courses could provide credit transfer into TAFE Certificate courses. Nevertheless, the Committee accepts that there are often cases where such direct articulation arrangements will not be appropriate given local labour market conditions and the need to secure the involvement of some young people who are alienated from the formal education systems.

### **7.18 Coordination Between Systems and Agencies**

A recurring theme in submissions dealing with disadvantaged groups was that close coordination must be maintained between relevant education, industry, welfare and employment service agencies to provide a comprehensive range of services to support participation in education.

In the post-school phase coordination arrangements are difficult given the variety of possible destinations for teenagers. Improved coordination should be seen as a comprehensive process from the national level down to local communities. At the national level, more effective allocation of shared responsibilities under bilateral arrangements between State and Commonwealth Governments may clarify areas of responsibility (such as through Special Premiers' Conference initiatives). At the State Government level, high priority must be accorded to the effective coordination of youth transition policies and programs. The Committee believes that there are considerable benefits to be gained from high level and comprehensive coordination of a range of youth support programs. However, the most important point of coordination is at the local/regional level. The Committee recommends that a client-centred approach to transition be adopted by the full range of service providers at the local/regional level.

Some useful models of practical local and regional coordination have been developed in recent times. In NSW there has been a successful trial of 'Start to Life' Regional Advisory Centres as a device for focusing support for unemployed school leavers. The Centres involve an intensive referral, job/training counselling effort for a short period (perhaps two weeks) in March-April each year. The purpose of the Centres is to secure appropriate training/work/education opportunities for school leavers who have not found employment after leaving school.

The Centres require extensive coordination between education and training providers, CES and community agencies. In NSW a two-day residential training course was given to the officers involved. This in itself forges communication links between the relevant agencies, and generates some excitement about the process.

It is particularly important that closer links be between school and welfare agencies.

*It is more likely for many educationally estranged young people that teachers will have less involvement with them than youth workers, social workers, the police, magistrates and others from welfare agencies. Schools need to engage in dialogue with all these groups to develop ways of ensuring that the young people successfully re-engage in education (Anwyl, 1991).*

School services should systematically link in with welfare advisory and assistance services on social problems such as homelessness, violence and abuse in the home, with referrals organised and monitored directly from the school. Advice and counselling on DSS support services and AUSTUDY should be readily available to students. Each school should be encouraged to develop a school welfare policy which sets its work within the framework of services available in its local region. ACOSS has recommended a community-sector-based home/school welfare liaison program to integrate school, community, accommodation and CES services. The Committee considers that there is merit in principle, in proposals to improve the level of coordination between school and welfare services.

**The Committee recommends that:**

**Community Services and Health Ministers examine ways of coordinating welfare services at the local level to promote more effective educational participation for disadvantaged young people.**

**7.19 Community and Parental Involvement**

One feature of effective programs for drawing disadvantaged people into education and training opportunities is the close involvement of the community in the establishment and service delivery for a range of relevant programs. Moves to support the collective responsibility of pupils, teachers, students, principals, parents and administrators for the participation of teenagers in post-compulsory education and training should be strongly encouraged.

One of the most useful concepts to appear from the American experience with measures to raise post-compulsory participation has been the idea of partnerships between key institutional agents—employers and schools being the most significant—to raise educational and labour market outcomes for disadvantaged groups.

Research evidence suggests that there is a very strong correlation between parental involvement in education and the performance of the student. Parents should be drawn into the process of schooling wherever possible. The Students at Risk program has supported a number of programs in this area which could serve as examples for wider dissemination.

Under the Aboriginal Education Program, one of the most effective measures has been the payment of student support assistance to the parents in the community. It may also be useful to develop various distance education projects in a way which involves the parents of teenagers in order to consolidate their support for their children's continuing education. There is good reason for TAFE, as well as the school system, to be involved in such projects.

## **7.20 Information to Support System and Regional Targets and Strategies**

All States/Territories should be responsible for establishing mechanisms for monitoring and reporting on participation and attainment of disadvantaged young people against targets and specified performance indicators. The targets would need to take into account the variety of programs available for disadvantaged groups and the need to preserve regional flexibility.

Within each State and Territory there are major variations in education and training participation and attainment patterns between different regions. To be most effective, strategies must be tailored to the needs and circumstances of each region. Policies and information systems which operate at State level can obscure this critical point.

**The Committee recommends that:**

**States and Territories examine their information systems with a view to improving their capacity to monitor regional patterns of education and training participation and attainment, especially for 'at risk' groups.**

### **References**

Anwyl, Jill, *Empowering Educationally Estranged Young People*, presented at 'The Liberating Curriculum', Curriculum '91 Conference of the Australian Curriculum Studies Association, University of Adelaide, 11-14 July 1991.



## Chapter 8

### Careers Education

#### 8.1 Context

In the context of rapid social and technological change, it is difficult to accurately predict what the future holds for individuals entering the work force and more importantly how the job market will be structured in the future. In general terms it seems clear that a higher overall standard of education and training will be required and that many traditional jobs will disappear and others emerge. Jobs will require broad abilities rather than narrow, specific skills. Retraining throughout one's working life will become the norm.

These developments give even greater emphasis to the need for effective career education.

Young people need to learn, while at school, what work entails and get some experience of it. They also need to make informed choices about training, further education and their future careers. This requires the best possible information and advice.

Career education is clearly recognised across Australia as a topic of major importance especially in schools. It is included in the 1989 declaration of National Goals for Schooling:

*To provide appropriate career education and knowledge of the world of work, including an understanding of the nature and place of work in our society.*

The importance attached to careers education in the education and training community is demonstrated by the range of recent publications, events and activities focusing attention on the topic. For example:

- Davis and Braithwaite, *Career Education in Australian Secondary Schools*, Project of National Significance, 1990;
- NBEET, *Strengthening Career Education in Schools*, 1991;
- establishment of AEC Working Party on career education, 1990;
- establishment of National Career Database Management committee, 1989;
- joint NBEET/DEET review of careers advisory services in higher education institutions, 1990;
- joint NBEET/BCA forum on career education in schools, 1991;
- establishment of BCA Working Party on career education, 1989; and
- AEC Review of Post-compulsory Education and Training.

The aim of all this activity is to improve services to provide clear direction and information to all those involved in the delivery of career education leading ultimately to the provision of sound, timely information and assistance to young people.

#### 8.2 Career Education Defined

It became apparent early on in the Committee's deliberations that the term 'career education' had different meanings to different people. NBEET commented on this range of meanings as follows:.

*Some consider that it reflects the spectrum of life-long careers, encompassing a person's role as a student, a worker, both paid and unpaid, a family member, a citizen, a spouse and a community member. At the other extreme, some consider it is confined simply to providing occupational and course information...*

The Committee considers that career education should be designed to provide young people with the knowledge, skills and attitudes they need to make informed decisions about school and post-school education, training and employment options. To achieve this outcome career education needs to encompass:

- learning about the world of work and its changing nature, its place in Australian culture, the general expectations of employers and the demands of the workplace;
- an understanding by individuals of themselves including their interests, abilities, weaknesses, desires and values;
- an understanding and awareness of the job/career options and the alternative pathways available;
- an understanding of the decision-making processes which can be applied in making career choices; and
- acquisition of the skills necessary to implement the decisions made (for example, job interviewing).

### **8.3 Involvement of Industry**

Career education will necessarily involve many people, including teachers, parents, employers and industry representatives.

As part of a growing interest in the outcomes of our education and training systems, industry is showing an increased interest in career education.

Industry is not only continuing to voice its long-established concerns over young people's work 'ethic' and schools teaching of the 'basics', but is now setting up employer/education consortiums and entering wholeheartedly into the development of specific career education and school/industry links programs.

Whatever the reasons for industry's increased involvement, be it enlightened self interest or a concern for our young people, it is clear that industry's involvement is a critical factor in the success of career education. A great opportunity exists to form meaningful partnerships between education and industry and every effort should be made to grasp that opportunity.

### **8.4 A Cooperative Approach**

One of the criticisms from industry, levelled at the current provision of career education, is the lack of a national, coordinated approach. The BCA stated in its submission to this review:

*In general the current provision, particularly at secondary education level, is misguided and confused, devoid of any national strategy and with various parties involved in its delivery but with no real owner of the total system.*

*The Business Council is particularly keen to see a cooperative national effort to elevate the career education function at all stages of educational*

*and occupational choice and to give it a national focus.*

The Committee believes that such a cooperative effort with a national focus is both desirable and achievable. In the first instance, this must involve greater coordination among the deliverers of careers education across systems and education sectors. Some steps towards greater national coordination are already under way.

For example, an AEC Working Party on Careers Education was formed in mid-1990 to undertake three major areas of investigation on a collaborative basis:

- the development of a statement of national goals, a set of outcome statements for students, schools and systems and appropriate evaluative arrangements;
- an analysis of key strategic issues common to all systems involved in the achievement of these national goals and outcomes; and
- a review of the roles and responsibilities of all the stakeholders involved in the delivery of effective career education to students.

The Working Party includes representation from school systems, TAFE and the Australian Vice-Chancellors' Committee. Following a recommendation from the Working Party, VEETAC has also recently agreed to establish a national review of TAFE information, advisory and counselling services. It is expected that the review will maintain ongoing links with the AEC Working Party. In the context of its review of Commonwealth/State relations, VEETAC has also recommended to Ministers the establishment of State-level consultative committees on occupational information and related services, involving consultation with industry and other groups.

These projects are increasing the level of national coordination within educational sectors, but there is still a need for greater coordination across all education and training systems and delivery agents. Each of the separate systems may deal with separate client groups and different levels of information but in essence the concepts they are dealing with are the same and each could gain a great deal by working more closely with the others and sharing experience and resources.

NBEET has foreshadowed work on a national overarching model for careers education covering all education sectors and the work force. The Committee encourages NBEET to proceed with this work.

## **8.5 Delivery**

Career education has several major components that are delivered in a variety of ways, by a variety of people and at different intervals throughout the education and training systems.

The components can be summarised under three major headings:

- curriculum;
- information and guidance; and
- experience.

### ***Curriculum***

For most young people the process of making a career choice is a complex and lengthy one and will necessarily vary from individual to individual. Each individual's perception of their future will change countless times throughout

their school life depending upon a multitude of factors such as influence from others, experience through part-time work, achievements in a particular discipline at school or simply through the process of growing up.

Career education should take account of this process and provide as many opportunities as possible for young people to explore their options. This should not be confined to the provision of information or counselling as young people approach the senior years at school, but rather be embedded in the whole learning process throughout the curriculum. Gaining an appreciation of the world of work and the available pathways to employment and further education should begin as early as kindergarten and continue right throughout school, into post-school education and training.

In the primary years of schooling, the curriculum should begin to cover general knowledge about the world of work and begin to position education in the context of future employment. Opportunities should be provided to individuals to identify and explore personal strengths, interests, attitudes and values which will ultimately influence their career choice. Career education should then take on a more rigorous and directed approach throughout the secondary years.

Secondary studies should include general work studies, the history of work and labour markets and provide a general understanding about the expectations of employers and available career opportunities.

Educators should be encouraged to employ a variety of teaching methods and allow young people to experience, first hand, aspects of the world of work through links with employers.

There are currently many examples of school/industry links that encourage joint development and teaching of such curriculum, and these should continue to be encouraged.

### ***Information and Guidance***

High quality, timely information is a vital element in career education. It is essential to clarify young people's thoughts and help guide them to an informed decision.

Information is currently provided by a number of organisations and takes many forms. Governments, educators, employers and specialist companies all distribute information through books, videos, computer programs, seminars and direct counselling.

The type of information is equally as varied, and covers, among other things, job descriptions, course information, place of study, pathways, minimum entrance requirements and a great deal of general educational material covering topics such as: 'How to get a job' and 'How to approach an interview'.

The importance of all this information is unquestioned. However, the committee believes that there is room for improvement in the delivery and availability of information that is accurate, easily understood and accessible by all young people.

A major step in this direction will be the establishment of a national computer database that will provide, in an interactive way, the information needed to help young people make informed career choices.

The committee has noted the endorsement by the AEC of the proposal presented by the National Data Base Management Committee recommending the development of such a national database using the Job and Course Explorer (JAC) as a framework.

The proposed national data base contains the following information and structures:

- **Courses**—Full sets of data on all courses accredited by higher education and TAFE authorities and on the institutions which provide them, in a nationally consistent format of the nationally agreed data element conventions. This data will be fully integrated. The data will also be available in summary form, and will be fully integrated in this format. At present, private providers and private courses will not be included (though they may continue to be held on State/Territory databases);
- **Jobs**—The full set of National Occupational Descriptions (NODs) developed by DEET, and additional state-specific occupational information attached to the NODs in a standard format; and
- A job/course link facility will be included, linking courses to possible occupational outcomes.

The development of this national database represents major progress towards an overall national approach to career education and will facilitate cooperation between delivery agents through the collection of data. The Committee fully supports the AEC decision to proceed with the project.

There are also several computerised guidance and learning systems in use or under development around the country. One particularly interesting example is the Job Ideas and Information Generator, Computer Assisted Learning (JIIG-CAL) program, currently being piloted in Western Australia. Specially trained teachers and advisers use these systems to help students learn about themselves and the world of work. There are elements of the computerised guidance systems that could enhance the accessibility and value of the national database.

#### **The Committee recommends that:**

**The National Data Base Management Committee of the AEC review the usefulness of systems for computerised careers guidance and learning with a view to identifying the best systems for application in the Australian context.**

Regardless of how accurate and accessible information services may become, there will still be the need for counselling or guidance.

The assistance sought by an individual may relate to personal issues, general educational information, or vocational choice. Those providing such guidance must not only have the necessary knowledge of industry and of available courses, but also must be skilled at personal counselling. Young people will rely on these 'experts' to provide sound, relevant assistance. This underlines the importance of having specialist career adviser positions not only in schools but also in TAFE colleges and higher education institutes.

While schools have the most fundamental role to play in career education, TAFE and higher education also have an important responsibility in information and guidance at the post-school level. Provided young people are presented with a range of experiences and formal career education throughout their school years, then the great majority will have their sights set on a career before they complete school. This will allow them to make informed decisions about subject and discipline choice prior to selecting further study or employment. However, there will always be a group of young people who will enter TAFE or higher education without a clear direction in mind, or for whom a change in direction becomes necessary or desirable part

way through a course. It is vitally important for those young people to have the support services necessary to explore and reassess their options.

The current and prospective changes in post-compulsory education and training, including the proposals contained in this report, pose new challenges for information and guidance systems at all levels. A closer relationship between education and training sectors is required to give effect to the convergence of general and vocational education and to ensure that pathways are developed which maximise opportunities for young people. This means that information and guidance systems in each sector need to be fully aware of the range of developing opportunities across sectors and with the world of work.

Information systems will need to include up-to-date data on course articulation and credit transfer between sectors. Teachers and careers advisers will need to understand the variety of pathways available and how they relate to each other. Educators and advisers in schools and higher education institutions will need to understand TAFE pathways and the concept of national competency standards. Teachers and advisers in all sectors will need to understand the concept of key competencies and the relationship between school, TAFE and higher education courses. All sectors will need to understand the developing links between education, training and employment.

This certainly implies a greater effort on behalf of each sector to inform the others of relevant developments. Given the patchy understanding of TAFE among school students revealed in the Committee's consultations, there is a particular need for improved information flow from TAFE to schools.

### *Experience*

Experience plays an important role in any method of teaching. Experiencing, first hand, what has been discovered through the curriculum or information sources, helps young people learn about the world of work in general, and may even help determine specific career preferences.

At the school level, work experience programs, school visits to industry, school/industry links, holiday work programs, programs such as TRAC and Young Achievement, all have a place in clarifying the role of industry and helping provide a real 'live' experience for young people in the world of work.

Increasing numbers of school students are working part-time while at school, and this provides a further opportunity for educators to draw actual work experience into a comprehensive program of careers education.

All experiential opportunities should be encouraged throughout school and embraced by teachers as a way of enriching the curriculum. Students should be encouraged to evaluate their own work experiences and to think carefully about their role as active participants in the workplace. Industry will need to accept a greater responsibility by providing opportunities for young people to participate and by working more closely with the education systems to develop the programs.

## **8.6 Individuals Responsible**

There are many people involved in career education, all with varying degrees of responsibility and involvement. Teachers, career advisers, employers, governments, parents and of course the young people themselves all have an important role to play if the career education is to be fully effective.

## ***Teachers***

Teachers have a vital role to play in helping provide the climate, information and experience necessary to prepare young people for the world of work.

Teachers have a responsibility for career education in the same way they have responsibility for other subject matter. However, they cannot be expected to assume this responsibility in isolation and should expect support and expert advice from career advisers, government agencies and employers.

There has been a fair amount of criticism levelled at teachers because of their lack of knowledge and expertise in the field of career education. The major criticisms relate to a perceived lack of 'real' industry experience and hence an inability of teachers to provide students with 'real world' information and guidance. Recent research (for example, Davis and Braithwaite) has shown that, in fact, there are many teachers who have worked in industry or gone to great lengths to learn about industry.

Nevertheless, a more sustained effort is needed, beginning with more pre-service and in-service training for teachers, to extend and update their knowledge of wider industry. Industry must provide more support through teacher exchange and similar programs and through direct advice and information to teachers. Industry involvement is referred to in more detail later in this chapter.

## ***Career Adviser (Coordinators)***

All teachers have a degree of responsibility for career education, there is also a need for specialist career advisers/coordinators in education and training institutions.

The responsibilities of dedicated career advisers/coordinators are wide ranging and cover for example:

- liaison with general teachers;
- information sharing with general teachers in relation to career education matters;
- liaison with the community including parents, industry and other educators;
- liaison with government agencies;
- coordination of general information including contact with local industry;
- input to curriculum regarding the world of work;
- counselling for individual young people/parents;
- fostering education/industry links; and
- liaison with career advisers in other schools and educational institutions.

Students gain knowledge and understanding about the world of work and their personal attributes through a variety of learnings and experiences. While some students have little difficulty in relating this knowledge and awareness to their personal career planning, many others require the catalyst of a special program/strategy introduced by the career adviser to facilitate the process.

At the individual level, career advisers must also be able to identify and respond to any specific career planning needs related to a student's socioeconomic background, cultural orientation, geographic situation, gender or disability.

Career advisers must be properly skilled through both pre-service and in-

service training programs. The range of skills and knowledge needed to perform their task effectively is broad and certainly not limited to simply understanding the career options available in industry.

NBEET sums up the skills and knowledge needed in such positions as follows:

*A sample but not exhaustive list of skills and knowledge would include interviewing, counselling and referral skills; some understanding of the interconnectedness of ability, aptitude, achievement and interest; knowledge of course prerequisites and selection procedures; knowledge of labour markets and labour market programs; knowledge of the education and employment needs of special groups; skills in team work and liaison (both in and outside school); information retrieval skills; organisational skills of a high order; skills in curriculum development; program design, implementation and evaluation skills; some understanding of work practice issues; and understanding of and experience in schools.*

The diverse nature of skills and knowledge, would require a complex program of education and training provision contributed to by a number of sources, including system and school authorities, HET's, employers, DEET and unions, and taken in a range of settings.

The Committee recognises the importance of having dedicated career advisers and endorses NBEET'S recommendation *'that every school with a large secondary age enrolment have a full-time career adviser (coordinator) to manage and coordinate the provision of career education in the school'*.

For smaller schools in regional areas a career adviser/coordinator should be provided to service a cluster of schools.

#### **The Committee recommends that:**

**Governments act on NBEET's recommendation that every school with a large secondary enrolment, and appropriate clusters of smaller schools, have a full-time careers adviser.**

#### **Industry**

Employers ultimately benefit from the provision of good career education when they hire employees who are familiar with their requirements, with the world of work in general and hopefully are committed to the career they have chosen. Substantial industry support is already provided through a wide variety of mechanisms including:

- provision of current job information and labour market projections;
- work experience programs, career information seminars, open days etc.;
- input to curriculum;
- education of teachers/career advisers through pre-service and in-service training;
- structured learning for students during part-time work;
- counselling to students/parents;
- provision of specific career information through brochures/videos etc.;
- input through school committees; and
- general education/industry links.

Industry has a particular responsibility for the provision of workplace experience for both teachers and students.



As noted above, industry associations have been critical of the perceived lack of experience of teachers in general, and careers advisers in particular, outside of the teaching profession. There are several programs of Teacher Release to Industry designed to deal with this issue. These programs have had varying degrees of success, but are often constrained by restrictions on resources for replacement teachers and on placements in industry.

One relatively new program that has received strong industry support is the 'Teacher In Industry' program in NSW. The program forges links between industry and teachers by allowing teachers to spend time working in industry. Teachers gain first hand knowledge of the way a business operates, and business gains a better appreciation of the role of teachers, the needs of students and the way schools function. The program is relatively new, but the support to date by industry has been extremely positive with about ninety teachers taking part by the end of 1991.

The program is strongly supported by the Rotary Club, and it appears that an opportunity exists to extend the program nationally. The Committee believes that a program of this sort is vitally important, both in forging links between industry and schools, but as a real training experience for teachers. To realise the full benefit of such industrial experience teachers should also have access to appropriate in-service follow-up programs.

Industry role in providing work experience opportunities for students is probably better established than its role in respect of teachers. With increasing school retention and an increasing emphasis on the 'relevance' of school to the world of work, there has been a substantial increase in the demand for work experience places. During consultations it becomes evident that there is a degree of frustration among both business and educators; business because of the proliferation of requests from different institutions and agencies, educators because of the difficulties involved in receiving suitable placements in an increasingly 'competitive' situation.

As noted in Chapter 6, a strong message from business representatives was that the substantial willingness of employers to provide work experience opportunities could be better utilised if procedures and lines of communication could be nationalised and coordinated.

In the Committee's view this needs to occur both at the local level, through consultation between employers and representatives of local education institutions, and at the national level through some nationalisation of career education structures to facilitate more effective industry involvement in national policy setting.

The Committee believes that experience in industry for both students and teachers makes a fundamental contribution to the development of an effective and motivated work force. This ultimately benefits industry as a whole. There are of course significant immediate costs to employers in providing these opportunities. The Commonwealth should consider allowing employer expenditure on industrial experience programs for students and teachers as valid expenditure for the purposes of the Training Guarantee legislation.

**The Committee recommends that:**

**The Commonwealth Government should allow employer expenditure on industrial experience programs for students and teachers as valid expenditure for the purposes of the Training Guarantee legislation.**

### ***Parents/Students***

Parents can have enormous influence over the career directions their children will ultimately pursue. Parents' attitudes to work and study, the examples they set, the encouragement and the information they provide, all have a direct bearing on student outcomes.

Parents, therefore, have an important role to play in helping their children make informed career choices. This implies a responsibility to ensure the information they base their advice on is up-to-date and accurately reflects future opportunities and is not drawn solely from the experience they gained when first entering the work force.

Schools, teachers and career advisers should welcome those parents who show interest and encourage others less inclined to become involved. This can be achieved by involving parents in the school, inviting them to careers nights, involving them in counselling sessions with their children and so on. Provision of access to information through schools and public libraries will also encourage parental involvement.

Young people themselves must also realise that they have a responsibility for their own future and should pursue all avenues of career education with vigour—be that finding information, making contact with employers, educational institutions or in seeking out counsel. The process of careers education must, in part, be almost instilling that sense of responsibility and providing young people with an understanding of the sources of information and assistance available to them.

### **8.7 Careers Education Coordination**

The Committee has reached the conclusion that there is a need to raise the profile of career education, provide national consistency, involve industry to a greater degree and ensure a more efficient use of resources across system and across the country.

In addition there is a need for a more active and coordinated approach to the promotion and provision of work and industrial experience placements for students and teachers, and for a process to monitor the effectiveness of careers education services.

The Committee was concerned that these needs may not be met through current approaches, despite the recent enhancements to career education system and moves toward improved coordination. In particular, the Committee took note of the strong views from business that there is a need for a simplified process to capitalise on the willingness of industry to increase its input and involvement. Such a simplified process was characterised as a single 'funnel' through which increased industry efforts could be directed.

One option could be the establishment of a high profile national body, jointly funded by and representative of relevant education authorities and industry, with a charter to:

- encourage the involvement of industry in careers education;
- develop and promote work and industrial experience opportunities for students and teachers;
- monitor and report on the effectiveness and relevance of careers education; and
- provide advice on strategies in relation to careers education for

governments, education and training systems, and industry. Any such option would need more detailed development and consideration before it could be recommended unequivocally. There may be other ways in which to achieve the same essential policy objectives.

**The Committee recommends that:**

**AEC and MOVEET should establish a working group with the NIEF to develop strategies to:**

- **raise the profile of careers education;**
- **achieve better coordination in the operation of the careers education system; and**
- **respond positively to the call from business for a simplified and improved mechanism for involvement in careers education.**

**The working group should be established as soon as possible and should take into account:**

- **the report of the AEC Working Party on Careers Education,**
- **the VEETAC review of TAFE information, advisory and counselling services,**
- **the results of the current PNS study on school-industry links.**

**The working group should examine a range of options, including the possible formation of a new national agency along the lines outlined in this report. It should report to AEC, MOVEET and the NIEF no later than May 1992 to allow for decisions to be taken and implemented by January 1993.**

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## **Chapter 9**

### **Resource Implications**

#### **9.1 Introduction**

The terms of reference require the Committee to assess the likely resource and funding implications of existing trends in, and further strategies for, post-compulsory education and training. This Chapter addresses three aspects of these issues:

- aggregate resource implications relating to the provision of education and training both for current trends and the targets proposed by the Committee;
- options for restructuring the approach to resourcing of post-compulsory education and training; and
- funding implications of other specific recommendations in this report.

#### **9.2 Resource Implications of Education and Training Provision**

In order to assess the resource implications of current trends and the Committee's proposals for post-compulsory education and training, it was necessary to complete two tasks:

- develop a set of scenarios each of which provides an internally consistent projection of the education and training activities of young people; and
- develop a consistent approach to the costing of educational participation across sectors.

Both of these tasks were complicated by the different approaches to measurement and definition across sectors, across States and in some cases, within sectors. To help deal with these difficulties, the Committee established a working group of officials from the Commonwealth, New South Wales, Victoria and Tasmania. The working group in turn sought advice from all States. In addition, Dr Gerald Burke of Monash University was contracted to provide expert assistance, especially in relation to the methodology for costing across sectors. The Committee gratefully acknowledges the input provided from these various sources.

#### **9.3 Scenarios**

The Committee examined a range of different scenarios for post-compulsory education and training over the period 1991 to 2001. The most important of these for developing an appreciation of the resource implications of current trends and the Committee's proposed targets are:

1. Base scenario: demographic change only;
2. Trend scenario: estimate of possible trend growth in participation across all sectors; and
3. Target scenario: assuming achievement of the proposed targets.

In each case, the baseline data for the scenarios were drawn from the ABS Transition from Education to Work Survey with the exception of the figures for higher education which were supplied by the Department of Employment, Education and Training. The shortcoming of the ABS data is that it is a

'snapshot' taken in May each year and therefore does not capture full year enrolment figures, especially in TAFE where students enrol continuously throughout the year. To overcome this problem, the proportional change in participation over time was applied to current cost data to generate the estimates of resource implications.

The baseline scenario assumes that the educational participation rates of all groups will remain constant at projected 1991 levels, so the only change from current numbers is generated by demographic change. The baseline scenario for 1991 and 2001 is shown in Table 9.1. The most notable feature is the close similarity between the two years. After a dip in the youth population during the 1990s, by 2001 the numbers in the 15-19-year-old cohort will have returned to their 1991 levels.

The 'trend' scenario assumes that:

- school retention rates to Year 12 increase to 75 per cent;
- as retention rates rise the transfer rate from Year 12 to higher education decreases slightly, from 40 per cent to 38 per cent; and
- age participation rates in TAFE and other training increase by about 1 per cent per annum.

Table 9.2 shows the trend scenario for 1991 and 2001. It involves an increase of about 11 per cent in the numbers of 15 to 19-year-olds participating in education and training. The total participation rate for the age group rises from 69 per cent in 1991 to 76 per cent in 2001. Relative to the baseline scenario there would be an additional 98 000 teenagers involved in education and training in 2001.

The target scenario was developed to be consistent with the Committee's proposed targets for a completion/participation rate of 95 per cent of 19-year-olds by 2001 and for at least a Level 2 qualification for almost all young people by age 20.

The target in relation to Level 2 qualifications implies that almost all young people will take some form of significant post-school education or training by the age of 19. The target scenario therefore assumes that:

- retention rates in school to Year 12 will increase to 80 per cent;
- roughly 30 per cent of each year cohort go direct from school to higher education (and a further proportion enter in later years);
- by 2001, 50 per cent of each year cohort take some form of post-school training in TAFE or private colleges by age 19; and
- in 2001, all but 5 per cent of young people at age 19 will have reached at least Year 12 or will have taken some post-school training
  - that is, achievement of the target of a completion/participation rate of 95 per cent.

Figure 9.1 provides a simplified illustration of the student flows assumed in the target scenario. The pattern of post-school participation in the different sectors could vary from that assumed in the target scenario and still satisfy the Committee's overall targets. The patterns will almost certainly vary from State to State. The Committee is not proposing that the detailed elements of the target scenario should be adopted as specific targets in themselves, but it notes their importance for sectoral planning.

Table 9.1 'Base-Line Scenario' Demographic Change Only 15-19 Year Olds

	1991	2001	% Change
	No. (000's)	No. (000's)	1991 - 2001
School	635	640	0.8
TAFE	150	152	1.4
Higher Education	135	136	0.7
Other Tertiary	26	26	0.0
Total Students	946	954	0.9
Total 15-19 Year Olds	1367	1379	0.9

Table 9.2 'Trend Scenario', 15-19 Year Olds

	1991	2001	% Change
	No. (000's)	No. (000's)	1991 - 2001
School	635	699	10.1
TAFE	150	166	10.7
Higher Education	135	158	17.0
Other Tertiary	26	29	11.5
Total Students	946	1052	11.2
Total 15-19 Year Olds	1367	1379	0.9

Table 9.3 'Target Scenario' 15-19 Year Olds

	1991	2001	% Change
	No. (000's)	No. (000's)	1991 - 2001
School	635	726	14.3
TAFE	150	232	54.7
Higher Education	135	160	18.5
Other Tertiary	26	40	53.8
Total Students	946	1158	22.4
Total 15-19 Year Olds	1367	1379	0.9

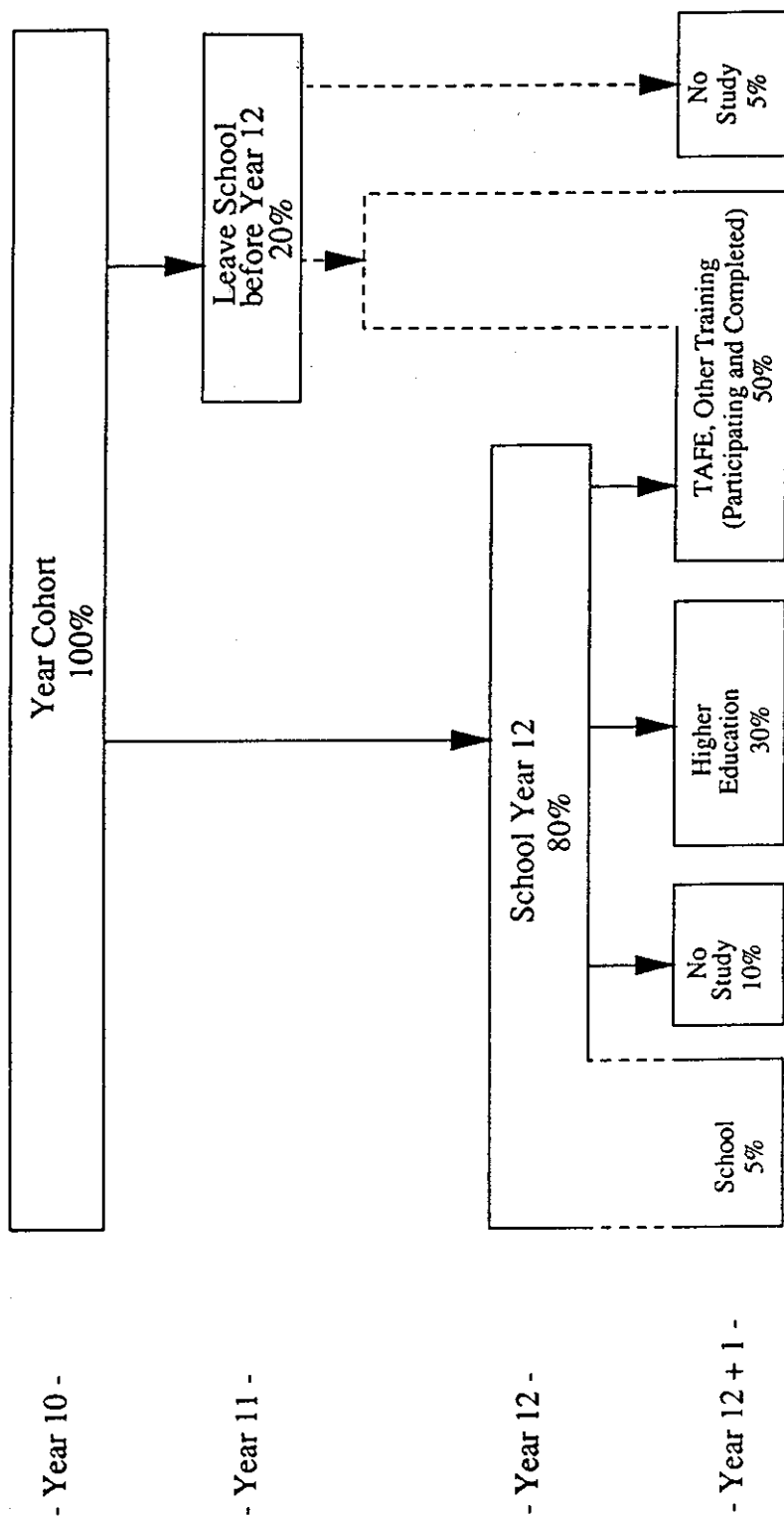


Figure 9.1 Target Scenario: 2001 Simplified Representation of Flows



**The Committee recommends that:**

**Governments should commission a review of the sectoral impact of policies for participation in post-compulsory education and training with a view to ensuring balanced growth in the provision of places for schools, TAFE and higher education.**

Table 9.3 shows the target scenario for 1991 and 2001 for 15 to 19-year-olds. Key features are:

- an overall increase of a little over one-fifth in the total number of students;
- more than a 50 per cent increase in the number of young people in TAFE; and
- an overall increase in the participation rate from under 70 per cent to 84 per cent.

Table 9.4 compares the pattern of participation and attainment of 19-year-olds under the target scenario in 2001, with the pattern recorded in the 1990 ABS Transition survey. Key features are:

- doubling of the participation rate of 19-year-olds in TAFE from 14.9 per cent to 30.5 per cent and more than a doubling of their participation rate in other training (2.3 per cent to 6.8 per cent);
- an increase in the participation rate in higher education from 23.0 per cent to 27.2 per cent; and
- a fall in the proportion not participating in education and without post-school qualifications from 18 per cent to 10 per cent for those who completed Year 12 and from 27 per cent to 5 per cent for those who did not complete Year 12.

For costing purposes it is also necessary to make some assumptions about the split between government and non-government schools, between TAFE and other training providers, and between full and part-time attendance. For the trend and target scenarios it has simply been assumed that enrolment shares between government and non-government schools are maintained in the 1990 ratio.

In addition variations have been calculated showing:

- government schools and non-government schools share the additional students 85 per cent to 15 per cent; and
- all additional students enter government schools.

In each scenario the split between TAFE and other training providers was maintained in the 1990 proportion for each age. In relation to full and part-time attendance, all school students were treated as full-time, and the 1990 proportions for each age were maintained in TAFE and higher education.

Each scenario for the 15–19-year-old group was also expanded to form a coherent scenario covering all education and training participants. This enabled the Committee to estimate total resource implications as well as those associated directly with the teenage cohort.

Table 9.5 and Figure 9.2 provide further details of each scenario for the 15–19-year-old group.

#### **9.4 Method of Estimating Government Recurrent Outlays**

Estimates of government recurrent expenditures have been prepared for the alternative scenarios of participation in education by 15–19-year-olds as discussed above, and for the total of student numbers in each education sector.

Two sets of estimates of expenditure in schools, TAFE and higher education have been prepared; one on the assumption of constant real wages and, the other on the assumption that real wages rise by 1 per cent per annum. The estimates are shown in detail in Tables 9.6 and 9.7 and in summary in Table 9.8.

##### ***Schools***

The estimates for outlays on schools assume the maintenance of real outlays per student in primary and secondary education. For government schools the estimates are based on data from the finance statistics prepared by the Australian Education Council for 1989–90. For non-government schools the estimates are based on data on per capita grants received by non-government schools as compiled by DEET.

For government schools the expenditure estimates for 15–19-year-olds are based on the recent age-grade distribution. For Australia as a whole, school enrolments of those aged 15 correspond closely with total Year 10 enrolments and enrolments of those aged 16 plus are close to the total in Years 11 and 12. It is assumed that expenditure on Years 11 and 12 is approximately 20 per cent more than the average for junior secondary years. The estimates for senior secondary costs is based on analysis of class sizes across Australia. The actual cost of upper secondary education varies among States. However for Australia, because of the pattern of demographic change the assumption about the relative cost of senior secondary schooling has little effect on the aggregate of school expenditure in the 1990s.

On the assumption of an increase in the final year retention rate to 80 per cent, senior secondary enrolments will remain at about 30 per cent of total secondary enrolments, rising to 31 per cent towards the end of the decade.

All school enrolments are assumed to be full-time.

##### ***TAFE***

Estimates for TAFE assume constant real outlay per student hour and per student. Expenditure estimates for TAFE are based on an analysis of 1989 TAFE student data and expenditure data derived from Selected TAFE Statistics (DEET, 1989). Teenagers comprised about 27 per cent of all students, but 55 per cent of full-time students. Whereas about 9 per cent of all TAFE students were classified as full-time, about 19 per cent of teenagers in TAFE were full-time. There is also some evidence that 15–19-year-olds enrol in courses that involve above average costs.

It is estimated that expenditure on a teenage student is between 35 and 40 per cent more than the average for all TAFE students. The estimate for 15–19-year-olds therefore uses a 40 per cent loading on average costs.

##### ***Higher Education***

Estimates for higher education are based on DEET's calculation of funding per unit of student load for 15 to 19-year-olds and for total persons. It is assumed that the small amount of State/Territory funded load is financed at the same rate. The expenditure by governments on higher education includes

Table 9.4 Educational Participation and Attainment of 19 Year Olds, 1990 and Target Scenario

	1990		Target 2001	
	No. (000's)	%	No. (000's)	%
<b>Participating</b>				
School	7.4	2.5	12.7	4.6
TAFE	44.9	14.9	84.3	30.5
Higher Education	69.2	23.0	75.3	27.2
Other Training	7.0	2.3	18.7	6.8
<b>Attained</b>				
TAFE	34.9	11.6	41.7	15.1
Other Training	1.9	0.6	2.2	0.8
<b>Not participating and Without Post School Attainment</b>				
With Y12	54.2	18.0	27.6	10.0
Without Y12	81.7	27.1	13.9	5.0
<b>Population</b>	301.1	100.0	276.4	100.0

% of 19 year olds having attained year 12, a vocational qualification, or still participating:

1990 (%)	2001 (%)
72.9	95.0

% of 19 year olds in school or with Post School participation, or attainment:

1990 (%)	2001 (%)
54.9	85.0

Table 9.5 Scenario for Education and Training Participation, 15-19 Year Olds

	'Base-Line' Scenario		'Trend' Scenario		'Target' Scenario	
	No. (000's)	% Change 1991-2001	No. (000's)	% Change 1991-2001	No. (000's)	% Change 1991-2001
School	640	0.8	699	10.1	726	14.3
TAFE	152	1.4	166	10.7	232	54.7
Higher Education	136	0.7	158	17	160	18.5
Other Tertiary	26	0	29	11.5	40	53.8
TOTAL	954	0.9	1052	11.2	1158	22.4

# Scenarios for Education and Training Participation at 2001 - (15-19) Year Olds

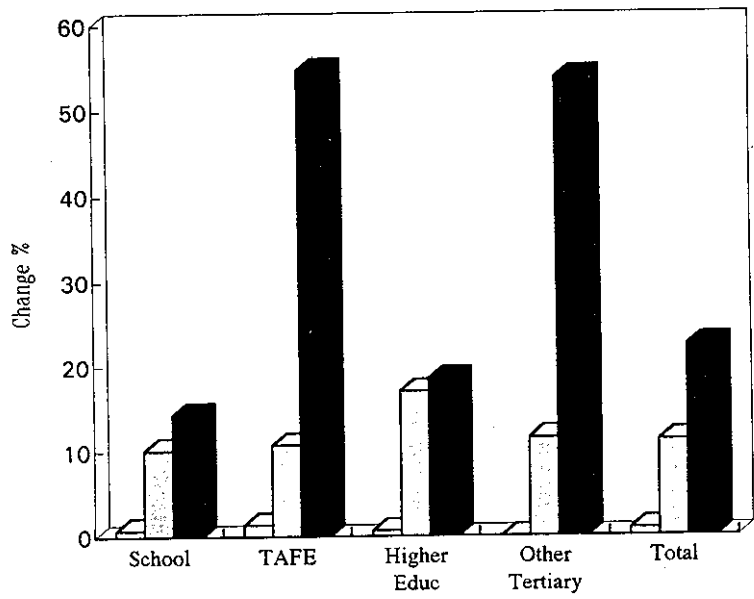
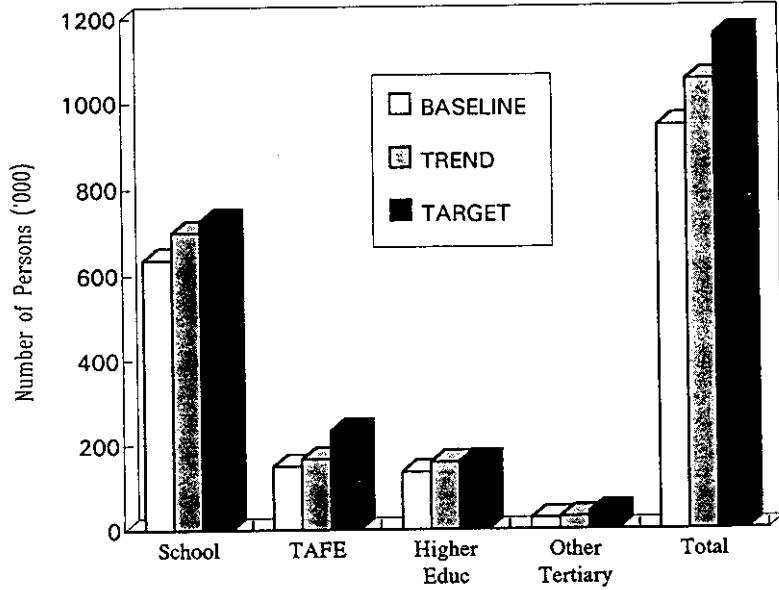


Figure 9.2

Table 9.6 Student Numbers and Government Recurrent Outlays on Education  
1991 and 2001 Trend and Target Projections  
December 1990 Price Levels

		Students ('000)		Government Expenditure \$M	
		15-19	Total	15-19	Total
Government Schools	1991	432	2193	2227	8635
Trend	2001	476	2443	2416	9562
Target	2001	494	2461	2512	9658
Non-Government Schools	1991	203	858	526	1728
Trend	2001	223	954	578	1916
Target	2001	232	963	601	1939
TAFE*	1991	150	480	563	1600
Trend	2001	166	578	655	1952
Target	2001	232	645	895	2192
Higher Education	1991	135	473	1171	3454
Trend	2001	158	552	1372	4046
Target	2001	160	558	1385	4083
Other Tertiary	1991	26	151	0	0
Trend	2001	29	166	0	0
Target	2001	40	178	0	0
TOTAL	1991	947	4152	4488	15417
Trend	2001	1051	4694	5021	17476
Target	2001	1158	4804	5393	17872
		Eligible 16+ full-time	Total		
AUSTUDY	1991	576	779	663	1023
Trend	2001	670	918	771	1205
Target	2001	716	964	824	1265

Note: \* TAFE student statistics estimated on basis of May survey by ABS (6227.0).

Table 9.7 Alternative Estimates of Government Recurrent Outlays on Education  
1991 and 2001 Trend and Target Projections  
Effects of Real Wage Increase, % to GDP, Payroll and Superannuation Adjustments  
December 1990 Price Levels, \$ million

		Government Expenditure constant real wage		Government Expenditure 1% per annum rise in real wage		Total + super- annuation -payroll tax*	
		15-19	Total	15-19	Total		
Government Schools	1991	2227	8635	2227	8635	9498	
	Trend 2001	2416	9562	2618	10362	11399	
	Target 2001	2512	9658	2722	10466	11513	
Non-Government Schools	1991	526	1728	526	1728	1728	
	Trend 2001	578	1916	626	2076	2093	
	Target 2001	601	1939	651	2101	2118	
TAFE*	1991	563	1600	563	1600	1682	
	Trend 2001	655	1952	710	2116	2225	
	Target 2001	895	2192	970	2375	2496	
Higher Education	1991	1171	3454	1171	3454	3302	
	Trend 2001	1372	4046	1487	4384	4191	
	Target 2001	1385	4083	1501	4424	4230	
SUB-TOTAL	1991	4488	15417	4488	15417	16210	
	Trend 2001	5021	17476	5441	18938	19906	
	Target 2001	5393	17872	5844	19367	20357	
AUSTUDY	1991	663	1023	663	1023	1023	
	Trend 2001	771	1205	771	1205	1205	
	Target 2001	824	1265	824	1265	1265	
TOTAL				% of GDP			% of GDP
	1991	5151	16440	4.2	5151	16440	17233 4.4
	Trend 2001	5792	18681	3.5	6212	20143	21111 4.0
	Target 2001	6217	19137	3.6	6668	20632	21622 4.1
% INCREASE in TOTAL 1991 to 2001							
	Trend	12.5	13.6	20.6	22.5	22.5	
	Target	20.7	16.4	29.5	25.5	25.5	

Note: \* To increase comparability among sectors payroll tax has been removed from those sectors where it had been included, and estimated employer contributions to superannuation included in the totals.

Table 9.8 Government Recurrent Outlays on Education - All Students

	1991 (\$M)	2001 (\$M)	
		Trend	Target
Government Schools	8635	9562	9658
Non Government Schools	1728	1916	1939
TAFE	1600	1952	2192
Higher Education	3454	4046	4083
AUSTUDY	1023	1205	1265
<b>Total</b>	<b>16440</b>	<b>18681</b>	<b>19137</b>

Assumes:

- . Real Wages Constant
- . 1990 enrolment shares between government and non-government schools



funds raised by the Higher Education Contribution Scheme. The Commonwealth's outlay in higher education is partly off-set by the amount of HECS revenue raised each year. In 1990-91, HECS will have raised approximately \$125 million which represents about 3.4 per cent of the \$3.7 billion the Government will make available to higher education institutions. By the year 2000 it is estimated that HECS revenue will increase to more than \$600 million annually, representing a significantly higher percentage of the Commonwealth's outlay.

### ***Student Assistance***

Estimates of total outlay on student assistance are based on the assumption of constant real outlay per full-time student aged 16 and over, in schools, TAFE, higher education and 'other education' (mainly business colleges). Estimates of the number of full-time students are based on current proportions of full and part-time students for schools, TAFE, higher and other education. Estimates for 15 to 19-year-olds and the total estimates assume maintenance of the average rate of funding by age as estimated by DEET in 1990.

No allowance is made for potential offsetting savings from reduced expenditure on unemployment benefits.

### ***Cross Sector Comparisons***

The expenditure data compiled in the normal data collection for the separate sectors is not strictly comparable. In addition the very large majority of TAFE students are part-time, some taking very short courses. It is not easy therefore to draw conclusions about cost per full-time student from the aggregate data on students and expenditure.

Two adjustments have been made to increase comparability of the total expenditure among the sectors. Payroll tax is not paid by non-government schools and is excluded from the Australian Education Council Collection for Government Schools. It is also excluded by the ABS from its government finance statistics. Hence an adjustment has been made in Table 9.7 to exclude it from other sectors. Employer contributions to superannuation are also excluded from the AEC collection. Increasingly, employer contributions to superannuation are being included in departmental costs. They are included in higher education and non-government estimates. An approximate estimate of its cost is included for relevant sectors in Table 9.6.

### ***Commonwealth State and Private Shares***

Recent Commonwealth and State/Territory shares of outlay are shown in Table 9.9. It is not clear what the trend in shares will be in the next decade between levels of government and between public and private sources. In relation to TAFE the Deveson Committee recommended a growth in private finance for TAFE through entrepreneurial activity. It also recommended an expansion of government funds of 5 per cent per annum. In relation to schools the Commonwealth has committed itself to maintaining real per capita grants to government schools and to increase them for low resource non-government schools. At the state level, New South Wales for example, is increasing grants to non-government schools, but this is not so for all other States. Unless otherwise specified, the estimates in this chapter use the current shares as set out in Table 9.9.

Table 9.9 State/Commonwealth shares of Recurrent Outlays 1990

	Government Outlays	
	Commonwealth (%)	States & Territories (%)
Government Schools	9	91
Non Government Schools	65	35
TAFE	9	91
Higher Education	95	5
AUSTUDY	100	0
Average	39	61

## 9.5 The Expenditure Estimates

Total recurrent outlays by governments are estimated for the target projection to increase by 16 per cent or 1.6 per cent per annum in the period 1991 to 2001 on the assumption of constant real wages. The increase is estimated to be 26 per cent or 2.3 per cent per annum if real wages increase by 1 per cent per annum. This represents increases of \$2.7 billion to \$4.2 billion on 1991. However, the increases are not large compared with estimated expenditure associated with the trend projection. In 2001 the target projection is only about 2.5 per cent or to \$450 to \$500 million more than the trend projection.

The total outlays can be compared with GDP. The GDP is projected to grow faster than the highest of the projections in educational outlays. It grew in real terms by nearly 40 per cent in the 1980s and is assumed to grow 37 per cent to 2001 in the estimates in Table 9.7. On the assumption of constant real wages the percentage of GDP is projected to fall from 4.2 per cent to 3.6 per cent. The fall is about half as much if real wages increase.

The age structure of the Australian population is the main reason that the projected changes in participation in this report do not have a bigger impact on expenditure in the 1990s. While total school enrolments are growing, the rate of increase is less than for the work force and is mainly in the primary grades. The 15–19-year-olds population declines slightly to 1995, recovering to its 1991 level in 2000.

Expenditure on 15–19-year-olds for the target projection is estimated to rise 21 to 29 per cent, a larger increase than in total outlays. The increase is estimated at between \$1.1 and \$1.5 billion. About one-third of the increase in expenditure on 15 to 19-year-olds is in schools, about one-fifth in higher education, one-third in TAFE, and 15 per cent in AUSTUDY. Proportionately, the increase is greatest in TAFE, at over 60 per cent for the decade. Total TAFE outlays on persons of all ages are projected to grow by 37 to 48 per cent, compared to 18 to 28 per cent for higher education and 12 to 21 per cent for schools.

AUSTUDY is under review in 1991. Outlays on AUSTUDY are estimated to grow by about 25 per cent, on the assumption that expenditures increase in line with the number of full-time students aged 16 and over. Some other areas of student assistance such as ABSTUDY and AIC are not included in the tables.

### *Alternative Estimates for Outlays on Schools*

The total increase in enrolments by 15–19-year-olds in non-government schools is projected as 29 000 in the Target projection. If all these students attended government schools (in Years 11 and 12) outlay on government schools would be increased by \$155 million and grants to non-government schools (at the recent rate per secondary student) reduced about \$75 million, a net increase in outlays of \$80 million or about 0.7 per cent of total government recurrent outlay on government and non-government schools in 2001. If 85 per cent of the increase in non-government enrolments of those aged 15–19 were accommodated in government schools the outlay on government would be \$132 million higher and outlay on non-government schools about \$64 million lower, a net increase of \$68 million, or about 0.6 per cent of total recurrent outlays on schools.

## 9.6 Capital Resources

An expansion of student numbers to the recommended participation targets will have major capital implications. The extent to which sensible estimates of those implications can be made depends on a number of factors, in particular:

- the amount of spare capacity in existing capital stock, within current delivery practices; and
- the potential to create additional capacity by more intensive utilisation of existing stock.

### *'Worst Case' Scenario*

If it is assumed that there will be no spare capacity or potential to create additional capacity, the capital implications of the recommended targets will be the product of the additional numbers of students multiplied by the assessed costs of housing each additional student.

In secondary schools the assessed costs will be a mix of the costs of putting students into completely new schools and into new classrooms at existing schools. On the basis of school building costs in New South Wales and Victoria these costs would be in the order of \$13 000 per student in new schools and \$4 400 per student in new classrooms in existing schools.

In TAFE and in higher education the assessed costs are likely to be the average cost of putting students into new facilities at existing institutions, although some completely new institutions may also be necessary. For TAFE new teaching buildings in the fields of study which are projected to absorb any expansion in participation over the next decade cost around \$20 000 per full-time student place; for higher education a slightly lower estimate of \$17 000 per full-time student place has been applied.

The additional funding would be required at the latest over the five years 1996 to 2000 to provide for the expansion target in 2001 since a targeted expansion of 19-year-old participation by 2001 would start with an increase in Year 10 to Year 11 school retention in 1998. Spending on capital facilities for 1998 expansion would need to start in 1996. In practice it is more likely that the expenditure would be required to start ramping up somewhat before this.

### *'Best Guess' Scenario*

At the other extreme from this worst case scenario, it could be assumed that all additional students will be housed in existing facilities with no capital implications apart from the normal 'existing policy' funding. In reality the capital implications will be between these extremes. There will be spare capacity in schools in inner metropolitan and country areas. Providing the necessary recurrent funding is available, there will also be potential to increase the intensity of utilisation of facilities in TAFE and higher education, for example by expanding weekly timetables and the teaching year.

Table 9.10 illustrates the capital costs if it is assumed that the school sector is able to accommodate one half of the expansion in spare capacity, with the balance split between additions to existing schools and new schools, and both the TAFE and higher education sectors are able to absorb half the expansion in existing capacity. These assumptions would of course need to be tested in practice.

## 9.7 Resourcing Options

The magnitude of the resource implications of the proposed targets and even of current trends presents a major challenge to governments and the community. The levels of educational participation to which the society now aspires and which are suggested by the imperatives for a more highly skilled work force cannot be achieved without substantial increases in resources. Put bluntly, if the society and governments are not willing to meet these resource implications, the types of strategies proposed by this Committee will need to be entirely reconsidered and even current trends will need to be slowed or halted.

At the same time, it should be re-emphasised that, even for the target scenario, recurrent government expenditure on education and training would still fall as a proportion of GDP.

The costs of education and training will be met from a combination of sources:

- individuals, directly through fees and charges and indirectly through foregone wages in some instances;
- industry, through direct involvement in training and through contributions in-kind to education and training institutions;
- entrepreneurial activity by institutions, for example, the sale of education overseas; and
- the public purse, through costs to government.

The extent of individual contributions to the total cost of education and training will depend largely on the balance between public and private sector provision, and on the extent of individual contributions to the cost of each type of provision.

In the schools sector, private schools will absorb some of the increased participation, but the major proportion will flow into public schools, at least in line with their current share of enrolments. There may, in fact, be a disproportionate flow into the public schools given the higher retention which already exists in the private sector (there is nearly full Year 12 retention already in the non-Catholic, non-government schools) and the recent evidence of a move back towards government schools. Non-government schools will receive a guaranteed level of contribution from the Commonwealth Government for at least the next eight years, but are also under an obligation to maintain or increase their level of private contributions. It should also be noted that there is a significant private contribution to the costs of public schooling in the form of various charges and levies for specific activities. In Year 12 it is not unusual for these charges and levies to amount to \$300-\$400.

In the higher education sector, the introduction of the Higher Education Contributions Scheme (HECS) has established a stable basis for individual contributions. As indicated above, HECS contributions will meet an increasing proportion of the Commonwealth's outlay in higher education. The AVCC has advanced a proposal to allow institutions to enrol Australian students on a fee paying basis in addition to the student load funded by the Commonwealth. Any such change would be likely to increase the proportion of systems costs met by private contributions, but only to a limited extent.

Table 9.10 Cumulative Capital Cost 1991-2001 Trend and Target Scenarios

School	Trend Scenario	Target Scenario
	\$ Billion Total 1991-2001	\$ Billion Total 1991-2001
- Government	1.1	1.2
- Non Government	0.5	0.5
- Sub-total	1.6	1.7
<b>TAFE</b>	0.6	0.9
<b>Higher Education</b>	0.6	0.6

Assumes constant enrolment shares and equal capital cost per student between government and non-government schools.

In the TAFE/training sector, private providers will continue to charge full costs at market rates. The establishment of a more open training market will lead to an expansion of privately funded training activity, but TAFE will remain the dominant provider, especially for the younger age groups.

Within TAFE, the Commonwealth has lifted its prohibition on States and Territories levying fees for preparatory or initial vocational courses. This has opened the possibility of rationalising what the Deveson Committee called 'the hotch potch' of present arrangements which involves a mixture of administrative, general, student services and materials charges that in combination can range from less than \$50 to more than \$1 000 and which vary from State to State and even college to college. The Deveson Committee estimate, that in aggregate, fees and charges contributed 4 per cent to TAFE recurrent income in 1989-90 and fees for stream 1000 (recreational) courses contributed a further 1 per cent.

The Deveson Committee noted a range of possible wider arrangements for fees in TAFE and identified elements of an equity package which should be considered alongside any extended fees regime. The Committee believes that States and Territories will need to rationalise and extend their fee arrangements for TAFE, ideally in a nationally consistent way, if the increased participation targets proposed in this report are to be realised. In line with its proposal for an Education and Training Guarantee for twelve years, the Committee believes that fees should be rationalised such that all education and training subject to the Guarantee should be free of tuition fees, with a consistent approach to individual contributions applying thereafter.

As noted previously the Committee believes that industry has an obligation, and is increasingly willing, to extend its contribution to the resources needed for a more highly skilled work force. The proposed extension of entry-level training arrangements, the implications of award restructuring, the training guarantee legislation and the general development of a training culture will all boost the significance of the workplace as a learning environment and the contribution of industry to education and training. The development of competency based approaches which can give formal recognition to competences gained on-the-job or in industry skill centres will also encourage the involvement of industry in training. In this context industry will play a significant role in the provision of training opportunities.

The involvement of industry with institutional education and training providers is also an important avenue for resource contribution. As industry links with schools, TAFE and higher education are enhanced, the in-kind contribution of industry to curriculum development, provision of equipment, work experience for students, professional development for teachers, etc., will become increasingly significant. In this context, industry's contribution will be more to an enhancement of quality of education and training than to the expansion of educational provision.

The potential resources to be obtained from entrepreneurial activity by institutions are very limited in the schools sector, but more significant for TAFE and higher education. These activities relate principally to fee for service provision and design of education and training programs, sale of education services to overseas students (more significant in higher education but with potential for TAFE), and research, development and consultancy services.

The Committee noted that, especially in TAFE, there are significant limits to the extent to which additional places can be funded from revenue generated by

commercial activity. Margins on commercial activity in the training market are generally quite low, so a very substantial effort is required to generate significant additional income. At the same time TAFE colleges are required to meet their community service obligations as a first priority. The Committee also noted that the original policy intention of boosting TAFE's fee-for-service role was not so much to generate additional income, but rather to strengthen TAFE's responsiveness to its clients.

A key element in the resources equation is the degree of efficiency with which resources are applied. There is no doubt that some further efficiencies are possible in all sectors. For example, in the schools sector there are opportunities at local and regional level for rationalisation of sites and more intensive use of facilities. At the system level there are possibilities for enhanced efficiency from the use of new educational technology and from increased national cooperation, especially in curriculum development.

In the TAFE sector, the Deveson Committee recommended examination of:

- better sharing of training materials among States
  - especially the excellent range of open learning materials now produced;
- greater use of existing plant and equipment including the sharing of facilities with industry;
- duplication between on-the-job and off-the-job training;
- class contact hours in some courses which seem to be excessive; and
- attrition rates in some courses which seem to be unacceptably high.

In higher education, institutions have been operating with a gradually reducing rate of funding per student, although aggregate budgets have increased substantially, and are pursuing further efficiencies through, for example, rationalisation of courses and organisational structures and more intensive use of facilities.

While the Committee believes that some further efficiencies are possible and should be pursued, it does not believe that increased efficiency can be expected to have a major impact on the total resource implications of significantly increased education and training participation.

In summary, the contributions from individuals, industry, entrepreneurial activity, and enhanced efficiency can all be expected to increase. However, without major policy and structural change, the majority of the resources needed for growth in education and training, especially at the immediate post-compulsory level, will be drawn from the public purse.

The Committee was particularly concerned with two aspects of this resource demand:

- the implications of increasing Year 12 retention in schools; and
- the implications of increasing participation in TAFE.

## **9.8 Resource Implications of Increasing School Retention**

The aggregate recurrent and capital implications of increasing school retention are addressed above. These costs will represent a significant impost on State, Territory and Commonwealth governments and on the non-government systems, although the major influence on school costs overall is the demographic shift in the school age population.



Two particular issues are raised by increasing retention to Year 12:

- the additional expenditure needed to diversify the curriculum and offer high quality vocational options; and
- the desirability of offering more adult learning environments such as senior colleges.

State and Territory systems have been responding to this challenge in a variety of ways through cooperative programs with TAFE, the establishment of joint senior secondary/TAFE institutions, the rationalisation of schools into clusters of junior schools feeding a common senior secondary campus and so on. Some best practice examples of these initiatives are noted in Chapter 6. These same solutions are not as readily available to the non-government sector which therefore faces special challenges in responding to the demands of increasing retention rates.

The Committee recognises that non-government schools confront major resource problems in providing the breadth and quality of curriculum now needed at senior secondary level and believes that there needs to be some flexibility to draw non-government schools into district planning processes, open up opportunities for cooperation between non-government schools and TAFE, and allow some resource sharing across the government and non-government sectors. The key objective must be to develop the most cost-effective approach to the provision of expensive facilities across all sectors.

During the Committee's consultations, the National Catholic Education Commission argued strongly for the introduction of a national infrastructure program to help fund the costs associated with increased retention. The Committee believes that this proposal warrants consideration in the context of a more detailed examination of the resource implications of increased retention aimed at developing funding arrangements for both government and non-government sectors which facilitate access to common facilities and encourage sharing of resources. Prior to establishment of any resource sharing arrangements it would be important for both government and non-government schools to have taken equal degrees of rationalisation within their own systems.

**The Committee recommends that:**

**Governments give consideration to the need for a national schools infrastructure program in the context of a more detailed analysis of the resource implications of increased school retention.**

## **9.9 Implications of Increased Participation**

The Committee's recommendations entail very significant growth in TAFE participation for 17-19-year-olds in particular. Under current arrangements the costs of this expansion would fall principally on the States and Territories which fund approximately 90 per cent of TAFE recurrent costs. This impost would come at the same time as continuing growth in the school sector.

Under current funding arrangements TAFE has become the 'poor cousin' of the other sectors. All governments have supported guaranteed access to schooling and so school funding has per force been the higher priority in education expenditure for the States and Territories. The Commonwealth has primary funding responsibility for higher education and has supported a

major expansion of that sector.

While these two sectors continue to grow, expenditure on TAFE has actually been reduced in the last two to three years contrary to logic, trends and demand.

An important question for States and Territories to address in this context is the extent to which it is more economical to utilise existing TAFE infrastructure by developing and promoting TAFE-based or joint school-TAFE programs at the post-compulsory level, as opposed to expanding school facilities to deliver a broader curriculum.

Within TAFE funding arrangements there are some problems and anomalies which also give rise to concern, for example:

- there is no clear boundary between Commonwealth and State funding responsibilities;
- different courses and programs are funded in different ways; and
- higher education courses in TAFE which are the direct equivalent of those offered in universities are funded quite differently (and HECS does not apply).

The Committee believes that the Commonwealth, State and Territory governments need to reconsider the approach to TAFE funding in order to remove anomalies, improve boundary arrangements between educational sectors, and provide a mechanism which will ensure a more balanced approach to setting funding priorities across the sectors.

As a follow up to the Special Premiers Conference (SPC) on Commonwealth/State relations, a joint Commonwealth/ State committee has been examining the balance of responsibilities in the area of TAFE, training and labour market programs. At this stage the principal option canvassed by that Committee involves resting responsibility for TAFE more completely with States and Territories. Decisions on the best approach must take into account the dynamic picture of significant potential growth in both schools and TAFE, and must be made looking across all educational sectors to ensure that a balanced approach to priorities will be achieved. In particular, the Committee is concerned that unless there is a significant shift in the fiscal balance to the States, placing primary funding responsibility for both schools and TAFE with the States, may lead to a continuation of TAFE's 'poor cousin' status relative to the other educational sectors.

#### **The Committee recommends that:**

**Ministers should consider a comprehensive range of options for TAFE resourcing including the following options:**

- i) Full Commonwealth Funding Responsibility for TAFE Beyond the Education and Training Guarantee**
- The States and the Commonwealth would guarantee to provide a place in school or TAFE for all young people for twelve years of education and training
  - the Commonwealth would contribute to the cost of these places as per existing arrangements.
- The Commonwealth would assume full funding responsibility beyond that level.

- States would retain control of the priorities and management of their TAFE systems
  - operationally one option to achieve this would be for States to identify the desired 'profile' for their TAFE system in the funding period (annually or possibly triennially) in accordance with their own priorities. The 'profile' could identify the number of students by stream and any other characteristics considered essential to the 'mission' of the TAFE system. The Commonwealth would agree to all or an identified part of this profile as the 'agreed profile' against which Commonwealth funding would be provided as a block grant. State TAFE systems would be free to fund additional places and undertake activity outside of the agreed profile provided that activity is funded from sources other than the Commonwealth grant for TAFE.
- This option would allow for the equitable rationalisation of fees and charges across States and sectors.
  - for example education and training in schools and TAFE could be provided free of tuition fees for the period of the Guarantee, with a consistent approach to individual contributions applying thereafter.
- Capital funding for TAFE would be a matter for negotiation.
- There would need to be a negotiated adjustment to the Financial Assistance Grants to the States.
- The Commonwealth would continue to provide income support to students.
- Funding arrangements for higher education would be unchanged.
- ii) Full State Funding Responsibility for TAFE Beyond the Education and Training Guarantee
  - As per option 1, except that States and Territories would assume full responsibility for funding of TAFE beyond the level of the guarantee.
  - States would require access to a wider revenue base.
- iii) Commonwealth Funding Responsibility for Higher Education
  - The Commonwealth would assume full recurrent funding responsibility for associate diploma and diploma courses (on the basis that they are higher education)
    - definition would be an issue, especially since course articulation means that almost any course can be part of an associate diploma.
  - HECS would then apply for these courses.
  - There would be a minor adjustment to the Financial Assistance Grants to the States.
  - Other arrangements would be unchanged.
- iv) Commonwealth Funding Responsibility for Structured Entry-level Training
  - The Commonwealth would assume full recurrent funding responsibility for all apprentices and trainees and any other students in an identified set of contractual training arrangements
    - definition would be an issue
    - a variation would be for the Commonwealth to fund additional places above the current number of trainees in the identified arrangements.
  - Any adjustment to the Financial Assistance Grants would be a matter for

discussion and dependent on the nature of the change.

- Other arrangements would be unchanged.

The Committee believes that as part of any rationalisation of TAFE funding, it would be desirable to move to funding on a student-load basis (whereby funds relate to the number of equivalent full-time students) to introduce greater funding equity and efficiency. This would require significant improvements to statistical collections and management information systems in the TAFE sector.

#### **9.10 Funding Implications of Other Specific Recommendations in This Report**

In addition to the major recurrent and capital costs arising from the proposed expansion of post-compulsory education and training, there are some resource implications associated with other specific recommendations contained in this Report. These implications will need to be assessed in detail in the process of making decisions on the relevant recommendations.

Specifically, there will be substantial costs associated with:

- curriculum development, and the development of new assessment instruments associated with the broadening of curricula and the implementation of Key Competency profiles. This will principally relate to schools and TAFE but will also have some impact in higher education. Some of these costs will be associated with work already under way; and
- both initial teacher education and in-service professional development of teachers and trainers.

There will be significant, but somewhat lesser costs associated with:

- new statistical collections as proposed in Chapter 3;
- extension of funding for the Students at Risk program; and
- the proposed pilot program of transition coordinators.

There may also be cost implications associated with:

- any seeding funds for the Credit Transfer Authority;
- the possible development of a new careers education body; and
- the possible introduction of a senior school infrastructure program.



