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ABSTRACT

An Australian national task force examined a number of areas related to achieving educational equality for Australia's Indigenous peoples. Young Indigenous Australians are disproportionately represented among young people who do not successfully negotiate the transition from school to independence and employment. This paper focuses on issues of transition across multiple pathways. Chapter 1 provides background on the importance of lifelong learning, the Australian national labor market, the nature of "effective transition" for young people, national policy on vocational education in schools, and task force findings on problems in the transition system and the particular transitional issues of Indigenous youth. Chapter 2 summarizes issues related to Indigenous students' transitions between primary and junior secondary school, between junior and senior secondary school, and between school and work. High rates of early dropouts and student absenteeism are discussed, along with effective practices in improving attendance and retention and the benefits of vocational learning for Indigenous students. Back-to-school programs for early school leavers are also described. Chapter 3 examines Indigenous participation in Vocational Education and Training (VET) and practices that ensure successful Indigenous participation. Chapter 4 looks at Indigenous participation in higher education, difficulties during the freshman year, factors that lead to withdrawal in the first and second year, characteristics of Indigenous college students, and academic and institutional factors that influence Indigenous retention and success. Two tables present data on Indigenous college students at Australian universities. (Contains 31 references.) (SV)

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ED 463 135

**EXPLORING
MULTIPLE PATHWAYS
FOR
INDIGENOUS STUDENTS**

DISCUSSION PAPER

**MCEETYA TASKFORCE ON INDIGENOUS
EDUCATION**

JUNE 2001

U.S. DEPARTMENT OF EDUCATION
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EXECUTIVE SUMMARY

The achievement of lifelong learning is a widely recognised success factor in the world today. It is critical for both individual's and communities' capacity to meet the challenges of a rapidly changing and globalised world.

Substantial work has been undertaken across Australia in the last decade to improve the nature and functioning of the pathways open to young people. Nevertheless there is still some concern about the nature and functioning of pathways and a range of initiatives are underway across jurisdictions to explore these issues of concern.

OECD reports point out that people with acute learning needs are most at risk of being marginalised or excluded, while being also least likely to become lifelong learners. Any expansion of lifelong learning may in itself potentially exacerbate rather than reduce existing inequalities.

As one of the longest living cultures in the world, lifelong learning has been a valued part of Aboriginal and Torres Strait Islander cultures and societies throughout the ages.

At the same time, young Indigenous Australians generally seem disproportionately represented among young people who are having difficulty in successfully negotiating the transition from school to independence and active participation in their communities. They have a fractured pattern of education and employment participation because the connections between school education, Aboriginal and Torres Strait Islander cultures and experiences, and post-school options are often not made available or are apparent to them.

The Taskforce acknowledges that there is a range of issues relating to the disproportionate representation among young people of young Indigenous Australians aged 12 to 25 years who are having difficulty in successfully negotiating the transition from school to independence and active participation in their communities.

Available advice on these issues has been summarised in this information paper in terms of transition across primary and secondary school pathways; transition from school to vocational education and training, and transition to higher education.

The Taskforce proposes that this advice may prove useful to inform further work being undertaken across a range of current initiatives to improve the transition of young Aboriginal and Torres Strait Islander people across multiple pathways.

CHAPTER ONE: INTERNATIONAL AND NATIONAL POLICY CONTEXT

This chapter summarises a range of advice relating to the importance of lifelong learning, issues relating to improving seamless transition across a number of pathways, and population statistics.

Introduction

The achievement of lifelong learning is a widely recognised success factor in the world today. It is critical for both individual's and communities' capacity to meet the challenges of a rapidly changing and globalised world. Globalisation has become a key force of change in most countries of the world. It is offering new opportunities, but it also demands of governments, and education systems and people in particular, the capacity to respond quickly to change.

Education and training are the main instruments available to governments and the community to prepare individuals for a rapidly changing, increasingly demanding world of work, and to improve their employability.

An individual's employability depends on several factors. It involves self belief and an ability to secure and retain employment. It also means being able to improve his or her productivity and income-earning prospects. This often requires competing effectively in the job market and being able to move between occupations if necessary. It requires 'learning-to-learn' for new job opportunities in an advanced knowledge, communications and technology society.

The enormous pace and scale of change means that many countries face a choice between a high skills/high wages economy, or a low skills/low wages economy. Countries that have a high skills approach to economic development (such as Germany, Denmark and Japan) have maintained relative levels of income equity, while those that have not emphasised high skills approaches have growing levels of income inequality. New jobs continue to be concentrated in high-skilled services.

In most OECD countries, public policies are aimed at promoting equal learning opportunities for all. OECD reports point out that for a number of reasons, countries that have a high skills, knowledge-based approach to economic development need to ensure that all parts of their populations have access to education and learning resources.

Social inequalities existing outside the education system contribute to educational inequalities in terms of access, opportunity, process and outcomes as well as in terms of the consequences of achievements and attainment.

People who have less education and are at most risk in the labour market are least likely to receive training. Those with acute learning needs are therefore most at risk of being marginalised or excluded, while being also least likely to become lifelong learners. Any expansion of lifelong learning may in itself potentially exacerbate rather than reduce existing inequalities.

It is well acknowledged in OECD countries that there is still a lot to be done to reduce the number of people at the margin of learning and employment opportunities. Public policy strategies and initiatives to target those most at risk can include:

- increasing educational attainment levels in compulsory and post-compulsory schooling (or its equivalent);

- increasing diversification and flexibility of service delivery;
- strategic deployment of resources;
- identifying equity as an integral part of the education institution's mainstream strategies;
- targeting adult training at disadvantaged groups;
- supporting the development of social capital to enhance networks, communities and structures that support learning.

National labour market

Australian young people (aged 12 to 25 years) now face a more uncertain world than their parents experienced when leaving school and are now significant losers from the radical transformation in the nature and shape of work in Australia over the past two decades. The impact of the revolution in the structure of the labour market has fallen most heavily on young people. An estimated one-in-five, nearly 300 000 young adults, could now be considered as being continually disadvantaged in the labour market. Some 500 000 young people, about 19 per cent of the total youth cohort, could be viewed as being in a precarious labour market situation. This is a figure that has risen in the last decade. In addition, it is now clear that by 20-24 years of age the different choices and options facing young men and women are more marked and more powerful than they were as teenagers.

At the same time, the current generation of young people in Australia experiences a number of advantages in the current labour market: it has a higher level of education than earlier generations, and the relative size of the youth age group in the population has decreased over time, therefore reducing competition. In addition, changes in the industry structure of the economy away from manufacturing to services, with less gender bias and often the need for higher skill levels, have helped greater numbers of better educated young people get into employment.

Over the last decade there has been a significant increase in young people's participation in education despite the improvement in the overall labour market. This suggests that most young people accept that their future prospects of secure employment depend on their education and skill level. Leaving school early to take a job is increasingly acknowledged by young people as a path to employment insecurity. However higher levels of education participation alone are not sufficient. Also of importance are: the quality of outcomes and experience, linkages with employment, broader community responsibility, and greater program and institutional flexibility.

The economic pressures on extended use of school have intensified greatly in the last decade. These have been felt very unevenly. Today girls on average are only half as likely as boys to leave school early. Since the 1990 recession, the number of full-time jobs for young women has fallen away sharply and has been steadily overtaken by part-time jobs. On the other hand, boys who start work are as likely to hold full-time jobs as part-time or casual ones. There is therefore less economic penalty for boys in leaving school early.

Staying on in education however does not make it any easier for many young people to make the transition from education to full-time work. Staying longer at school can mean that many young people now enter the labour market at older age levels but without any increase in work-related experience. Because wages are often tied to age, employers are required to pay higher wage rates for inexperienced workers. The result has been large decreases over time in the demand for young people relative to 'prime age' adults.

Transition to personal and economic independence

The transition from childhood to adulthood involves a number of changes, across a number of pathways for young people, and is often dependent on achieving personal and economic

independence. For most young people, this comes with obtaining a full-time paid job that offers career prospects.

The key elements of 'independence' are: an enhanced sense of individual empowerment; active participation in social and economic life; active and responsible citizenship; and the capacity to be adaptable, flexible and resilient. Independence entails having the means, capacity, confidence and orientation to interact with others on an equal footing. Independence is broadly about sustainable livelihood and citizenship.

The term 'transition across a number of pathways' provides a useful mental image to explain the various combinations of education, training and employment activities which individuals (from ages 12 to 25 years) may undertake over time to reach a destination such as a desired qualification or type of employment.

Transition issues emerge at different points in the education/work continuum for students from 12 to 19 years. There is the transition from primary to secondary school, from compulsory to post-compulsory secondary education, from school to work, from school to further or higher education, and from unemployment to further education or training and work.

Effective transition is seamless and ensures that:

- young people should have a set of interrelated experiences providing for progression. This would include early warning signals so that preventative and early intervention strategies can be put in place;
- education and training should have a sense of continuity even when individuals cross institutional and sectoral boundaries;
- young people should have access to a range of different pathways and should be able to move from one to another without losing ground;
- effective credit transfer and articulation arrangements are needed to provide smooth bridges between pathways; and
- signposts (information and career advice) are needed at the start of each pathway and at each junction between pathways.

Each of these elements of a coherent structure of pathways through education and training and into work has figured in various ways in government policies during the last decade.

Substantial work has been undertaken across Australia in the last decade to improve the nature and functioning of the pathways open to young people. One of the goals of the Adelaide Declaration on National Goals for Schooling in the 21st Century (1999) states that when students leave school they should have employment related skills and an understanding of the work environment, career options and pathways as a foundation for, and positive attitudes towards, vocational education and training, further education, employment and life-long learning.

Nevertheless there is still some concern about the nature and functioning of pathways and a range of initiatives are underway across jurisdictions to explore these issues of concern. Three examples are described below.

MCEETYA Taskforce on VET in Schools

At its meeting in March 2000, Ministers agreed to implement a New Framework for Enterprise and Vocational Education in Schools in the 2001 school year. Council agreed that in view of the National Goals of Schooling which outline that students should have participated in programs of

Vocational Learning with the curriculum provided for them during their compulsory years of schooling, especially years 9-10, work be progressed in relation to the following implementation strategies:

- (i) establishment of the place of Vocational Learning in the curriculum;
- (ii) adoption of measures to support school communities to implement Vocational Learning;
- (iii) identification and dissemination of effective strategies that support the development of partnerships with industry and the wider community to enhance the Vocational Learning of students;
- (iv) development of programs for students at risk of not completing secondary schooling involving recognised VET programs which articulate with other VET programs available in senior secondary certificates and the development of generic, literacy and numeracy skills.

For all students, the envisaged outcomes of Vocational Learning are to:

- develop a wide range of generic skills, enterprise attributes and the Key Competencies;
- understand the changing nature of paid and unpaid work, full-time, part-time and casual work, the varying cultures of the workplace, as well as issues of the labour market;
- understand the value of participation in community projects and activities;
- be informed, plan and make choices about further education and training, career and employment options.

Priorities under the implementation strategy for 2001 include work to commence within schools systems, authorities (and Boards of Studies where applicable) on the development and implementation of arrangements for:

- the recognition and recording of student achievement under the Framework that spans all years of school education particularly across key transition periods such as from primary to secondary school and from compulsory to non-compulsory school education;
- commencing or continuing the process of integrating Enterprise and Vocational Learning into K-12 curriculum frameworks.

The development and implementation of the Enterprise and Vocational Education Framework has considerable implications for two groups of students: early school leavers up to year 10, and those who leave after commencing senior school studies. The MCEETYA Taskforce on VET in Schools will report to Council in July 2001.

Kirby Review

The Ministerial Review of Post Compulsory Education and Training Pathways in Victoria (the Kirby Review) reported in 2001 and identified the complex issues facing young people in their transition from school to education, employment and training.

The Review found that each year in Victoria about 11 000 young people leave school without any recognised qualification. Most young people who leave school early do so either during year 11 or at the end of it. These young people enter a labour market from which, over the last 20 years, more than 50% of all fulltime jobs held by boys and about 66% of all fulltime jobs held by girls have disappeared. While the collapse of fulltime employment has influenced the longterm rise in school retention rates, continuing high levels of unemployment have not eliminated early leaving. This is in part because a long term weakening in employment conditions does not extinguish the desire to

work and in part because the effectiveness of school as a refuge from unemployment depends on the richness of the young people's experience of school.

The Kirby Review found that outcomes for young people vary significantly across the State. The metropolitan regions where early leaving is generally high are also those in general in which student achievement is also relatively weak and socio-economic status is low. In contrast, in country Victoria, while early leaving is high, it is not associated with low levels of scholastic achievement. On the other hand, early leavers do not abandon study. Over 50% of all those who attempt Year 11 continue in some form of education and training when they leave school.

In Victoria, young Aboriginal people are the least likely to have formal learning experiences that are successful. In 1999, there were 5112 Koorie students enrolled in Victorian government schools. Many Koorie students leave school by Year 10.

The Review recommended that a more effective and integrated system for post compulsory education and training needed to be provided to meet international standards.

In particular, the Review recommended a new approach to pathways guidance provision. This new approach includes an active program of managed individual support in educational and vocational programs with the support of a designated adult, as well as tracking young peoples' destinations as they leave school. Managed individual pathways will assist young people to:

- develop skills to manage their pathways throughout their working lives
- develop their knowledge, understanding and experience of opportunities in education, training and employment
- move through the transition phase from compulsory schooling to further education, training and employment.

An adult will have primary responsibility for working with a young person to assist them to shape a pathway to continued education and training and employment. The initial priority for the use of these mechanisms is for those considered as unlikely to continue with education and training or ongoing employment.

PM's Youth Pathways Action Plan Taskforce

In 1999, the Commonwealth Government announced the establishment of a Youth Pathways Action Plan Taskforce, to advise on the scope and direction of a Youth Pathways Action Plan. The Taskforce comprised members from the community sector, business, academia, and State and Commonwealth governments. In 2001, the Taskforce in its report to Government entitled *Footprints to the Future*, detailed a plan to improve support for young people and their families during young people's transition to independence, and strengthen pathways for those who do not proceed straight from school to further study or full-time employment.

The Youth Pathways Action Plan Taskforce found that the wide range of education, income support, housing, health, employment and judicial services which young people encounter in their transition to independence are, from the perspective of young people, not appreciated as a coherent or responsive system. Young people are often as affected by the gaps, the overlaps and inconsistencies between different parts of the transition system, as they are by the positive services provided.

The Youth Pathways Action Plan Taskforce found that a major issue is that institutions that young people need along the way often do not recognise themselves as part of a coherent youth transition

system. The Taskforce was of the view that it is the failure of the services in the system to work together as part of a co-ordinated whole, which is at the core of systemic weaknesses. This failure does not derive solely from the ways that agencies work. It is due in part to the ways that programmes are designed, funded and implemented to address specific issues or particular groups of young people.

This lack of a broader vision about a coherent youth transition system has led to:

- poor linkages between programmes;
- different and sometimes competing programme accountability requirements;
- haphazard exchange of best practice;
- gaps in local service provision;
- lack of responsiveness within services;
- lack of accountability for broader outcomes;
- lack of information about the transition system for young people;
- lack of information about young people's progress through the system hampers follow up.

The Youth Pathways Action Plan Taskforce found that schools and youth services often failed to co-ordinate with each other and with the families of young people, and that there are few systemic incentives to bring about better co-ordination. In many locations, there were critical shortages in the availability of crisis, student and long-term housing for young people as well as poor access to trauma and abuse counselling. Many schools focus on the outcomes for young people in relation to their accessing post-secondary education, but show less concern for young people who leave early, or for what happens to young people after they leave school. There is also considerable variation in the way that schools acknowledge that vocational education and broader 'life skills' need to be an integral part of the curriculum.

The Youth Pathways Action Plan Taskforce identified three broad groups of young people each requiring different levels of assistance: those who successfully navigate their pathways; those who are vulnerable and experience periods of stress; and those who have become disconnected from their families, schools and communities.

The Taskforce found that young Indigenous Australians generally:

- seem disproportionately represented among young people who are having difficulty in successfully negotiating the transition from school to independence and active participation in their communities;
- experience substantial disadvantage in terms of educational participation, attainment of qualifications, and labour market participation;
- have insufficient attention paid to their recreational, cultural and spiritual needs;
- have a fractured pattern of education and employment participation because the connections between school education, ATSI cultures and experiences, and post-school options are often not apparent to them;
- record markedly lower outcomes in all academic subjects with their poor literacy achievement being of particular concern;
- experience higher rates of unemployment – even when they achieve the same levels of educational qualification as their non-Indigenous counterparts and when geographic and other differences are taken into account;
- need their own role models and mentors;
- lack opportunities for participation and leadership in community decision-making;
- need to feel valued and respected members of their communities;

- along with all young people, need activities beyond the school with peers which possibly stimulate and extend their cultural values, recreational interests, skills, and relationships with other age groups.

The Commonwealth Government responded to *Footprints to the Future* within the context of the Federal Budget 2001-2002, with a range of measures to complement the *Australians Working Together* plan and is expected to respond with further measures within the context of the 2002-2003 Federal Budget.

Indigenous transitional issues

Indigenous communities themselves are learning communities with a wealth of knowledge and skills passed on through Elders and family links. Lifelong learning has been a valued part of Aboriginal and Torres Strait Islander cultures and societies throughout the ages. This is directly attributable to Indigenous Australia having some of the longest living cultures in the world.

Indigenous students and their parents have high educational and vocational aspirations. Numerous reviews, inquiries and consultations conducted in recent years have all demonstrated that Aboriginal and Torres Strait Islander people place a high priority on education. They want for themselves and their children no less by way of educational opportunity than is afforded to other Australians. They expect that educational processes should lead them to acquire the knowledge and skills necessary to realise their individual potential, lead satisfying lives, and contribute actively to the community. They look to education as a means of moving out of poverty and welfare dependency, enabling them to earn income through employment or enterprise and to manage the development of their communities.

Nevertheless, many young Indigenous Australians have a poor understanding of the pathways within and between school and post-school options, and their Indigenous cultures and experiences, because the connections are often not apparent or available to them. Therefore they may drop out of education and training or restrict themselves to one pathway, rather than explore the multiple pathways available to them.

According to the Australian Bureau of Statistics, the Indigenous population of Australia is younger and growing at a faster rate compared to other Australians. Existing concerns about the difficulty many Indigenous youth experience in successfully negotiating the transition from school to independence and active participation in their communities are therefore likely to increase as the population expands in proportion to other Australian youth.

The Taskforce acknowledges that there is a range of issues relating to the disproportionate representation among young people of young Indigenous Australians who are experiencing transition difficulties. Available advice on these issues has been summarised in this information paper in terms of transition across primary and secondary school pathways; transition from school to vocational education and training, and transition to higher education. The Taskforce proposes that this advice may prove useful to inform further work being undertaken across a range of current initiatives to improve the transition of young Aboriginal and Torres Strait Islander people across multiple pathways.

CHAPTER TWO: TRANSITION ACROSS PRIMARY AND SECONDARY SCHOOL PATHWAYS

This chapter summarises a range of issues relating to primary school, junior secondary, and junior to senior secondary school transition, as well as a description of vocational learning. The chapter also includes advice on school to work and unemployment to school transitional issues.

Primary school transition

A smoother transition from primary to secondary school increases the possibility of students remaining in secondary school.

The experience of schooling for Indigenous primary school children may include a number of factors which affect learning and subsequently influence their transition to secondary school.

For example, Indigenous children have a higher incidence of health problems, often speak English as a second language or dialect and their cultural capital is often poorly recognised and valued by the school.

In addition, there are substantial differences in the average literacy and numeracy achievement levels of Indigenous and non-Indigenous primary school students. The results of the 1999 national Year 3 reading standards show that despite recent improvements, nationally one third of Indigenous students are still below the standard. There is considerable variation across the States and Territories in the proportion of Indigenous students failing to meet the standard.

A number of these factors are described in more detail in two separate Taskforce papers entitled *Effective Learning Issues For Indigenous Children Aged 0 To 8 Years* and *Solid Foundations: Health and Education Partnership For Indigenous Children Aged 0 To 8 Years*.

Despite these concerns, some studies show that the final years of primary schooling are seen to be positive ones for Indigenous students. They experience independence and responsibility on a level which is comparable with that which they enjoy at home, and have good relationships with their teacher. This sense of security and affirmation can easily be lost in the transition to secondary school and Indigenous students can experience confusion, a loss of responsibility, choice and freedom and a lack of recognition as a person.

Junior secondary school transition

The transition from primary school to secondary school is a difficult one for many young people but it can be traumatic for Indigenous young people who have to leave their communities to undertake secondary studies. Poor preparation, not knowing what to expect, homesickness, distance from family and community support, lack of local support, poor literacy levels and shame at not succeeding lead many young Indigenous people to drop out.

Indigenous youth share the universal development tasks of their age group with their non-Indigenous peers. These include the need to develop a strong sense of personal identity and self esteem. Indigenous youth, however, have a distinctive sense of identity as Indigenous people and in early adolescence it may be a source of confusion and embarrassment. Research has shown that many Indigenous students benefit from spending periods of time in Indigenous-only learning

groups, including cultural studies. Such groups produce positive gains in self-confidence and self esteem, with flow on effects for school performance.

For Indigenous people, completing Year 10 or 11 increases employment chances by 40 per cent, a post-secondary qualification increases employment chances by 13-23 per cent, and education also reduces the likelihood of arrest, which itself significantly reduces the probability of employment.

Secondary school retention rates have improved over the last decade for Indigenous youth, but they are still comparatively low. According to the ABS (1996):

- 81% Indigenous 15 year olds in school compared with 92% all students;
- 57% Indigenous 16 year olds compared with 80% all students;
- 31% Indigenous 17 year olds compared with 60% all students.

Apparent retention rates show that only 83% of Indigenous students remained in schooling to year 10 in 1998, compared to just under 100% for non-Indigenous students. This year 10 retention rate varies considerably across the country and in some parts of the country was just over 50% in 1997.

Most early school leavers, including most Indigenous early school leavers, are categorised as 'negative leavers' and include:

- opportune leavers, who have not decided on a career path, but leave to take up a job or perhaps a relationship in preference to school;
- would-be-leavers or 'reluctant stayers', who prefer to leave but stay because of lack opportunities beyond school;
- circumstantial leavers who leave school for non-educational reasons, for example for income or family need;
- discouraged leavers, who have left because they have not had success in their schooling, and have low levels of performance and interests; and/or
- alienated leavers, who are so alienated or 'turned off' school that their behavioural problems lead to suspension or expulsion.

Many are bolstered in their choice to leave by friends and peers who share and support a negative stance towards school authority and to any form of post-school learning. They often lack work-related qualifications, knowledge, experience or skills; feel disenfranchised and alienated from school; feel resentful towards authority, formal learning, family and community; and are confused about their personal and cultural identity.

Only around one quarter of all early school leavers are 'positive leavers', in that they leave to take up employment, and apprenticeship, or alternative careers paths.

There are a number of initiatives underway across jurisdictions to ensure that Indigenous students have a good understanding of the pathways available to them. One example is described in **Box 1**.

Box 1: Aboriginal and Torres Strait Islander Careers Aspiration Pathways Program

The Aboriginal and Torres Strait Islander Careers Aspiration Pathways Program (AICAPP) is an Education Qld program launched in 1998 with five main objectives:

- to provide incentives for Aboriginal and Torres Strait Islander learners to continue at school until the completion of Year 10 when greater flexibility in post-schooling options become available;
- to integrate literacy and numeracy Commonwealth targets with learning for life skills;
- to provide direction in subject choice and optimum attainment level throughout secondary schooling from Year 7;

Box 1 (cont.)

- to provide career-focussed curriculum resources for P-10 schools who are peripheral to career guidance service providers; and
- to provide current, timely and appropriate career guidance to students, schools, training providers and employer groups via the *Murri Thusi* website.

AICAPP is designed as an early intervention strategy targeting the critical Year 7, 8 and 9 transition period. In 1999, AICAPP (Stage 2) built on activities undertaken during the first stage of AICAPP by following the 1998 cohort of Year 7 and Year 8 Aboriginal and Torres Strait Islander students. This approach to career guidance and education aims to enhance the 'tracking' and profiling of individual students and provide an individualised program of career support, guidance and information.

The implementation of AICAPP involves the following processes: 1) Pre-Student Forum Preparation; 2) The Student Forums; and 3) Post-Student Forum Activities. During the pre-student forum preparation, schools and communities conduct appropriate preparatory activities to set the context for an exploration of career pathways. Such activities serve to raise student awareness of the available pathways and the requirements to proceed along particular career pathways. The Student Forums allow students to participate in both a Career expo and a number of workshops facilitated by role models drawn from trade, business and government agencies.

The Taskforce proposes that it may be useful to identify and explore any further relevant examples of effective practice with a view to promoting this advice at the local level.

Attendance and exclusion

Australia has one of the highest rates of student absenteeism among OECD countries, with an average rate of over 7%. Absence rates of 7% are typical in government schools systems, and absenteeism peaks around Year 10 with rates of about 11%. Long term absences of more than four weeks or non-attendance at school on an ongoing basis appears to involve almost 3% of 14 year olds.

There is considerable debate about the level of consistent attendance required to achieve equitable educational outcomes, but there is little doubt that high levels of absenteeism are linked to lower educational achievements. Absenteeism rates vary considerable across the country and the variation depends on geographical location, year of schooling and education system. There is also some evidence to suggest a link between educationally significant hearing impairment and attendance patterns, particularly in primary school.

Recent research across the primary and secondary years shows that the general pattern of attendance for both Indigenous and non-Indigenous students is the same, except that the level of attendance is higher for non-Indigenous students at each year level.

Indigenous school students attend about 84% of the time and non-Indigenous students attend about 93%. This gap widens in secondary school. In Year 10, which is the lowest point in attendance for both Indigenous and non-Indigenous students, Indigenous students are absent up to three times more often than non-Indigenous students.

Poor attendance, with its associated knowledge gaps, creates classroom situations where students are not coping, become disruptive, face reduced on-task time and generally greater disciplinary intervention. Disciplinary action makes school unattractive and further reduces the chances of success. Often the poor attendance/ poor learning cycle is then perpetuated and even accelerates to the extent that lower literacy and numeracy skills, disciplinary intervention and absenteeism feed on each other to significantly affect both success at and length of schooling. In addition, many systems require high levels of attendance before awarding Year 10 completion certificates.

Suspension rates are highest for students aged between 13 and 15 years, and are markedly higher for boys. These figures are likely to be an underestimate because they do not include those who are excluded informally, such as 'difficult' students who are discouraged from attending school.

Evidence to the 1996 House of Representatives Inquiry into Truancy and Exclusion suggests that there is a strong correlation between early school leaving and criminal activity, poverty, unemployment and homelessness.

Effective practice in improving attendance and retention

Studies of schools where Indigenous students were retained and achieved success have identified a range of supportive policies, programs and strategies, including the following:

- a school environment which encourages a developing sense of identity of their Indigenous students, particularly by increasing the Indigenous adult presence in the school and encouraging networking with other Indigenous students;
- positive relationships between staff and these young people, in which all are viewed as individual persons rather than through stereotypes, and the individual needs and aspirations of students are recognised;
- effective communication with Indigenous families. The transition point from compulsory to post-compulsory schooling is critical. A decision to go on to Years 11 and 12 may be a major one for Indigenous students. There is often a great deal of encouragement needed from home and school for this step to be taken;
- the setting of high standards of behaviour and achievement, yet still giving chances to those who fail to meet expectations. Teachers need to expect success rather than anticipate failure, and provide intensive classroom support where necessary;
- develop imaginative courses and pathways which are flexible enough to explore and expand the latent interests of young people well before negative school leaving occurs;
- foster the development of strong supportive bonds among Indigenous students.

Intensive case management approaches for Indigenous students have also proved useful in the provision of individual assistance for students at risk and improving attendance. Case managing Indigenous students can include home visits, community liaison, an emphasis on personal contact with consistent follow-up where absence occurred; personal planning and goal-setting; support with academic work; linkages (actual and/or electronic) with other students in similar situations; and counselling and mediation where problems were occurring, the use of alternative education sites, and intervening in the suspension/exclusion process.

There are a number of initiatives underway across jurisdictions to improve the attendance rate of Indigenous students. A critical feature of effective practice is the widespread belief among the educators involved that it is important to reduce the level of cultural alienation among young Indigenous people and to replace it with a sense of cultural pride coupled with an experience of achievement in education. Professional development programs can ensure that non-Indigenous educators have high expectations of Indigenous student success and provide cultural acknowledgment and support. Alternatively, the presence of Indigenous adults can be increased in the school either as additional tutors, mentors or classroom assistants, voluntary or employed. Home visits encourage parental support.

Two examples of effective practice to improve attendance in the junior secondary years are described in **Boxes 2 and 3**.

Box 2: Effective practice to improve attendance

A project undertaken in a country town with a high Indigenous population targeted Year 7 and Year 9 as critical transition years in schooling in terms of the students' engagement with the school and its culture. Indigenous adults were targeted through community and support service networks and applicants then went through a TAFE based training program aimed at enhancing the Key Competencies. Nine adults completed the course and were employed in the project either as tutors or classroom assistants.

Students with poor attendance, poor work skills and reduced work outcomes were withdrawn from class three times during a week to work with the tutor. Tutoring occurred on a week on, week off basis. Information was gained from the student's English and Mathematics teachers in regard to the topics and skills to be presented in the "off" week classes. These skills and topics were then pre-taught to the students so they would arrive in class with a stronger base knowledge of what was expected. The students' progress, attitude and behaviour was supported and monitored in the classroom by the classroom assistants who documented the results.

Year 7 students in particular made marked improvements during the projects with a 125% increase in English language achievement levels and 50% increase in reading proficiency. The number of discipline referrals fell by 48% and attendance rates have increased by up to 10%.

Box 3: Alternate schooling

An Aboriginal School/Community Worker was employed full-time to provide support in a variety of ways to Indigenous students at secondary schools in two neighbouring rural towns. The Worker acted amongst other tasks, as a mentor and resource person to Indigenous students (particularly those assessed as being 'at risk' of leaving school). The Worker also ran an 'alternate school' for two afternoons a week at a family service agency. The 'alternate school' provided an opportunity for Indigenous students 'at risk' to work intensively on literacy and numeracy skills with a tutor, as well as exploring aspects of Indigenous culture.

If young Indigenous people do leave early despite encouragement to stay, they need to be supported in the leaving process. This support might include:

- exit briefings, including advice and plans for further learning and work options;
- connecting alienated learners to community, service and income support agencies; and
- setting up ongoing mentoring and employment counselling, tied in with community and mainstream case management and youth counselling through employment and income support agencies.

Vocational learning for Indigenous students

Vocational learning is one way that schools can meet the heightening challenge of preparing young people for a complex world, including the world of work. Vocational learning can also provide schools, communities, teachers and students with greater variety in their 'education experience', and in so doing, ideally generate greater educational appeal for young learners, including Indigenous youth.

All vocational learning initiatives and programs should be flexible enough to meet individual students' aspirations and learning preferences (eg on-the-job delivery). Ideally, these initiatives will allow for articulation and skills transferability across industry contexts. Outcomes which include paid work and a positive vocational orientation can be deliberately anticipated within program and curriculum design. Similarly, a lifelong learning orientation must be anticipated, so that learning does not suddenly end with the first job.

An example of effective practice in delivering vocational learning for Indigenous students is provided in **Box 4**.

Box 4: Work education in Year 9

Over 100 'at risk' Year 9 Indigenous students across 11 rural sites were provided with a combination of generic and specific work skills. All students participated in a generic 'work skills module' (AQF Level 1) at the local VET college – a course that allows for a range of vocational emphases. Each site focussed on a particular vocational area and Indigenous people with relevant skills supported the project wherever possible.

Central to the project was the provision of work education classes for students not yet ready to undertake industry-specific training; targeted literacy and numeracy support for those with skill shortfalls relevant to their chosen career pathway; specific career development for a number of students with potential in sport; and a camp for all students on developing and refining career choice and job seeking skills. About 90% of students continued with some form of education or training.

Effective practice in Indigenous vocational learning in schools requires recognition within program designs that:

- careers education in its many community and curriculum-embedded forms, should start early, particularly for young people at risk of leaving schools early;
- work experience is important;
- a focus on generic work skills is important;
- semi-structured vocational education in middle secondary school is desirable;
- structured VET in schools and school-based New Apprenticeships must be flagged as a real possibility early in secondary years, particularly to cater for students 15 years of age and older in junior years.

The provision of information about careers and development of individual plans should identify student goals and map clear and accessible pathways through school and post-school education and training options and employment, both within and beyond the local Indigenous community.

Vocational learning programs which actively and positively connect learners to their communities have the capacity to help Aboriginal and Torres Strait Islander young people to make their cultural identity a positive growth area of their lives which they foster, nurture and value as a source of personal strength and self esteem.

Linking vocational learning programs to Indigenous communities also facilitates understanding, trust, collaboration and community networking. Work to support community partnerships needs to ensure a significant level of formal local Indigenous community involvement at a management level with a focus on agreed local educational priorities. In this way, schools, Indigenous communities and community organisations positively network and collaborate to build social capital. Such networking promotes reconciliation, celebrates shared norms and encourages reciprocity, now widely recognised as the building blocks of improved social and economic wellbeing in the wider community.

While connecting to community is important, it is not an end in itself. Few Indigenous young people can anticipate a life totally within Aboriginal and Torres Strait Islander communities. Opportunities for paid work beyond community, and the lifelong learning to support that work, are essential if Indigenous young people are to share in an equitable future with other Australians.

A high degree of flexibility needs to be encouraged especially in relation to the design and delivery of vocational learning courses which need to be tailored to:

- meet the diverse range of Indigenous student learning needs;
- ensure continuing participation and engagement in education and training;
- accommodate varying levels of participation and attendance;
- develop administrative arrangements to locate mobile students and support schools in ensuring that the students adapt to their new setting as quickly as possible, especially through the use of electronic student portfolios;
- establish good functional levels of SAE literacy and numeracy;
- operate holistically by addressing health, juvenile justice, welfare and housing issues.

The design and delivery of vocational learning courses needs to also recognise the difficulties often associated with the provision of qualified and appropriate VET trainers, the provision of locally accessible training facilities and accommodation for visiting trainers, limited opportunities for local work placements, and the high costs of student travel and accommodation, particularly in rural and remote locations.

There are ongoing concerns that vocational learning and VET in schools may be seen as the only pathway being explored for these students. Often there are few obvious incentives or alternatives visible to Indigenous young people other than vocational learning at school through community.

Junior to senior secondary school transition

Indigenous students are much less likely to continue their education beyond the compulsory years. Only about 38% of Indigenous students remain at school from the commencement of their secondary schooling to year 12, compared to about 75% of non-Indigenous students in 2000.

In addition, in some parts of the country, in 1997, only a quarter of these year 12 students may successfully complete year 12, compared to 50% of non-Indigenous Year 12 students. The year 11 to 12 grade progression rates from 1996-97 show that a considerably higher proportion of Indigenous than non-Indigenous students leave school after commencing senior school studies. In addition, physical access to Years 11 and 12 is an issue for Indigenous students in rural and remote communities.

The 1994 ACER study on subject choice in years 11 and 12 and more recent trend data shows that early school achievement is a significant influence on enrolments in particular subject areas and therefore on post-school options. High achievement in the early years of schooling in either literacy or numeracy was associated with considerably higher enrolment levels in the physical sciences, mathematics and LOTE in Years 11 and 12. The reverse was true for technology, The Arts and physical education subjects.

There are substantial differences in the average literacy and numeracy achievement levels of Indigenous and non-Indigenous secondary school students and these differences are associated with higher enrolments in different subjects.

Students who achieve at the highest level of literacy are more than three times as likely to study either physics or chemistry. Students who achieve at the highest level of numeracy are more than eight times as likely to study either physics or chemistry. It is not surprising then that Aboriginal and Torres Strait Islander students are enrolled in higher proportions than other Australian students in the following: the Arts, Technology, Health and Physical Education, with enrolments in physical education more than double for other Australian students.

The lack of parity of participation by Indigenous secondary school students across all subject areas, especially science and mathematics, impacts on the numbers of Indigenous people who are able to undertake the full range of courses in post-compulsory schooling, VET and higher education.

The Aboriginal and Torres Strait Islander Peoples' Training Advisory Council recently outlined a number of barriers to access and success in school education faced by Indigenous students. These barriers include:

- concentration of senior secondary certificates of education upon traditional academic subjects and assessments designed to produce a Tertiary Entrance Rank (TER);
- confinement of educational outcomes to assessment scores and the TER;
- highly centralised and relatively limited range of senior secondary subjects;
- recent moves of a number of TAFE authorities to use the TER as a means of selection for their advanced courses;
- concentration of school education upon classroom and didactic teaching styles;
- relative absence of curriculum related to Indigenous cultures;
- lack of cross-cultural understanding of Indigenous cultures;
- lack of Indigenous people employed as teachers and trainers;
- lack of senior secondary schools in some areas;
- relative isolation of many Indigenous communities;
- high levels of poverty amongst Indigenous communities; and
- lack of attention given to the retention of Indigenous students post Year 10.

A number of other things, often taken for granted by their peers, may be difficult for some Indigenous students to obtain. For example, for many Indigenous students who live at home, study and storage space is often a problem because, in comparison to most non-Indigenous households, Indigenous households tend to be more crowded and space is at a premium. The social traffic is busier and privacy often unavailable; such obstacles present major challenges to those who wish to undertake study.

Indigenous senior secondary students are usually the first members of the family to enrol in this form of education. Consequently, family expectations about what types of support are needed are often very different from the expectations of non-Indigenous families. The alternative - moving away from the family - is a culturally drastic solution even when it is economically viable. Most Indigenous students need more, not less, social support as they contend with a culturally unfamiliar and difficult educational experience.

Aboriginal and Torres Strait Islander students ground their choices in education at least in part on evaluations of cultural costs and benefits which may not always align with the calculations of rates of return employed by non-Indigenous students. Their choices appear to be related at least in part to attempts to minimise cultural costs and acquire cultural capital of value in their own communities.

There have been several studies of Indigenous students who have stayed on at school beyond the compulsory years. Indigenous students who stay on at school have strong Indigenous and personal identities, self-reliance, confidence and goal direction as well as mainstream school cultural knowledge, a determination and desire to succeed at school, and long-term career goals. The main influencing factors are: a school environment that acknowledged, and sought to preserve, cultural identity; the effort made by the school to find appropriate ways for Indigenous students to achieve academic success; and teachers who offered interesting lessons and treated Indigenous students with respect.

The difficulty for many Indigenous youth in making a commitment to learning is that there is often no clear relationship between formal schooling and employment. There are a number of initiatives underway across jurisdictions to increase Indigenous participation in senior secondary school and higher education. One example is described in **Box 5**.

Box 5: Tertiary Aspirations Program

The Qld Aboriginal and Torres Strait Islander Tertiary Aspirations Program was developed in 1987, to address low education retention rates and a subsequent low representation of Aboriginal students and Torres Strait Islander students in tertiary courses. From an initial five schools in 1987, AITAP now includes over one hundred schools.

AITAP involves the setting up of a local project committee inclusive of key players. This team coordinates the selection and interview processes for new AITAP students. After the successful selection, the parent, the principal's nominee and the student agree to a contract which commits them to work together for the best educational outcomes for the student.

An induction seminar for new students and parents of AITAP is coordinated by the AITAP School Coordinator and the Local Project Team members. Individual schools organise various activities when implementing AITAP, such as homework centres, mentors from school or community, career markets and inter-school events. Some clusters of schools are investigating links with industry and tertiary institutions to assist in the conduct of the program.

The AITAP State Student Challenge is a culminating activity which occurs annually. In addition, many schools organise mini-Challenges at a local or district level as part of their preparations.

Many Aboriginal and Torres Strait Islander students have already left the school system before being able to access the 'VET in schools' programs, which are usually offered at years 11 and 12. 1999 ASTF data showed that only 3.3% of students participating in Structured Workplace Learning programmes are Indigenous. Therefore, relying on VET in schools at year 11 and 12 as the only form of vocational learning for Indigenous students discriminates against young Indigenous people and other 'at risk' early leavers.

Barriers to the successful uptake and completion of apprenticeships and traineeships occur when: the idea for the apprenticeships/traineeships was generated externally to the Indigenous community; course modules were mainly developed by non-Indigenous people or outside the community; the process was rushed and took place without adequate negotiation; key parties were not involved in consultation or consultation was seen to be selective/tokenistic; undue attention on factors such as literacy, numeracy and work ethics in a deficit approach rather than paying attention to creating a supportive environment; lack of cross-cultural awareness or training responsibilities by employers; lack of continuity; mismatch between training outcomes and employer/industry expectations; lock-step and inflexible off-the-job.

In order to ensure maximum participation of Indigenous students in New Apprenticeships, consideration should be given to introducing pre-apprenticeship programs in the middle years of secondary schooling, and to be designed to articulate with post-compulsory VET in schools and apprenticeships in schools programs. A literacy and numeracy component should be incorporated into these programs, and Indigenous people should be involved in the development and delivery of the programs. An example of effective practice is described in **Box 6**.

Box 6: Part-time retail traineeship

This project was designed to enable Year 9 Indigenous students 'at risk' in rural areas to complete part A of a retail traineeship course and develop pathways to employment. The students were from relatively isolated locations; many had learning difficulties, poor literacy and numeracy skills, and some were very withdrawn from the social aspects of school and their communities.

The course was delivered by VET teachers using audiographics (ie. software that allows on-line interaction between students and school sites in a 'virtual' classroom), so that students could participate even though separated by considerable distances. The use of audiographics also added a technical component to the course that, when mastered, boosted students' information technology skills and confidence. Work placements were arranged and these were coupled with work on workplace competency manuals to give students exposure to all aspects of retail operations. The project was strongly supported from within the Indigenous and wider communities and the schools participating in the project.

The Taskforce proposes that it may be useful to identify and explore any further examples of effective practice with a view to promoting this advice at the local level.

School to Work Transition

The labour market is changing and over the next decade will require increasingly higher levels of skills and greater flexibility from its future employees. Not only do young people need to have the knowledge, skills and understandings to make them employable, but they also need productive work habits, personal confidence, decision-making skills and a commitment to learning as well as specific vocational skills. In addition, there is a decline in employment in goods-based sectors such as primary industries and manufacturing, and an increase in employment in knowledge and service-based sectors such communications, retail and financial services.

The unemployment rate is higher for 15-19 year olds than for any other age group.

In making a successful transition from school to work, many Aboriginal and Torres Strait Islander young people have difficulty in competing with the increasing volume of other Australians with educational qualifications and in managing the changes in the nature of the job market.

For young Indigenous people, as well as for other age groups, level of education is the biggest predictor of having a job:

- completing Year 10 or 11 increases an Indigenous person's chance of employment by 40%;
- completing Year 12 increases employment prospects by a further 13%; and
- having a post-secondary qualification increases employment prospects by between 13% and 23%.

However, even where young Indigenous Australians achieve the same levels of educational qualification as their non-Indigenous counterparts they experience higher rates of unemployment. This remains true even when geographic and other differences are taken into account – this may be due to racism.

Indigenous people's potential for employment is affected by family responsibilities, cultural obligations, homelessness and isolation. There are few paid employment opportunities for youth in remote communities, and young Indigenous women in particular are expected to undertake a range of family and domestic responsibilities which could affect their employment prospects. Having been arrested is a large disadvantage in terms of employment.

Rurality is salient factor for many Indigenous young people in their transition through school and on to further education or work. Like the overall Australian population, the overwhelming majority of Indigenous Australians live in either capital cities (26.2%) or in other urban areas (62.9%). Nevertheless, Indigenous Australians are more likely to live outside capital cities than other Australians. 62.9% of the Indigenous population live in other urban areas and 10.9% live in rural areas, cf. 41% and 2.4% for the non-Indigenous population, respectively.

Indigenous youth in rural and remote areas may experience additional barriers in their experience of school and subsequent transition from school to work or further education. Ainley (1994) found that the difference in the average literacy and numeracy achievement between Indigenous and non-Indigenous students was greater in rural than in urban areas. In many rural and isolated communities, travel distances to the nearest school, TAFE or university is prohibitive. In many rural communities there is no accessibility to 'natural labour markets' other than local community or CDEP ones.

Employment prospects for Indigenous people who live in rural and remote Australia are generally poor. Communities experience multiple forms of economic burden in areas where long-term unemployment is chronic, there are few jobs and competition for employment is high. While the likelihood of employment for Indigenous people in rural areas does not appear to be significantly different from urban areas, this is mainly due to the presence of Community Development Employment Projects (CDEP) employment in rural areas .

There is some danger of conflict between the employment incentives offered under the CDEP scheme and programs to promote school retention. CDEP jobs generally require lower skills and provide low income. The CDEP scheme is effective in facilitating the transition of participants to other employment but many projects are not funded to provide accredited training or individual case management to assist participants to secure full-time employment. The offer of part-time employment within the community under the CDEP scheme may encourage Indigenous youth to leave school and discourage Indigenous youth from leaving home in pursuit of further education.

Recent work shows that school to work transition can be improved for Indigenous students by implementing alternative teaching and learning practices in such a way as to build on the cultural capital of the students. Apart from focussing on the students and the qualities and competencies that need to be fostered, school to work transition can be more successfully negotiated by:

- designing and delivering courses that are tailored to meet local needs, have a high degree of flexibility and are undertaken in cooperation with a number of parties including: schools, higher educational institutions, VET providers (public and private), Indigenous communities, employers (individually or in association), and local government;
- providing information about careers and development of individual plans that identify student goals and map pathways through school and post-school education and training options and employment;
- increasing cultural support through the provision of Indigenous adult support (either by mentoring and/or access to role models) and by building and affirming cultural identity through the conduct of camps and excursions;
- providing extensive periods of work experience placements even in geographically remote locations with limited job opportunities; and
- maintaining sufficient flexibility to meet difficulties associated with the lack of qualified and appropriate VET trainers, the lack of locally accessible training facilities and accommodation for visiting trainers, limited opportunities for local work placements, and the high costs of student travel and accommodation.

Back to school

Back to school programs are seen to be effective for some early school leavers. Coming back to education and training after a break, for whatever reason, is one aspect of lifelong learning. It may also be a chance to repair damaging experiences of formal education, and to recover a sense of cultural pride and self esteem.

Returning to school should always remain a viable option. Schools need to actively encourage early school leavers to return to school or to other forms of learning by providing individualised support.

Advice from projects to encourage Indigenous students to return to study indicate that these projects were effective, especially for those at risk with a history of alienation from formal education processes, when the curriculum programs:

- are built around the interests and needs that Indigenous students have a part in defining. Issues of importance to their communities are likely to play a major part in this curriculum;
- operate as a medium of support for cultural identity and self esteem;
- have a strong and authoritative Indigenous staffing presence, preferably known and accepted by the community, and active participation from influential community members;
- take into account and support low levels of literacy and numeracy, health matters, juvenile justice, pressing financial demands, family problems, and other personal issues;
- have a high level of flexibility to accommodate variations in attendance and participation, as well as the influence of gender, age and/or skill level on student grouping arrangements.

An example of effective practice in encouraging re-entry is described in **Box 7**.

Box 7: Tertiary preparation program

The course was designed to enable Indigenous students who had recently dropped out of mainstream schooling to access tertiary study. The course consisted of modules in written and oral communication, Indigenous studies in history, art and language, environmental science and managing personal change.

Indigenous and non-Indigenous educators developed curriculum and team teaching in a collaborative way and ensured that the subject material was of cultural relevance in all subject areas. National and local Indigenous and non-Indigenous people were invited to make presentations. Students were actively encouraged to participate in the public arena, for example through the production of a local community radio programme. Oral presentations by students were videotaped for self-evaluation purposes. Many students who previously had not considered themselves candidates for university level study enrolled in tertiary courses at the conclusion of the programme.

The Taskforce proposes that it may be useful to identify and explore any further examples of effective practice with a view to promoting this advice at the local level.

CHAPTER THREE: TRANSITION FROM SCHOOL TO VOCATIONAL EDUCATION AND TRAINING

This chapter summarises general and Indigenous VET participation rates, the different purposes of VET for Indigenous people and national VET initiatives.

Introduction

Indigenous school students have a better perception of VET than of schools, and feel that VET contributes to their employability and career options, even though the quantitative and qualitative data shows that the employment outcomes from VET for Indigenous students are not as good as for the general community.

The VET sector is to some extent serving different purposes for younger Indigenous and non-Indigenous Australians. For younger Indigenous Australians, VET is principally an alternative to schooling as a means for continuing education and training, while for younger non-Indigenous Australians it complements 12 years of schooling. There appears to be little available detailed advice on this disparity, on its impact on the nature of schooling for Indigenous students, on whether the VET 'culture' is more inclusive for Indigenous students compared to schooling or whether it is simply the longer period of education and training that is meeting requirements.

General participation rates

In the ten years from 1990 to 1999, the number of students in Australian VET has increased annually by about 6%, with growth being more prominent in the last five years (1995 -1999) with an annual growth rate of 6.7%. In 1998, the total number of VET students was 1.535 million and this increased by almost 112 000 to 1.65 million in 1999, an increase of about 7%.

In 1999, of 1.65 million VET students, 74.8% undertook training with TAFE and other government providers, 14.3% with community providers, and 10.9% with other registered providers (including private providers).

Young people (15-24 years) comprise 38% of VET students in 1999. The majority (80%) of young people (15-24 year olds) who undertook VET in 1999 were enrolled with TAFE and other government providers.

In 1999, the following proportion of equity groups were VET students:

- 63,200 (3.8%) reported a disability
- 50,800 (3.1%) identified as Aboriginal/Torres Strait Islanders
- 279,400 (17.0%) were born outside Australia
- 17,100 (1.0%) were full-fee paying students from overseas
- 192,300 (11.7%) spoke a language other than English at home

An important minority (roughly 20%) of VET students are apprentices and trainees undertaking the formal component of their training program.

In 1998, 55% of all VET students live in a capital city, 29% in rural areas and 3.5% in remote locations. The participation rate for people living in rural and remote areas is slightly higher than

for the whole population. The course enrolment profile of rural and remote clients was broadly comparable with the national profile of all students. Rural students had higher pass and completion rates compared with national averages, whilst remote students had lower pass and completion rates.

For two thirds of all VET students (67%), the major course they undertook leads to a recognised AQF qualification or equivalent. AQF certificate III or equivalent as the students' major qualification level accounted for the highest percentage of VET students (19.6%), followed by AQF certificate II (15.9%), AQF diploma or higher (12.2%), and AQF certificate IV or equivalent (10.1%). 19.0% of all VET students undertook non-award courses.

National VET initiatives

In 1998, Ministers endorsed a new national strategy for vocational education and training for the years 1998-2003, entitled *A Bridge to the Future: Australia's National Strategy for VET 1998-2003*. The national strategy identifies five objectives:

1. equipping Australians for the world of work;
2. enhancing mobility in the labour market;
3. achieving equitable outcomes in vocational education and training;
4. increasing investment in education and training;
5. maximising the value of public vocational education and training expenditure.

In May 1998, the ANTA Board agreed to ATSIPTAC developing a specific strategy for Indigenous people to support the third objective: *achieving equitable outcomes in vocational education and training*.

In June 1999, Ministers for vocational education and training approved eight key performance measures of the efficiency and effectiveness of the national VET systems:

1. skill outputs produced annually within the domain of formally recognised VET;
2. stocks of VET skills against desired levels;
3. employers' views on the relevance of skills acquired through VET;
4. student employment outcomes and prospects before and after participation in VET;
5. VET participation, outputs and outcomes achieved by client groups;
6. (Actual) public expenditure per publicly funded output;
7. (Actual) public expenditure per total recognised output;
8. total expenditures on training.

Under Key Performance Measure 5, systems report on poor outcomes and client groups more likely to be under represented such as Aboriginal and Torres Strait Islander people. Whilst some key performance measures are still being implemented, they are reported against annually and will be reviewed as part of the review of the national strategy around 2003.

At its meeting on 30 June 2000, ANTA Ministerial Council endorsed Australia's National Aboriginal and Torres Strait Islander strategy for vocational education and training from 1999 to 2003, developed by ATSIPTAC and entitled *Partners in a Learning Culture*.

The national key performance measures contained within *A Bridge to the Future* will measure outcomes for Indigenous peoples as well as for all Australians. To further measure the success of *Partners in a Learning Culture*, specific KPMs for the four objectives of the Strategy have been identified and include KPMs in relation to VET in schools. *Partners in a Learning Culture* will be implemented over a similar time frame to *A Bridge to the Future*.

Partners in a Learning Culture has set a vision of a vocational education and training system which renews and shares an Indigenous learning culture with all Australians in a spirit of reconciliation, equity, justice and community economic development and sustainability. This is to be achieved by:

- increasing involvement of Indigenous people in decision making about policy, planning, resources and delivery;
- achieving participation in VET for Indigenous people equal to that of the rest of the Australian community;
- achieving increased culturally appropriate, and flexibly delivered training, including the use of information technology for Indigenous people; and
- developing closer links between VET outcomes for indigenous people and industry and employment.

Indigenous participation rates

In 1996 there was relatively little difference between the participation rates of Indigenous and non-Indigenous 15 to 19 year olds, with 26% for Indigenous Australians and 27.5% for non-Indigenous Australians. These rates are mirrored for the 20 to 24 year old group. However there is a number of possible sources of bias in these comparisons and it is difficult to reach any real conclusion on whether participation rates are equitable.

Participation data are based on enrolments and many VET courses are of less than twelve months duration, so the participation rates overstate the true participation rates to the extent that individuals enrol in more than one course in a given year. Since Indigenous students tend to enrol more in shorter courses, they are more likely to be multiple enrolments and therefore artificially inflate participation rates.

Indigenous students tend to leave school earlier than non-Indigenous students and therefore there is a relatively greater pool of persons available to participate in VET. This means that the apparently equitable participation rates in VET disguise real differences. Given the larger pool of available Indigenous persons not in school and the low participation rates of Indigenous 15 to 19 year olds in higher education, the 15 to 19 year old Indigenous participation rates in VET should be higher than those for non-Indigenous Australians.

On the other hand, a minimum of 2.9% of all VET students identified themselves as being Aboriginal or Torres Strait Islander (1998). This figure is higher than the Indigenous proportion of the Australian population (1.7% population aged between 15-64; 1996 census). Given that 21% of VET students did not indicate their background, it would be expected that more than 2.9% of students are Indigenous Australians. Accounting for the non-reporting rate could produce an estimated participation rate for all Indigenous students of 3.7%.

Although Indigenous people may be well represented in VET overall, they tend to be in lower level and shorter courses compared with non-Indigenous Australians. The differences persist across age groups and is therefore less likely to be simply the result of Indigenous students having lower levels of schooling.

It should be noted that while a significant proportion of Indigenous participation in VET is in preparatory or pre-vocational courses, there does not appear to be any literature documenting the success of these courses in terms of transition to employment or to further education involving courses of a higher skill level.

The number of Indigenous people participating in publicly-funded VET grew to 50,800 in 1999. As at August 2000, there were 6 745 Indigenous New Apprentices currently in training.

In 1997, about 28% of Indigenous enrolments were in AQF Certificate I and II courses, around 32% in AQF Certificate III and equivalent, and 11% in Diplomas and AQF Certificate IV and equivalent courses. By comparison, non-Indigenous enrolments were 13%, 25% and 23% respectively. In 1998, about 44% of Indigenous Australian enrolments were in AQF level I and II courses, compared with 22% for non-Indigenous students. Almost 15% of enrolments by Indigenous Australians were in diplomas and AQF Level IV and equivalent courses; the corresponding figure for non-Indigenous students was 27%.

Indigenous students are also under-represented in many VET course areas including business, administration and economics, and they continue to be over-represented in areas such as 'general (multi-field) education' courses and in lower level Certificate programs. The over-representation occurs as much for 20-24 year olds as for 15-19 year olds.

Indigenous students on average experience lower pass rates and higher withdrawal and fail rates than other VET students, even though the gap has narrowed in recent years.

An inherent problem with competency-based training for Indigenous students is the lack of contextual relevance of a set of pre-determined vocational skills. Indigenous students are more likely to engage in learning if the skills or knowledge to be learnt was set in or related to a context familiar to the students.

Furthermore, Indigenous people experience lower employment rates and higher unemployment rates after participating in a VET programs than do other VET students. By May 1997, only 52 per cent of Indigenous VET 1996 graduates had jobs, compared to 71 per cent of non-Indigenous graduates. Nevertheless VET participation enhances employability. In 1996, 80% of Indigenous Australians with vocational qualifications were working compared with only 49% of those without a qualifications.

Aboriginal and Torres Strait Islander people are more geographically dispersed throughout Australia, than other Australians. Many Indigenous people live considerable distances from local VET providers, with 64 per cent of Indigenous people living in rural areas live more than 50 km from the nearest TAFE College (1995). Indigenous students comprise a high proportion of Australians enrolled in VET in remote communities. For example, in 1996, 26 per cent of Indigenous VET participants lived in remote regions compared with just three per cent of non-Indigenous VET participants.

The problem with VET participation for Indigenous people in rural and remote communities does not lie so much in the content of courses, but in course delivery. Course flexibility was seen to incorporate modularisation and recognition of prior learning, as well as the use of new technologies and computer-based learning, particularly for students in rural and remote areas. This would enable trainees in rural and remote areas to undertake trade training without leaving home for lengthy periods of time to attend a VET institution, and to proceed at their own pace through the course. Landcare Environment Action Program and Skillshare courses can be important in helping Indigenous people build bridges between one kind of education and training experience and another. Sometimes the undertaking of such courses resulted in an individual re-entering general education in order to lift their academic skills to a higher level needed for a certain line of work.

Effective practice

Several reports identify the major factors necessary to ensure successful Indigenous participation in VET and these include:

- a recognition of Indigenous culture and values in course planning and implementation through the involvement of local Indigenous communities;
- provision of support services in educational institutions for students as well as in their own communities;
- linking college-based directed learning with on-the-job training and experience to enhance motivation, attendance and learning outcomes;
- programs to improve literacy and numeracy skills that connect the development of industry-related competencies and pathways to genuine employment;
- flexible course structure and delivery, without sacrificing rigour and quality;
- the competency-based approach of VET appears to better suit students with additional support needs because it makes the requirements very clear and provides regular staging points for success to be achieved and noted.

There are a number of initiatives underway across jurisdictions to improve successful Indigenous participation in VET. An example of effective practice is described in **Box 8**.

Box 8: On-site skill development

Students can more readily acquire employment-related skills, as well as improved literacy and numeracy, by contributing to a process highly valued by the local community - building part of a cultural centre. This project delivered a structured nationally accredited pre-employment course to a group of Indigenous students who had not participated in formal education and training for some time. All students completed at least one module in the Construction Fitout and Finish course, and 30% completed them all. The majority of those who did not complete the course gained employment during the course of the project.

The project began by providing the students with some basic skills in construction and some literacy and numeracy training in the college environment. The students were each tested on entry to the course to determine their literacy and numeracy levels and individual management plans were developed. Attendance at literacy and numeracy courses in the college was irregular, but the shift to delivering literacy and numeracy classes on site improved attendance and outcomes significantly. By linking literacy and numeracy training to practical activity and employment-related learning outcomes, the students gained an increased appreciation of the need for these skills in the workplace.

The Taskforce proposes that it may be useful to identify and explore any further examples of effective practice with a view to promoting this advice at the local level.

CHAPTER FOUR: SCHOOL TO HIGHER EDUCATION TRANSITION

This chapter summarises Indigenous participation and attrition rates and looks at a range of academic and institutional factors that impact on the experience of educational success for Indigenous Australians.

Introduction

For many years it has been recognised that many students experience difficulties when making the transition from secondary school to university study. The problem is common to students entering all Australian universities and is experienced across a range of fields of study.

The early experiences of undergraduate students in mass higher education systems are vital in establishing attitudes, outlooks and approaches to learning that will endure beyond the undergraduate years. Changes in secondary curricula do not appear to have brought about any improvement in the transition experience.

For individual students, the consequences of a difficult transition can be costly, most obviously in terms of loss of confidence and income. The economic costs to universities and society are immediately evident in early withdrawals in the first year. However a third or more of first year students who remain enrolled have serious doubts about their choice of course and their level of commitment to study is problematic. Indeed, the effects of negative transitions to first year tertiary are often only revealed as discontinuation or failure in later years.

At the same time, universities today serve a far more diverse clientele than they have ever done at any time in Australia's educational history. In addition, there is considerable variation between States/Territories and between universities in the diversity of undergraduate students' backgrounds in terms of their admission to university. In terms of student performance, there is considerable variability within the system, between universities, between enrolment types, between modes of study and between discipline groups. This variation has considerable implications for the access, participation and educational outcomes of Aboriginal and Torres Strait Islander students and for devising strategies to improve the performance of Indigenous students at specific institutions.

University and student diversity

An analysis by Pargetter et al (1998) of 1995 university enrolment data shows the diversity of undergraduate students' backgrounds in terms of their admission to university. Nationally, of the non-overseas commencing cohort in bachelor degrees (147 920), only 54% were school leavers. There is considerable variation between States and between universities in the proportion of the intake drawn from school leavers.

Students entering higher education with a TAFE background comprised 7% of the 1995 intake and is increasing in importance and size. 'Special Entry' students comprised about 9% of the total admissions into bachelor degrees, about 6% being 'Mature Age' entrants, and 3% 'Other Special Entry'.

About 22% of commencing bachelor students had prior experience of higher education, comprising 11,744 who had previously completed a higher education course, and 20,421 with an incomplete higher education course.

There is considerable variation between States in terms of the basis of admission. In 1995, Victoria drew 65% of its overall commencing cohort from among school leavers, whereas NSW took only 48% from this source. By contrast, 15% of the NSW intake was drawn from special entry categories, compared with 5% in Victoria. The NT, WA and Queensland were the States/Territories which drew the largest portions of their intakes from higher education-experienced students, with 36%, 31% and 27% respectively).

There is also a wide variation between university as to the proportion of the intake drawn from school leavers. Of the larger universities, Melbourne (74%) and Deakin (72%) were the institutions relying most heavily on school leavers. Monash University took 65% of its intake from among school leavers. At the other extreme, Charles Sturt drew only 26% of its intake from school leavers. Edith Cowan (40%), Griffith (44%) and QUT (46%) also drew relatively low proportions from school leavers.

About 75% of all commencing bachelor students in 1995 were enrolled full time, with 15% part time and 10% external enrolments. Among school leaver commencers, the proportions enrolled were 92%, 6%, and 2%, respectively. External and part-time enrolment were more commonly the choice of students with prior experience of higher education. Only 11% of external students were school leavers.

Further analysis of the 1995 bachelor degree enrolments shows that commencing students did not perform as well as returning students, and that there is little difference in performance between school leaver commencers and other commencers. However commencing external students demonstrate a fairly low level of performance, especially among school leavers. School leavers also performed relatively poorly as part time students.

Some disciplines are harder than others to successfully complete. The lowest performing disciplines, for both school leaver and other commencing students were Mathematics/Computing, Engineering, and Business/Administration/Economics not far behind.

The results of student performance on a university by university basis are influenced by the discipline mix of offerings at a given university. The figures suggest that a university offering Mathematics/Computing, Engineering and Business/Administration/Economics in large quantities will demonstrate lower levels of student performance. Also, it could be that the relatively low levels of student performance in Business/Administration/Economics was caused by a relatively high proportion of part time enrolments, as part-time students under-perform full-timers, especially among school leavers.

First Year on Campus

For many years it has been recognised that many students experience difficulties when making the transition from secondary school to university study. The problem is common to students entering all Australian universities and is experienced across a range of fields of study. Concerns about undergraduate attrition have motivated numerous campus-based attrition studies conducted during the past decade, with researchers attempting to provide administrators with insight into which factors underlie students' decisions to withdraw from tertiary education, with a view to develop strategies to reduce student drop-out rates.

In 1994 a national study was conducted in Australia to document the initial experience of on-campus undergraduate commencers with a view to improving teaching and learning. The study findings were reported in *First Year on Campus* (McInnis and James 1995) and *Transition from*

Secondary to Tertiary: A Performance Study (Pargetter et al 1998). The national study concluded that while some students found the transition to university a challenging hurdle, for others it was an intimidating gulf. **Box 9** describes the major variables in the transition process based on the 1994 survey.

Box 9: First year on campus

Entry age

School leavers are more problematic than older students particularly in terms of their uncertainty about their roles as learners, in their perception of their relationships with academic staff, their application, and their uncertainty about the course they had taken.

Compared to students who were not school leavers, a higher proportion of school leavers were dissatisfied with university, hoped to change course, and received lower grades than expected. They were less clear about course direction, and more agreed they had difficulty adjusting to the university style of teaching. In the classroom, a notably lower proportion of school leavers than others found their subjects interesting.

Fewer school leavers sought advice and assistance from staff, found academic staff approachable or available, believed that academic staff took an interest in their progress, or agreed that teaching staff gave helpful feedback. As well, they perceived the learning climate among their peers as less positive.

Reason for going to university

In the 1994 survey, 38% of school leavers seriously considered deferring their course at some point in the transition process. Those who had seriously considered deferring were much less likely to have a career in mind and were less clear about their reason for being at university. In comparison to 'settled' students, 'uncertain' students had more difficulty in adjusting to the university style of teaching and in comprehending material. 80% of 'uncertain' students had not found their course interesting and over 70% did not know where their course was going. The 'uncertain' group felt teaching quality to be poor and reported being disaffected with academic feedback and interest taken in their progress.

By the middle of the first year, 'uncertain' school leavers were essentially 'turned off' the course, if indeed they were ever interested. This dissatisfaction clearly affected their sense of identity as a university student. They were less likely to enjoy being a university student and overall, more than two-thirds were dissatisfied with their university experience.

Satisfaction with university experience

In the first weeks and months of the university experience, students are inevitably making comparisons between school and university. The perception of the appropriateness of the final year of school as a preparation for university was generally negative. Only 38% of 'satisfied' students agreed they were prepared, and the dissatisfied students were even more negative, only 23 per cent being in agreement. Similarly, the dissatisfied students were far more negative than the satisfied students in their view of the extent to which their first year subjects built on their study at school (50% cf. 35%).

The grading of academic performance between school and university come as a significant surprise for many students. 38% satisfied students and 58% of dissatisfied students reporting lower marks than they expected, even though 12% of dissatisfied students were getting higher marks than they expected. Better than anticipated achievement did not necessarily guarantee satisfaction.

Only 9% of dissatisfied students found university study more fulfilling than school compared with 31% of the 'satisfieds' and, at the other end of the scale, 43% of the dissatisfied students found university study less fulfilling than school. Many more of the dissatisfied students had difficulty adjusting to the university style of teaching (49 per cent cf. 28 per cent), and likewise had difficulty comprehending the material they were asked to read (43 per cent cf. 24 per cent). Only 39% of dissatisfied students thought the quality of teaching was generally good in stark contrast to 72% agreement from the satisfied students. This suggests an exceptionally high level of disenchantment, reinforced by a similar pattern of responses on the perception of academics' enthusiasm about the subject they were teaching.

The most telling indicator of the positive or negative initial academic adjustment is the extent to which the students had a clear idea of where their course was going. Almost 50% of the dissatisfied students did not have a clear idea of where their course was going compared with 17% of the satisfied group. Interestingly, the two groups were roughly similar in their perceptions of the standards and demands of university work compared with school.

Box 9 (cont.)

Learning climate

The nature of the learning climate, where first year students work together and see one another as belonging to a group whose primary motives are concerned with learning, is an important performance indicator with respect to the transition process. Peer influence is crucial in establishing positive attitudes towards academic achievement and support for learning. A positive learning climate should also be one where the students are encouraged to contribute to discussions. A far higher proportion of dissatisfied students (44% cf. 20%) had negative perceptions about the attitude of their peers to learning. A considerably higher proportion of dissatisfied students had not made close friends at university (35% cf. 18%).

Similar differences were evident in the extent to which the students found their subjects interesting with only 17% of the dissatisfied students at all positive. There was some difference in the extent to which the students felt uncomfortable in group discussions with a third of the dissatisfied students feeling uncomfortable compared with 23% of the satisfied students.

New students are particularly sensitive to the way in which academic staff relate to them and the interest staff show in their academic development. Feedback on progress is of crucial importance for first year students. The contrast between school and university is potentially stark. School leavers had experienced teachers, parents and peers closely monitoring their performance throughout the final years of secondary school. For many, the decline in attention at university was an abrupt jolt. An overwhelming majority of dissatisfied students (65%) did not believe that the staff took an interest in their progress.

There was little difference between the satisfied and dissatisfied groups in the general support their parents gave to their university study, but only 37% of the dissatisfied students discussed their university work with their family compared with 54% of the satisfied students. Likewise, a higher proportion of dissatisfied students agreed that their parents had little understanding of their university life (40% cf. 28%). There was very little difference between the groups in the importance they attached to family support in their first year of study.

Dissatisfied students were not as able or willing to be pro-active in their own learning. They showed greater reluctance to approach academic staff for advice or assistance but neither did they see their own contribution as consistent or well-prepared.

General factors which lead to withdrawal

Employment, personal issues, finances, and issues associated with actual courses are important factors which might lead to withdrawal for all students. These include:

- personal issues (needing a break; resolving role conflict; tired of study; doubts about course);
- family matters (juggling family, job and study);
- health (overwork and exhaustion; exacerbation of some health problems without adequate support); and
- employment (not coping with full-time work and study; loss of job with subsequent too little funds to continue).

Some studies show that the 'student psychological state' is the variable most strongly associated with student initiated withdrawal, and often characterised by such problems as integrating into social life on campus, crises such as homesickness and loneliness, financial hardship, anxiety, low self esteem, depression, lack of motivation and marital/family conflicts.

Withdrawal in first year

The most likely trigger for withdrawal in first year is some unforeseen personal event. Usually finances are problematic and any small change in circumstances can trigger a crisis. Savings, parental income and AUSTUDY/ABSTUDY are the major sources of financial support. Further, there is a sense that balancing employment, family roles and study is a precarious process. This

suggests that the availability of counselling is crucial and particularly so for first year students. Knowledge that help is available may in fact prevent a hasty decision to withdraw. For example, a lack of knowledge concerning ways in which assessments can be deferred might also trigger unnecessary withdrawal. Publicity about the availability of services and procedures is therefore vital. Withdrawn students suggest that if they had used support services more this may have helped them maintain their enrolment.

Casual employment is significantly more important for those who had considered withdrawal, compared to those who had not considered such an option. Students who had actually withdrawn from study, ranked employment as the fourth most important factor to influence withdrawal. Losing a job or having insufficient funds from part-time work were suggested as the key elements in the employment area. Unless sufficient savings or other private income existed, these students relied heavily on part-time or casual employment. It would be useful for prospective students to have a realistic idea of costs associated with study. Further, lecture timetables need to take account of student's needs for employment.

Withdrawal in second year

The second year appears to be a critical time for many students for a number of reasons. Firstly, the second year is a time when many students engage in a questioning process and the choice of degree and future options are examined in some depth. The questioning which can occur in the second year of enrolment is something that can be controlled to some extent. Proactive career decision making advice from careers services and help with general goal setting and decision making from counselling services and study skills advisers should be undertaken. This emphasises the importance of the university's participation in school information programs, as well as ongoing liaison with school guidance officers and services such as careers, personal counselling and study skills advice.

The second reason is that for those whose motivations are externally bound (for example 'pleasing others'), or perhaps also for students who are unclear about their goals and motivations, it is simply the passage of time which brings their continued enrolment to a crisis point in second year. In some studies, students who have considered withdrawal give significantly greater importance to pleasing others and being with friends as reasons for enrolment. Those who had not considered withdrawal give greater importance to intellectual stimulation and interest. It is hardly surprising that withdrawal is considered when the motivation for study is external.

Finally, the first year is often perceived as exciting, with undoubted engagement in many social activities. With the passage of time, excitement wears off and the student engages in a serious consideration of his/her position.

Characteristics of Indigenous higher education students

In the last decade the numbers and proportion of Aboriginal and Torres Strait Islander students in higher education have increased dramatically. For example, by 1999, there were 8 001 Indigenous students across all levels of study, an increase of 2.7% over 1998 when numbers totalled 7 789. The proportion of Indigenous students in higher education is also increasing over time. The percentage of commencing students (non-overseas) who are Indigenous has risen significantly from about 1% in 1989 to 1.8% in 1999, a figure which is slightly higher than their population share of 1.7% (15–64 year age group at the 1996 census). The number of Indigenous and non-Indigenous students in individual universities is described in **Appendix 1**.

Indigenous Australian higher education students tend to be around five years older than their non-Indigenous counterparts. This tendency shows up at all stages of higher education: for both undergraduate and postgraduate students and for students at commencement and at completion. The average age for non-Indigenous commencing undergraduate students (1999) was 23 years, and for Indigenous Australians, 29 years.

55% of non-Indigenous undergraduate students commenced university at 19 years or under, compared to 58% of Indigenous undergraduate students who commenced at 25 years or over.

Indigenous women are significantly more likely to participate in higher education than Indigenous men. This follows a similar trend in the rest of the Australian population. In 1987, female students outnumbered male students for the first time (50.1%). In 1999, female students comprised 55% of all students. However the predominance of females among Indigenous students is much more marked, comprising 63% of Indigenous students in 1999.

Of those students commencing an undergraduate award course in 1999, 28% Indigenous students had no formal qualifications (cf. 4% non-Indigenous students) and 36% had completed secondary education (cf. 66% non-Indigenous students).

Indigenous higher education students are more likely to be admitted to higher education on the basis of special entry schemes or institutional assessments. Of those students commencing university in 1999, almost 50% Indigenous students were admitted on the basis of special entry schemes or institutional assessments (cf. 11% non-Indigenous students).

In 1999, 55% of Indigenous students were from urban areas, 30% rural and 15% remote areas (cf. 80%, 18%, 2% respectively for non-Indigenous students. In 1998, 43% of Indigenous graduates moved from their home town to study (cf. 28% for non-Indigenous graduates).

Students can enrol in university studies either internally, externally or 'mixed - mode' (at least one unit internally and at least one unit externally). In 1999, 70% Indigenous students were enrolled internally, 26% externally and 4% mixed-mode (cf. 83%, 14% and 3% for non-Indigenous students). The proportion of students from urban areas who enrol internally was 86%, from rural areas, 70% and remote areas, 57%.

Older Indigenous students are more likely to be enrolled as external students or by mixed-mode than younger Indigenous students. In 1999, 36-40% of Indigenous students aged 25 years and over were undertaking their courses externally or by mixed-mode, compared to 25% of Indigenous students aged 20-24 years.

Indigenous students in some fields of study are more likely to study externally or in mixed-mode. For example, of Indigenous students undertaking studies in 1999, over 50% in education, and over 30% in agriculture/animal husbandry, business/administration/economics, and law/legal studies undertook their courses externally or by mixed-mode.

In 1999, the two broad fields of study, the Arts and Education, each accounted for about 30% to 35% of Indigenous students. About 13% of all Indigenous students were enrolled in health-related fields, with smaller proportions in all other fields of study. By comparison, the two broad fields of study, the Arts and Business/administration/economics, each accounted for about 23% to 26% of non-Indigenous students.

In general, Indigenous Australians are under-represented in bachelor degree and postgraduate courses and are much more likely than other students to be enrolled in sub-degree courses or

enabling (bridging) courses. Between 1992 and 1999, Indigenous student numbers at the bachelor degree level increased by 55% from 2 812 to 4 351. In 1999, 54% of Indigenous university students were enrolled in bachelor degrees (cf. 75% of non-Indigenous students) and 18% in enabling courses (cf. 0.4% of non-Indigenous students). The under-representation of Indigenous students in some fields of study reflects an often restricted subject choice at school.

An issue which has been of concern for a number of years has been the increasingly high numbers of students enrolled at enabling level.

It should be noted that while a significant proportion of Indigenous participation in higher education is in preparatory or pre-vocational courses, there does not appear to be any literature documenting the success of these courses in terms of transition to employment or to further education involving courses of a higher skill level.

Many Indigenous people who wish to study in higher education are severely educationally disadvantaged and many of these are using enabling courses as a pathway to diploma and bachelor level study. Academic performance has been poor suggesting that this pathway is not proving cost-effective. For Indigenous Support Funding purposes a cap has now been placed on proportions of Indigenous students at enabling level in any institution. There has also been a review of the cost-effectiveness of the enabling programme under DETYA's Evaluations and Investigations Programme. Whilst this review addresses the whole programme which is directed at all equity groups, it does provide considerable useful information on Indigenous students. DETYA is currently evaluating options for improving the enabling pathway.

Although the initial intake of Indigenous students into higher education is steadily increasing, so is the concern over the high proportion of Indigenous students who do not actually graduate. In universities, the current apparent retention rate of Indigenous Australians is 78% of the non-Indigenous rate. Of the 1992 student cohort, over 62% of Indigenous students did not complete their undergraduate degree by 1997, compared with about 34% of non-Indigenous students.

The continuing high attrition rate means that the proportion of all Indigenous students has not increased as rapidly as the proportion of commencing Indigenous students. In 1989, Indigenous students were 0.8% of all non-overseas students. By 1999, this proportion had increased to 1.3% - this figure is still only 72% of what would be expected from Indigenous representation in the general population.

There are also similar concerns over other Australian students. Low graduation rates are viewed as an inefficiency within the system. The current focus of Commonwealth funding in Indigenous higher education is now on improving the performance of Indigenous students. Funding allocations for Indigenous Support Funding has been redirected to this end with elements based on progress rate and completions.

Indigenous student attrition

In addition to the general student attrition issues experienced by many students, one recent study focused mainly on academic and institutional influences on Indigenous student attrition and identified ten main factors that contributed to high 'drop out' rates:

- inappropriateness of the curriculum students have to study in various degree programs;
- racism heavily entrenched in tertiary institutions and perpetuated through lectures and other university programs;

- hostile environment in the university not conducive to study and culturally foreign to students;
- lack of effective mechanisms for enhancement of participation of Aboriginal students and community members in decision making regarding the planning, delivery and evaluation of the institutional education programs;
- lack of an institutional-wide Indigenous employment strategy in administration, teaching, research and student services areas;
- poor support structures for student's academic as well as socio-economic life;
- culturally inappropriate academic counselling system;
- rigid institutional structures that do not accommodate cultural divergence in course delivery and course requirements;
- lack of implementation of non-academic Indigenous programs for enhancement of cultural identity, cultural pride and self-esteem, and strategies for operating outside of one's culture; and,
- poor relationship between students and some ATAS tutors that does not enhance learning.

Other work suggests that Indigenous Australian and non-English Speaking Background students are more likely to experience difficulty with their study because of family responsibilities and financial difficulties than their mainstream counterparts.

Indigenous students are more likely to withdraw from university to maintain or commence employment than other groups. Such an outcome is not necessarily regarded negatively by Indigenous students, especially since attaining a university degree may not necessarily increase the probability of employment for Indigenous Australians as it does for other Australians.

Academic and institutional factors

A range of academic and institutional factors are generally recognised as influencing student retention, participation and success. These include teaching and learning, institutional policies and practices, and the institutional environment. Generally, Australian research highlights the relationship between negative aspects of these academic and institutional factors and student withdrawal. Issues such as isolation and cultural marginalisation adversely influence student participation at university.

An Australian study of first year students' experience found that more than 70 per cent of university academics believe students have become more demanding of their time, and most feel students are lacking purpose and application. Many academics appear to operate their classes on a 'sink or swim' notion of education, adhering to a set of assumptions about the knowledge and skills possessed by first year students which may conflict with the reality of the 'contemporary mass higher education system'. This view has serious implications for Indigenous students studying in mainstream university courses.

The growing success of strategies to increase access for equity groups has created new issues which universities need to consider if they are to retain these students and make university a meaningful experience for all. If these students are to succeed, universities will need to adapt to meet the changing needs and expectations of these different groups within the student population. Most of these groups, including Indigenous students, have different family and educational backgrounds and different expectations regarding the purpose of their tertiary education from those groups traditionally represented on campus.

Many of these issues for Indigenous students are highlighted by a brief consideration of a number of academic and institutional factors: access/success rates; modes of delivery and assessment practices.

Access/success rates

Universities with higher rates of access by Indigenous students appear to have lower success and retention rates. This finding contrasts with that for other equity groups who are generally on a par with, or only slightly below the success and retention rates for the rest of the student body. A table showing performance indicators for Indigenous students in relation to access, participation, retention and success by institution and state for 1999 is at **Appendix 2**.

Modes of delivery

Student surveys show that Indigenous students value the opportunity, not only to access study on campus, but also to 'come together, in one place, to learn together' as Indigenous Australians. There is an 'immeasurable benefit at so many levels' of inter-cultural and cross-cultural opportunities, including fostering empowerment and greater understanding of the diversity of Indigenous cultures as well as operating in non-Indigenous domains.

Nevertheless studies indicate that many students would never have been able to access university if community-based block release courses did not exist. Block release or 'mixed-mode' courses are terms used to describe courses delivered through a combination of distance education and face-to-face teaching for students who are based in their home communities and need regular on-campus tuition to complement the distance education component of the course. Block release programs play an important role in contributing to Indigenous self-determination and cultural affirmation, retention and course completion. Existing community-based block release courses are proving to be effective and valuable and there is a demand for more courses to be offered by block release mode.

On the other hand, research indicates that students from rural and isolated areas and/or in external or block release courses experienced isolation and disengagement from their course, and were often confused about academic procedures and had difficulty maintaining focus. Slow turn around time for feedback and assessment of assignments often caused students to feel anxious and uncertain about their progress.

In many higher education institutions there is a shift certainly in some courses from traditional learning to virtual class learning - also called "telelearning" and "distributed on-line education".

Hypermedia" is defined as multi-media (which includes text, movement, sound, pictures, colour) with hyper-links, which seamlessly transports the reader to other hypermedia materials. On-line hypermedia and the advent of intranets extensively increase the ease and feasibility of offering the same educational facilities to local students and distance students. This convergence of learning modes which traditionally have been called "distance education" and "on-campus education" means that both learning control as well as on-line learning and teaching materials are distributed to both local and distance students using the same interface (ie a Web browser).

The virtual class is seen as an electronic meeting place of students and lecturers for the purpose of learning and teaching. In the virtual class the activities of the traditional educational institute is performed mostly without the movement of physical objects (eg getting students and lecturers into a physical venue); this includes the challenge of providing social interaction and a "campus experience" to on-line students.

The virtual class can take many forms, it might be for example on-line education using the Internet or an intranet, or meeting in virtual reality as telepresences, or combining these methods with traditional educational modes.

Local students may have all their lecture notes on-line as well-designed hypermedia courseware which include on-line communication facilities, different navigation paths, catering for different learning styles, access and pointers to other Web resources and exercises. The local students may also have face-to-face tutorials to work through exercises and sit tests and exams in a physical building. Distance students may also have all their lecture notes on-line, have on-line real-time tutorials, attend workshops on the physical campus, and do their assignments on-line. However the synergy of this convergence is that local and distance students can meet on-line as well as physically, evaluate each other's on-line published materials, do group assignments together, and form informal study groups.

Moving towards the virtual class for some higher educational institutes mean to move all education from traditional education to virtual class methods, or it might mean to incorporate the virtual class as one of the key educational strategies.

The reasons why higher educational institutes are considering moving towards the virtual class include the need for life long learning. Education is becoming more of a lifelong endeavour than a few years study after school because most careers require continued training to keep up with the growing body of relevant knowledge and also because of the modern tendency to develop more than one career during a person's working life. Distributed on-line education is attractive to those already in the work force because of its open and flexible nature.

Emerging as a strong rationale for using distributed on-line education is that it can greatly enhance the quality of learning. It can lessen two huge problems in traditional distance education ie decrease in personal motivation and a sense of isolation. Both asynchronous (e-mail, message boards) and real time on-line communication facilities (voice, video, Internet Relay Chat and shared whiteboards over the Net) can be used very effectively in this area. It also bridges the boundaries and limitations of time and space, provide for a variety of learning styles as well as for different navigational preferences. Students can also take more control of their learning and can develop "life" skills like time management and research skills, by students having to set there own study plans, find additional Web resources, having to evaluate its validity and then drawing sound conclusions.

Students in rural areas are critical of the lack of off-campus information technology infrastructure and resources available to support their studies. Some studies identified the need for: greater access to computers, including hire arrangements for external students; the provision of computers as incentives; and more computer laboratory time in courses to address the increase used of 'virtual class learning'.

Assessment

The norm-referenced system of grading was first adopted in the early 1970s by Australian universities. This grading system breaks down students' results according to a bell-shaped curve, with students being ranked according to 'norm-referenced assessment'. This system has in recent years come under fire from a growing number of academics many criticising the norm-referenced system's emphasis on ranking students. There have been calls for an alternative assessment policy which uphold the same criterias by which mainstream methods measured students' skills or capabilities and does not generate criticism that alternative assessment gives people an easy option or preferential treatment. Many universities and academics still use 'norm-referenced assessment' and many now use criterion-referenced assessment.

While Indigenous units in universities use an array of assessment methodologies, there is considerable debate over whether mainstream assessment methods discriminate against Indigenous students and result in low retention and completion rates. It is argued that low graduations do not by themselves prove that mainstream methods disadvantage Indigenous students. Unfortunately while many reports discuss Indigenous students' alienation from the formal education system, few if any see inappropriate assessment as the cause.

Some commentators suggest that Indigenous students' difficulties can be traced directly to inflexible academic programs which, in his view, foster a 'sink or swim' ethos. Compounding Indigenous students' woes has been the tendency for some academics to lower standards as a way to boost their pass rates. But this practice is both insulting and dangerous, reinforcing the stereotype that Indigenous students are 'not up university standard'.

It is argued that relaxed entry requirements lie behind the recent surge in Indigenous tertiary enrolments, but there is a dearth of follow-up measures. This is apparent in three key areas: mainstream subjects' failure to consider Indigenous input in course content; inappropriate lecturing styles; and inflexible subject assessments.

Maintaining the status quo would mean that Indigenous students must learn to cope with, and succeed at assessment which does not cater for their needs. Insensitive though it is, this approach has its advantages, the least of which is that Indigenous students' qualifications would avoid the 'second-class' label put on them by some. On the other hand, a shift towards criterion-based assessment many argued would go some way to alleviating Indigenous disadvantage. Criterion-based assessment measures students' output against predefined criteria. Criterion-based assessment does not allow for judging students' work by different criteria nor provide for different levels of achievement.

Studies of Indigenous issues

Sensitivity and awareness about Indigenous issues, history and culture varies widely across schools and departments within universities. Universities have undertaken a range of work to improve successful Indigenous participation in higher education. Examples of this work are described in more detail in **Box 10, 11, 12 and 13.**

Box 10: Predictors of success

A study by Colin Bourke and other at the University of South Australia in 1996 suggests that several factors affect the success and retention rates of Indigenous students at university. The study found that the most useful predictors were gender, enjoyment of university life, mode of study, family situation and whether students had been studying in the year before commencing their course. The highest incidence of attrition occurred among Indigenous men, who lived alone, studied on campus, did not enjoy their studies and had not studied in the twelve months prior to commencing university.

Bourke identified three main reasons Indigenous students chose to study, including: to get a better job, to please their family and to meet community expectations. He concluded that Indigenous students' desire to meet community expectations 'was evidently insufficient to enable them to overcome their sudden exposure to the reality of university life and the discouragement many of them experienced in their studies at university.'

The lack of persistence among Indigenous students in the study could mainly be attributed to on-campus students. There were almost identical success rates for Indigenous and non-Indigenous students studying externally. While the external Indigenous students had a success rate of over 70%, their on campus counterparts had a success rate of about 50%.

Box 11: Student persistence

A study by Roz Walker of the Curtin Indigenous Research Centre found that key factors in student persistence were strong personal goals and family and community-oriented motivations for studying.

The study highlighted the importance to Indigenous students of a learning environment supportive of Indigenous values, recognising that many institutions still have a long way to go in these matters, particularly with regard to curricula and pedagogy. It also highlighted the many complex issues that do effect Indigenous persistence, not only the poverty and ill health faced by many students as individuals, but also the effects on them of trauma within their communities. The report suggested that many students who did not perform well academically, nevertheless were placed in an improved position with regard to gaining employment and contributing to their community because of their university experience.

Box 12: University culture

A study by Central Queensland University into the culture of universities found that while universities state that they are committed to Indigenous peoples' aspirations, the responsibility for enacting this commitment is invariably that of Indigenous academics and Indigenous support centres. The study found that it is not sufficient that Indigenous issues are addressed or responded to only when an Indigenous person is present on the committee. For one thing, the size of Indigenous staffing profiles is too small to accommodate this expectation.

The study took the view that universities should have a commitment to ensuring that the ethos of the university is such that every decision-making body within the university ensures that implications for Indigenous people are considered in all their discussions and deliberations. Universities need to accommodate Indigenous interests and rights across all facets of their operation – teaching, research, administration and community service. This requires more than cross-cultural awareness training, the incorporation of Indigenous perspectives in the curriculum or the employment of Indigenous educators.

Box 13: Key indicators of need

A University of Wollongong study looked at a range of difficulties that Indigenous people experience in pursuing post-schooling educational opportunities. Indigenous people are often encouraged into post-schooling educational opportunities only to experience disappointment, which can lead to a lowering of self-expectation, a lowering of opportunity by educational agencies and furthering of the myth that Indigenous people can not be educated to attain professional status.

Apart from failure to complete award courses, other examples of the effect of this phenomenon are where Indigenous people:

- enter post-schooling education and complete successive pre-vocational courses that do not lead to professional outcomes and employment;
- undertake a range of certificates and diplomas that are not directly connected to mainstream qualifications and awards;
- complete certificates, diplomas and degrees and are not able to obtain professional employment because they do not have appropriate work experience;
- face an educational experience that results in no clear direction for further education and employment within Indigenous and mainstream sectors; and
- refuse to upgrade qualifications.

The study took the view that rather than identifying Indigenous students as the most difficult students in need of remediation, that Indigenous students could be viewed as key indicators of mainstream needs and key resources for improved processes of evaluation and development of quality teaching and learning environments. While ever Indigenous students are viewed as having 'deficits' requiring remediation, educational institutions do not have to address the notion that its teaching and learning environment needs to change for the benefit of all.

The Taskforce proposes that it may be useful to identify and explore any further examples of effective practice with a view to promoting this advice at the local level.

Numbers of non-overseas students in 1999

Institution	Indigenous	Non-Indigenous
Australian Catholic University	219	9539
Australian Maritime College	*38	848
Australian National University	72	8464
Batchelor Institute	562	562
Central Queensland University	199	10 064
Charles Sturt University	296	21 029
Curtin University of Technology	457	17 912
Deakin University	266	23 571
Edith Cowan University	914	17 694
Flinders University of South Australia	101	10 402
Griffith University	264	20 062
James Cook University	386	9 336
La Trobe University	62	19 282
Macquarie University	281	18 184
Monash University	97	32 977
Murdoch University	108	8977
Northern Territory University	222	3996
Queensland University of Technology	240	26 847
Royal Melbourne Institute of Technology	19	22 114
Southern Cross University	169	8 629
Swinburne University of Technology	34	10 237
University of Adelaide	141	12 091
University of Ballarat	18	4 246
University of Canberra	87	7 992
University of Melbourne	91	29 056
University of New England	180	14 596
University of New South Wales	88	24 133
University of Newcastle	208	17 163
University of Notre Dame	33	108
University of Queensland	234	27 272
University of South Australia	322	21 319
University of Southern Queensland	148	12 682
University of Sydney	364	31 599
University of Tasmania	219	11 044
University of Technology, Sydney	243	20 838
University of the Sunshine Coast	15	2 377
University of Western Australia	116	11 848
University of Western Sydney	313	26 421
University of Wollongong	110	10 278
Victoria University of Technology	48	14 776
Total	8 001	603 156

* Numbers of students at AMC include students at VET level.

Performance indicators for 1999: Indigenous students

University	Access %	Participation	Success (1998)	Retention
Charles Sturt University	1.81	0.97	0.85	0.87
Macquarie University	1.94	1.04	0.87	0.83
Southern Cross University	2.87	1.32	0.78	0.71
University of New England	1.42	0.80	0.73	0.83
University of New South Wales	0.38	0.25	0.79	0.80
University of Newcastle	1.47	0.82	0.87	0.84
University of Sydney	1.85	0.77	0.91	0.85
University of Technology, Sydney	1.78	0.79	0.80	0.79
University of Western Sydney	1.12	0.81	0.92	1.00
University of Wollongong	1.09	0.72	0.85	0.91
Deakin University	1.16	2.50	0.76	0.90
La Trobe University	0.42	0.74	0.92	0.89
Monash University	0.31	0.69	0.80	0.78
Royal Melbourne Institute of Technology	0.11	0.20	0.85	0.77
Swinburne Uni of Technology	0.43	0.80	0.98	0.97
University of Ballarat	0.51	0.94	0.95	0.96
University of Melbourne	0.44	0.72	0.82	0.71
Victoria University of Technology	0.56	0.76	0.71	0.71
Central Queensland University	1.99	0.79	0.77	0.84
Griffith University	1.49	0.53	0.84	0.81
James Cook University	5.22	1.66	0.79	0.70
Queensland University of Technology	0.91	0.35	0.82	0.83
University of Queensland	1.06	0.35	0.88	0.93
University of Southern Queensland	1.36	0.44	0.54	0.61
University of Sunshine Coast ***	0.44	0.25	na	na
Curtin University of Technology	4.21	0.97	0.75	0.70
Edith Cowan University	6.85	2.06	0.55	0.67
Murdoch University	1.83	0.50	0.68	0.74
Notre Dame University (Broome Campus) ****	22.41	12.22	na	na
University of Western Australia	1.65	0.41	0.68	0.67
Flinders University of South Australia	1.31	0.75	0.75	0.83
University of Adelaide	1.78	0.90	0.62	0.70
University of South Australia	1.67	1.19	0.64	0.74
Australian Maritime College **	5.69	1.64	0.56	0.75
University of Tasmania	2.69	0.71	0.83	0.86
Northern Territory University	7.88	0.26	0.68	0.71
Australian National University	0.56	1.05	0.92	0.90
University of Canberra	1.38	1.32	0.76	0.69
Australian Catholic University	2.80	1.64	0.95	0.95
National	1.80	0.78	0.74	0.77
New South Wales	1.51	0.78	0.85	0.85
Victoria	0.48	1.00	0.80	0.82
Queensland	1.60	0.54	0.77	0.76
Western Australia	4.17	1.10	0.65	0.67
South Australia	1.62	0.98	0.65	0.73
Tasmania	3.07	0.78	0.82	0.87
Northern Territory	22.46	0.82	0.49	0.81
Australian Capital Territory	0.93	1.13	0.85	0.79

* Bachelor Institute of Indigenous Tertiary Education caters only for Indigenous students. As these performance indicators compare Indigenous students with other students, Bachelor Institute is not shown.

** Data for the Australian Maritime College includes Other Award students – these students are not studying at higher education level.

*** Until 1999, the performance data of the University of Sunshine Coast was included with that of the Queensland University of Technology.

**** The University of Notre Dame (Broome Campus) has only been required to collect data since 1999 when it first received operating grant moneys including an amount for Indigenous Support Funding.

References

- ACER, (1999) *The School to Work Transition of Indigenous Australians – A Review of the Literature and Statistical Analysis*, DETYA, unpublished;
- ANTA, (1998) Annual National Report 1998: Vocational Education & Training Performance, Vol. 3;
- ANTA, (2000) *Infrastructure Program – VET Infrastructure for Indigenous People – Program Guidelines*;
- ATSIPTAC, (2000) *Partners in a Learning Culture - Australia's National Aboriginal and Torres Strait Islander Strategy for Vocational Education & Training 2000-2005 - Blueprint for Implementation*, ANTA;
- ATSIPTAC, (1999) *Quill – Quality Indicators for Indigenous Lifelong Learning – A guide on quality in vocational education & training from an Aboriginal and Torres Strait Islander perspective*;
- ATSIPTAC, (1999) *WADU: National Vocational Learning Strategy for Young Indigenous Australians, Consultation Paper*;
- CESCEO, (2001) *Learning for vocational success, Strategic Directions in Vocational Learning for Indigenous Australian Secondary School Students*, penultimate draft;
- Commonwealth of Australia, (2001) *Footprints to the future*, Report from the Prime Minister's Youth Pathways Action Plan Taskforce, DETYA;
- DETYA, (1999) *Developing Best Practice with Indigenous New Apprenticeships Final Report – Research Institute for Professional and Vocation Education and Training*;
- DETYA, (2000) *Higher Education: Report for the 2000 to 2002 Triennium*, March 2000;
- DETYA, (1999) *Higher Education Indigenous Education Strategies 1999-2001*, June 1999;
- DETYA, (1998) *Characteristics and Performance of Higher Education Institutions*, December 1998;
- DETYA, (1999) *The Quality of Australian Higher Education 1999*, July 1999;
- DETYA, (1999) *Completions: Undergraduate academic outcomes for 1992 commencing students*, August 1999;
- DETYA, (1999) *Knowledge and Innovation: A policy statement on research and research training*, December 1999;
- DETYA, (1999) *Equity in Higher Education*, March 1999;
- DETYA (1997) *The Pipeline Project: An Investigation of Local Infrastructures to Educate Aboriginal Professionals for Community, Professional and Industrial Organisations in the Illawarra and Surrounding Regions*, Uni. of Wollongong;

DETYA (1998) *Equity Issues: Every University's Concern, Whose Business? An Exploration of Universities' Inclusion of Indigenous Peoples' Rights and Interests*, Central Qld Uni;

Longitudinal Surveys of Australian Youth (1999) *Curriculum and Careers: The Education and Labour Market Consequences of Year 12 Subject Choice* – Research Report Number 12;

McRae et al, (2000) *What Works? Explorations in improving outcomes for Indigenous students: The National Coordination and Evaluation Report on the Strategic Results Projects*, ACSA;

MCEETYA Taskforce on Indigenous Education, (2000), *Report of MCEETYA Taskforce on Indigenous Education*; MCEETYA Secretariat;

MCEETYA Taskforce on Vocational Education and Training (VET) in Schools (March 2000), *New Pathways for Learning*, unpublished;

MCEETYA Taskforce on Rural and Remote Education, Training, Employment and Children's Services, Report (March 2000);

NCVER, (1999) *Statistics in Detail: 1999 Australian Vocational Education & Training*;

NCVER, (1999) *Succeeding Against the Odds – The outcomes attained by Indigenous students in Aboriginal community-controlled adult education colleges*;

NCVER, (1999) *Student Outcomes Survey: 1999 National Report*;

NCVER, (1999) *Australian Apprentice and Trainee Statistics*, January – March 1999 Vol. 5 No.1;

NCVER, (1998) *Making a difference – The Impact of Australia's Indigenous Education and Training Policy*;

NCVER, (1997) *Australian Apprentices and Trainees 1997: Apprentices and Trainees at TAFE, An Overview*;

Recommendations, (2000) Report of the Human Rights and Equal Opportunity Commission National Inquiry into Rural and Remote Education;

State of Victoria, (2000) *Ministerial Review of Postcompulsory Education and Training Pathways in Victoria*, (Kirby Review), DEET.



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