

What are the mitigating conditions that prevent the uptake of apprenticeships and traineeships among post-secondary school adolescents in Victoria?

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This paper will provide an analysis of the mitigating conditions and factors that prevent the uptake of apprenticeships and traineeships amongst adolescents exiting secondary schools. The data is based on a thesis completed in May 2000 involving analysis of theoretical research, observation in the field, and case study interviews with secondary school educators involved in Career Education and Vocational Education and Training (VET) coordination.

Data will be presented detailing a range of mitigating *{reasons that moderate interest}* conditions including:

- A brief description of apprenticeships and traineeships
- Labour market statistics that demonstrate a prejudice against youth
- Attitudes of parents, teachers and students (including peer pressure)
- Inadequate training for teachers
- A general lack of understanding and appreciation of the vocational potential of apprenticeships and traineeships
- A secondary education system that provides a curriculum that is biased towards higher education, consequently serving a minority of students
- The potential value of apprenticeships and traineeships in terms of a vocational and educational pathway
- The need for a secondary school environment to acknowledge and provide equitable rewards for students that possess skills that are not based on traditional academic abilities.

The central issue of the research involved mitigating conditions that prevent the uptake of apprenticeships and traineeships among young people aged 15-19 years of age who have left school in Victoria. Examples were drawn from various sources and include numerous theorists and studies in this field, as well as comments frequently made by employers, teachers, parents, students, TAFE teachers, Department of Schools Education staff, and Group Training Company and New Apprenticeship Centre staff. Participant observation, from an ethnographic research perspective, has featured prominently in the research, together with four case studies containing comments from teachers working in the vocational education area.

This paper is a summary of a Masters thesis completed in May 2000. The paper has added updated material from the Kirby Final Report (2000) and Teese (2000).

The secondary education system in Victoria provides a curriculum that is biased towards higher education and consequently serves the minority of students within

state secondary schools (Kirby Final Report 2000; Teese 2000). While this bias may be gradually shifting, the majority of students who undertake the Victorian Certificate of Education (VCE) to a degree are educationally and vocationally disadvantaged when they do not proceed to higher education (Sweet 1998). Within this group, there are significant numbers of competent people who would be well served by the Apprenticeship and Traineeship Program (ATTP) when leaving school. For a range of reasons, these young people are not being effectively linked to the apprenticeship program (Ainley 1998; Hargreaves 1994; Hargreaves et al 1996; Peoples 1998; Sweet 1998). As will be demonstrated in this paper, vast numbers of adolescents exiting secondary education undertake increasing levels of part-time employment which does not involve training (Ainley 1998; Peoples 1998; Sweet 1998). An added disadvantage resulting from the increase in part-time employment for young people is the associated decrease in their average incomes (Ainley 1998; Sweet 1998). This may result in increased social problems amongst youth, and it is a responsibility the society must face, including the education sector (Dusseldorp Executive Summary 1998; Kirby Final Report 2000). Whilst many of these young people are no doubt highly motivated to work, the lack of training associated with many part-time positions inhibits their path to a career that is underpinned by industry-approved qualifications (Kirby Final Report 2000; Sweet 1998).

Apprenticeships and traineeships are now available in almost all industry sectors. Industry sectors not covered under technical training available under ATTP are few. However a reluctance to undertake apprenticeships and traineeships (whether full time as past students, or part time within the school curriculum) occur for a number of reasons. These may include factors within the secondary-school education system such as a rigidity with timetabling (Kirby Final Report 2000), attitudes of teachers (Kirby Final Report 2000), plus parental and peer influence (refer ANOP 1994) and possibly the belief that a higher education qualification leads to increased security and better pay (Peoples 1998). Frequently, higher education may not provide the salary level or security envisaged by parents or students, nor do university degrees readily lead to employment (Peoples 1998).

Many adolescent students, parents and secondary school teachers are unaware of the vocational and training opportunities that the ATTP can provide (Peoples 1998). Problems exist with a school system unable to develop a curriculum that adequately prepares students for their adult vocational lives (Hargreaves 1994; Hargreaves et al 1996; Kirby Interim Report 2000; Kirby Final Report 2000; Peoples 1998; Teese 2000). Many students exiting secondary education, their teachers and parents, demonstrate a lack of understanding of the pathways available through these programs to certificate courses, diplomas, degrees and beyond (Kirby Final Report 2000). The education system needs to be questioned from the perspective of educative processes and the curriculum, which has failed to provide effective vocational linkages for increasing numbers of student clients (Ainley 1998; Hargreaves et al 1996; Kirby Final Report 2000; Kirby Interim Report 2000; Peoples 1998; Sweet 1998). Simply, the ATTP is not appropriately emphasised by a sufficient number of educators as a sound alternative credential to higher education (Hargreaves 1994; Hargreaves et al 1996; Peoples 1998; Sweet 1998). This research provides a sample of data that describes and quantifies the growing number of adolescents and other young people who are undertaking part-time employment without accredited training. While many young people are aware of the benefits apprenticeships and traineeships can

provide (ANOP 1994), educational and social circumstances suggest that 'other' influences cause them to shun the ATTP (Peoples 1998).

To investigate why the ATTP is shunned, it was necessary to develop research that covered a number of important issues which are summarised below.

Apprenticeships and Traineeships Training Program

Firstly, it is important to describe apprenticeships and traineeships.

Together, apprenticeships and traineeships comprise the contract of training system. Through this system, employers and apprentices/trainees enter a legal agreement for employment-based training. Although its particular form has varied over time, this regulated and structured training system remains a core component of Australia's skills formation and thus its wealth-creating system and, historically, has formed a fundamental pathway from school into the workforce ... (Schofield 2000)

Apprentices/trainees can be of any age over 15 years, and may already possess a qualification (Smith et al 1997).

Employers choose their apprentice or trainee and the training providers are generally funded by State Governments to deliver the training. Usually, an apprentice or trainee is paid a training wage, which reflects the amount of time spent in training for the duration of their training contract (Smith et al 1997).

Registered Training Organisations (RTOs) are registered under the Australian Recognition Framework by State Training Boards to train and assess people, and award nationally recognised qualifications under the ATTP.

An employment agreement is signed for apprentices and trainees and includes an outline of their training program, clarifying the link between work and training. Work and training should be integrated, because time in the workplace is a vital part of training. Under the Agreement the employer is obliged to provide on-the-job training that reflects the off-the-job training provided by a registered training organisation (Smith et al 1997). The trainee or apprentice has a mutual obligation to work and undertake appropriate training.

Apprenticeships and traineeships are based on industry-approved training packages (where they exist) or curricula. Training packages contain approved industry competency standards, enabling apprentices and trainees to obtain a nationally recognised qualification that includes a combination of these standards (Australian National Training Authority 2000). The National Training Framework Committee must endorse all competency standards, qualifications and assessment guidelines (ibid). This committee consists of the Australian National Training Authority (ANTA) and all Ministers for VET. Training packages also involve industry-approved assessment guidelines. Occasionally the training packages may also contain learning, assessment and professional development resources (Australian National Training Authority 2000).

Some traineeships and apprenticeships are now delivered entirely in the workplace, with the training provided by supervisors, fellow workers and trainers from RTOs.

An apprenticeship generally lasts three to four years and a traineeship generally lasts one year, although two-year traineeships are becoming more prevalent.

Labour market analysis and adolescents

This section examines changes in the teenage labour market (mainly in the last decade), patterns of school participation and unemployment rates for young persons who are neither in education nor employment, in order to demonstrate the obstacles adolescents face when seeking full-time work, including apprenticeships and traineeships.

As the following statistics show, the current labour market offers a grim future for many young school leavers. On a national basis, only 30% of all school leavers go directly to higher education (Sweet 1998). Unfortunately, the statistics below suggest that lesser-skilled part-time positions are increasing. There are, however, many instances of part-time positions where young people would benefit from being trained under the ATTP to gain credentials towards their careers.

There is increased part-time employment amongst young people, plus high levels of unemployment. 'The proportion of 15–19 year olds with a full-time job fell from 32 per cent in the mid 1980s to 28 per cent at the beginning of the 1990s and then to 17 per cent by August 1996' (Sweet 1998, p 2).

Unemployment statistics provide an inadequate indicator of the plight of school leavers facing a changing labour market (Sweet 1998).

In total, almost 15 per cent of all 15–19 year olds are neither in full-time education nor in full-time work, and this proportion has grown during the 1990s. The problem that young people face in making the transition from initial education to their working life is not only to find work but to be able to escape from a cycle of insecure, casual, temporary and part-time work after they leave school. Many completely drop out of both education and the labour market. (Sweet 1998, p 2)

The problem of fewer young people obtaining training, when they have left school prior to completing VCE, is further exacerbated by the decreasing proportion of persons aged 15–19 studying within TAFE (Peoples 1998; Robinson and Ball 1998).

Between 1989–90, government expenditure on TAFE increased by 21 per cent in real terms and the number of students in the sector grew by some forty per cent. Those aged 15–19 years fell from thirty per cent to twenty per cent of all vocational education and training students (including the ATTP) between 1990 and 1996. (Peoples 1998, p 13, quoting Robinson and Ball 1998, p 67)

Older persons are now more common in VET courses and recognise the value to their careers of studying TAFE programs.

Since 1994, the adult participation rate in traineeships has dramatically increased. In 1996, of those commencing traineeships, 28,000 were aged 20 or over; only 41% were

teenagers. In the financial year 1996–1997, 71% of trainees were over 21 years old (Peoples 1998; Sweet 1998).

Schofield describes the participation of older persons in the ATTP succinctly.

Shifts in the age profile of apprentices and trainees are evident. In 1999 the average age of a new employee commencing as a trainee was almost 27 years and, excluding existing employees, there were more than 5,000 commencements aged over 40. The image of apprenticeships and traineeships as a structured entry-level pathway for young people from school to work no longer matches reality. (Schofield 2000)

This leads to a growing number of non-students and school leavers having to opt for insecure part-time work not linked to training or education. In effect, the labour market, or more precisely employers, are opting for more mature persons to recruit as apprentices or trainees. Three questions arise. Firstly to what degree does career education in secondary schools address the ATTP as a viable vocational and educational pathway for adolescents (this requires added research)? Secondly, why are older people being attracted to the ATTP as a viable career pathway? Finally, why was the ATTP not seriously considered in adolescence?

Many factors influence school retention rates. Students throughout the 1990s were leaving in increasing numbers, peaking in 1995-1996 (Robinson and Ball 1998; Sweet 1998) despite the decreasing availability of full-time positions and the fierce competition for lower-paid part-time work, which is also sought by full-time students (Sweet 1998). Participation of teenagers in apprenticeships and traineeships has reduced even though the numbers of adolescents leaving education prior to completing year 12 increased to alarming levels in the 1990s (Peoples 1998; Robinson and Ball 1998).

Sweet (1998) observed that in Australia, 72,000 non-students were looking for work and around 280,000 students were employed. Given the increasing numbers of youth, and particularly early school leavers, locked into numerous spells of insecure temporary work, unemployment, or labour market programs, significant changes are required. Such changes must include the development and formulation of vocational programs to better equip young people's entry into the labour market at the stage they exit education (Kirby Final Report 2000). This group are only half as likely as year 12 leavers to undertake post-school education and training. They are more than three times as likely as year 12 leavers to find themselves on the fringes of full-time work or study for extended periods; whether unemployed, in insecure part-time and casual work, or not in the labour force at all (Sweet 1998).

The ATTP needs to be promoted as a sound alternative education program to resolve young people's difficulties obtaining vocational pathways. Many apprenticeships and traineeships require high levels of competence in English, mathematics and physics. However, the program has such breadth and flexibility it is possible to accommodate a range of skill bases in the program, and if necessary customise the ATTP to include VCE maths and physics, giving interest in these science areas a boost due to relevance. The statistics for school leavers present a grim picture. Of the total school leavers in 1996, less than 30% gained entrance to university in the following year (Peoples 1998).

The statistics do paint a grim picture for young people. Society divides its wealth through employment and too many young people are experiencing fewer employment opportunities that have a connection to sustained employability with training. The social and economic problems that this can induce for youth and the society at large requires serious action stemming from the educational sphere in tandem with community partnerships (Kirby Final Report 2000). Apprenticeships and traineeships require serious re-evaluation and understanding to act as a key part of the solution.

Features of VET in Schools summary

VET in Schools generally runs as a two-year program (although it can be three years) combining general VCE studies (HSC in other states) and accredited VET. It enables students to undertake a nationally recognised vocational qualification by studying programs which involve workplace experience or a part-time ATTP, and concurrently complete the Victorian Certificate of Education. VET in Schools is a policy initiative aimed at increasing the employability of young people when they leave school, particularly if they are not university bound.

Funds were made available for the development and delivery of programs which would expand vocational education in schools to smooth the transition from school to work.

Priorities within the VET in Schools program include the development of part-time school-based apprenticeships and traineeships. In Victorian secondary schools in 1998, less than 386 students were undertaking this program (Joint Ministerial Statement VET in Schools, May 1999, p 6) due in part to the inflexibility of school timetables and difficulties experienced by teachers and industry in understanding the complexity of the program. Despite the Federal Government and Victorian State Government initiatives aimed to assist young people in the transition from school to work, the statistics presented in this research clearly indicate failure.

The inclusion of VET in Schools programs in secondary education can assist students in two main areas. VET in Schools can increase the ENTER score and boost the prospect of entering university or TAFE courses (Kirby Final Report 2000). The second main area is the capacity for VET programs to provide exposure to areas covered under the ATTP, as the same learning units are embedded in the Training Package competencies in almost all VET in Schools programs.

Despite the VET in Schools programs being absorbed into the VCE ENTER program more formally, interestingly, only about 20% of students, from the statistics presented by Polesel, are using the VET in Schools program as a lever to obtain an apprenticeship or traineeship (Polesel et al 1998, p 20). The VET in Schools program has been 'boxed' in to the ENTER score program (Kirby Final Report 2000). This creates a mix of intent of the program - ie whether VET in Schools are to assist students to pursue the program for vocational purposes, or primarily to increase their ENTER score. The program of course does allow students to keep an option open and have an added vocational background if they were to progress to university only to find that this lacked relevance to their vocational direction.

Nevertheless, attempts to assist young Australians through the VET sector have been made. Indeed millions of dollars have been spent with little to show for the expenditure. The Federal Labour Government sank \$20 million of taxpayers money into projects related to key competencies. With what result? The Australian Vocational Training System (AVTS) was overtaken, revamped and implementation delayed by the Howard Government. We await the outcome. (Peoples 1998, p 12)

In 1997, 31.5% of Victorian students who pursued VET in Schools continued full-time study at TAFE, with only 20.5% opting to undertake an apprenticeship or traineeship. In 1994, the number of year 11 and 12 students from all schools doing VET in Schools programs was 461, which has increased to 9,661 in 1997 and 11,594 in 1998 (Polesel et al 1998, p 20). Despite these large numbers, the uptake of young people into apprenticeships and traineeships is decreasing (Woden 1998).

The research undertaken by Teese calls into question the effectiveness of the VET in Schools program and suggests that curriculum needs serious revision (Teese 2000). The accuracy of the following statement is questionable in the light of the research Teese presents concerning equitable outcomes from education notable in Victoria.

The curriculum focus now includes provision for the 70 per cent of students who do not intend to take a university pathway at this stage of their education. Secondary teachers are now required to teach courses accredited by industry training authorities and to cater for workplace specialisations and placements. (Bickmore-Brand 1998)

The VET in Schools program, however, does not appear to be creating the vocational outcomes for which it was intended, despite ...

The present trend of Federal and State Governments (placing) a high priority on vocational education and training programs in post-compulsory schooling. There has been a subsequent shift in the kind of provision being offered by secondary education. (Bickmore-Brand 1998)

An objective evaluation of the merits of the ATTP and use of the VET in Schools programs effectively to locate employment from the statistics presented above is required. The increasing numbers of students undertaking the VET programs clashes with the reduced numbers of young people undertaking full-time apprenticeships and traineeships.

Ball and Robinson show that apprenticeship commencements by 15–19 year olds plummeted during the 1990s, falling by 21,592 or 44 per cent between 1989–90 and 1996. In the same period apprenticeship commencements by those aged 20 and over grew by 3,169 or 47 per cent. Between 1989–90 and 1996 traineeship commencements by 15–19 year olds grew by 45 per cent from 13,247 to 19,253. The total number of structured training commencements (apprenticeships plus traineeships) by 15–19 year olds fell by 15,586 or 25 per cent over the period. A substantial part of the fall in apprenticeship commencements occurred during the recession of the early 1990s. However in contrast to previous decades, apprenticeship numbers did not recover after the end of the 1990s recession, and in recent years have continued to decline. (Sweet 1998)

Government policy on VET operates in a complex environment, as parents and students clearly view a general university education as a prestigious pathway to future employment (Peoples 1998; Ryan 1997; Teese 2000).

The education, employment and training of young people have been key concerns of the Federal Government and State Governments for more than a decade (Sweet 1998). Increasing young people's participation in VET has been one of the central priorities of government during the 1990s. Since 1995, growth has occurred in VET programs in schools (VET in Schools), largely as a response to 'grass-roots demand' (Sweet 1998).

[There were] 274,500 15–19 year olds participating in vocational education and training in 1990 compared to 260,900 who were participating in 1996. Between 1990 and 1996, the proportion of 15–19 year olds taking part in vocational education and training remained largely unchanged at around 20 per cent. (Sweet 1998)

Despite the huge investment in the last decade in VET in Schools, the program is not succeeding to interest secondary students in the ATTP as a vocational goal (Peoples 1998). It would appear that significant change in career guidance is necessary to give the program an improved status in the face of alarming statistics.

The education, employment and training of young people have been key concerns of the Federal Government and State Governments for more than a decade (Sweet 1998). The underlying objectives of the policies, programs and expenditures that have flowed from this concern have been few and simple. They are to:

- reduce youth unemployment;
 - increase young people's access to and outcomes from VET, particularly through apprenticeships and traineeships;
 - increase the numbers who stay at school to complete year 12;
 - increase the number of young people entering university.
- (Dusseldorp Executive Summary 1998)

Between 1989-1990 and 1995-1996, government expenditure on TAFE increased by 21% in real terms: from \$1.9 billion to \$2.6 billion. Federal expenditure grew rapidly, accounting for 28% of total recurrent expenditure in 1995, compared with only 17% in 1991 (Sweet 1998).

The VET in Schools programs embodies the same competencies that are found in the ATTP. With an education system that results in the minority of students progressing to university and a form of curriculum that is linked to apprenticeships and traineeships, being the VET in Schools programs, it has to be questioned why this pathway is not pursued to a greater degree by adolescents encouraged by parents and educators. Is it shameful to become an apprentice or trainee?

Curriculum in schools

Education needs significant change so that students make a smooth transition to employment through educational and vocational measures that suit their needs, without endangering their dignity in circumstances where their skills do not surface if a non-traditional education curriculum is chosen. An education system needs to

provide support and a curriculum framework able to identify other capacities and skills among the students. As Teese suggests, educational institutions now face complexities trying to address the needs of many students who 'were unknown in senior forms twenty years ago or even ten' (Teese 2000, p 1), through the work of devoted teachers who are poorly acknowledged and stretched to apply a syllabus to try and make it relevant to many of the students in their charge (Hargreaves et al 1996; Kirby Final Report 2000; Teese 2000).

The policy thrust of the Kirby Final Report adopted by the Victorian Government aims to address the development of pathways for post-compulsory students desperately in need of assistance. The situation as Teese puts it is that '... the new populations who have been compelled to extend their time at school as jobs for young people have disappeared have paid a heavy price for their academic temerity' (Teese 2000, p 2). The need for temerity to be replaced with a learning environment that is suited to the needs of all students is essential in terms of social capital (Kirby Final Report 2000). The fact that year 11 and 12 students in Victoria need to undertake the VCE and be judged on their merits on an ENTER score that predominantly is used by universities to select students is worthy of debate and policy redirection (Kirby Final Report 2000; Teese 2000). As Teese writes, 'it is a sad irony that the young people who most need to succeed if they are to counteract the economic breakdown and degradation that surround them are instead the most likely to fail' (Teese 2000, p 3). Teese clearly suggests that the curriculum remains within the domain of the fortunate and acts as a fortress to protect social privilege and 'becomes more valuable as a way of preserving or extending social advantage' (Teese 2000, p 3).

Vocational experience as a bridge to adult vocational lives should surely be a mandatory component within the curriculum in secondary education and boosted to enable students to understand where their place may be in a changing industrial landscape (Hargreaves et al 1996). Hargreaves' and Kirby's views of education coincide as each agrees that the curricula needs to be substantially broadened using both internal and external resources to benefit students (Hargreaves 1994; Hargreaves et al 1996; Kirby Final Report 2000).

The educational path to certain vocations through higher education is well understood by students, teachers and parents. The path to the trade fields is no longer as clearly understood. It is as though a prejudice exists: that the ATTP is 'prejudged' as a less than sound educational pathway and rejected as inferior. Too frequently, adolescents are set work under a curriculum which is often askew from their needs, skills and interests (Hargreaves et al 1996; Kirby Final Report 2000; Schools Commission 1980).

Author's note: The Schools Commission Report of 1980 is notable as it demonstrates recurring problems faced by adolescents in 1980 even though vastly different problems are faced now by youth in terms of the deteriorating labour market, the demise of technical schools, and a curriculum that requires revision to the educational and vocational needs of students. An issue of note when referring to this document is the overall lack of change that has occurred in education in the last twenty years. The Kirby Final Report (2000) has elicited very similar problems secondary schools students face within schools today to that identified by the Schools Commission Report.

Hargreaves and the Schools Commission stated that teachers were an added obstacle to changes in the curriculum to address the needs of the students (Hargreaves et al 1996; Schools Commission Report 1980). Teese has a more compelling and sophisticated argument. He places the burden of responsibility on the syllabus writers that dictate the framework that teachers have at their disposal for students to be judged against. This to Teese is inadequate, as the curriculum or syllabus may lack relevance for many students in terms of identifying skills and abilities they possess (Teese 2000). If Teese's view is accepted - and it is supported by Kirby (Final Report 2000), Hargreaves et al (1996) and others - then identifying skills to plan a smooth path to an adult working life for students exiting education becomes complex and places the student in a position that has a likelihood of affecting dignity, confidence and self-belief. The outcome of this has the capacity to flow on to social problems. Teese levels an element of responsibility on universities for dictating the curriculum taught in secondary education, and setting the recurring traditional subjects that serve an 'archaic' university regime with a 'vertical integration' between secondary schools and the universities (Teese 2000).

Not only has the social map of achievement been ignored - thus compelling teachers to make do with design or abandon the student - but the syllabus has usually been planned for integration into university studies, even though most students completing school from the mid-1960s onwards did not enter university. Programs to integrate schooling with work or vocational training, such as school based Technical Year 12 courses introduced in Victoria in 1982, have been confined to the margins or disappeared. (Teese 2000, p 7)

Students need to be assessed against a broader curriculum framework to assess capabilities. This has the capacity to incorporate a range of broadened curricula including the VET in Schools programs, encourage participation, and ensure rewards occur on an equal footing with traditional education (Hargreaves et al 1996; Peoples 1998). As Kirby (Interim Report 2000) stated, the numbers of students pursuing curriculum unsuited to their needs is an urgent problem that needs to be addressed (this issue was prominent in the Schools Commission Report of 1980). Teese is of the view that the history of curriculum reform and counter reform has created little discernible impact on the social pattern of results (Teese 2000). Even though the material within the subjects may have varied over the past fifty years, access to the universities is still quarantined to privilege in the main, and the traditional subjects of languages, mathematics and physical sciences are the triggers to academic entrée to university (Teese 2000). So if this is the case, and Teese (2000) has the statistical evidence to support this scenario convincingly, it is time for the curriculum to move from centring on the 'qualities' of the learner to what the curriculum can induce in the student, with a broader curriculum (Teese 2000).

Prestige and influence that stem from educational structures using the curriculum to maintain position show the greatest opposition to change (Teese 2000). The Kirby Final Report (2000) has developed policies that have the capacity and potential to allow a flexibility in the education system that may expand the curriculum and access points to education that are well planned and perhaps more suitable to students - all students.

This historical bias reflects the unequal capacity of different social groups into influence the content of curriculum and to exploit the opportunities that it contains. (Teese 2000, p 196)

Relevance of secondary school curriculum

Around a quarter of low achievers doing the VCE reject the proposition that the curriculum caters for all. They do not agree that the VCE, at least as delivered in their school, is inclusive.
(Kirby Interim Report 2000, p 5)

The need to comprehensively reassess the school curriculum in terms of students' and society's needs is crucial (Kirby Final Report 2000). Schools may attract students for longer periods if they institute a new reward system - one that acknowledges skills in a broader curriculum within school and industry settings and is seen as more relevant to their needs. The schools need access to a broader and more relevant curriculum and the ability to form partnerships external to the school to address the needs of students. In many cases this is being done effectively, however greater assistance and support is required, plus licence (Kirby Final Report 2000).

One of the fundamental aims of education should be to prepare students for their adult vocational lives. Most schools with a bent towards higher education and academic prowess may induce an educational environment that students sadly clash with due to a lack of relevance to their needs (Hargreaves et al 1996; Kirby Interim Report 2000; Teese 2000). Many school teachers considered that they were unable to develop a framework of education that was suited to the majority group, ie those students that were not going to progress to higher education (Schools Commission 1980). Teese sees this as a responsibility of the syllabus writers (Teese 2000). The Kirby Final Report (2000) has outlined revolutionary changes to policy that has as one of its cornerstones being the development of Local Learning and Employment Networks (LLENS) to plan effective pathways and utilisation of various community, secondary and tertiary education structures to plan effective and pragmatic outcomes for students. Today the numbers finding a track to higher education have doubled since 1980, however secondary education needs a framework that will more adequately address the needs of the 70% of students who are not bound for higher education when they leave school (Bickmore-Brand 1998). With larger numbers of students pursuing VET in Schools programs in the late 1990s, things have changed slightly. However, the change is not reflected in the thinking of the majority of teachers, as they see VET as a threat (Bickmore-Brand 1998).

Added stresses emerge for some students who attempt to aspire to a higher education pathway due to peer group pressure, teacher/educational bias, and pressure from parents (Hargreaves et al 1996; Peoples 1998, ANOP Research Services Pty Ltd 1994). The stress may occur as a result of finding that their academic skills are not of the type or level sought by a tertiary institution. Despite possessing other 'intelligences' or skills, they have been steeped in an education system that has failed to draw out those skills due to an inappropriate curriculum (Teese 2000).

Traditional education organised around 'core curriculum' and predominantly involving conventional high-status school subjects is fraught with problems (Hargreaves et al 1996; Teese 2000). To Hargreaves and colleagues (1996), a

secondary school curriculum that centred on high-status school subjects was narrow and entailed a less than adequate form of intellectual achievement.

In 1980 the Commissioners were concerned that amongst the academic stream, there was a pace that most students were expected to match regardless of their background or individual learning requirements. Deficiencies in prior learning were largely unattended to, according to the Report. There was a rigidity of timetabling and structured expectations in all the schools that were a part of the research, which resulted in locking in the pace that academic achievement was supposed to occur en masse. The Schools Commission questioned the basic common sense of this approach and was concerned at the effect on students unable to reflect the standard demanded by this rigid system (Schools Commission 1980). The Commission Report noted that many students experienced difficulty keeping pace with the curriculum due to its limited relevance to their skills (Schools Commission Report 1980). From the data presented by Hargreaves and Kirby, circumstances suggest that the problems the Commission reported in 1980 prevail (refer Hargreaves et al 1976; Kirby Final Report 2000).

This section has highlighted the need for secondary education to change considerably. It is clear that the dominating curriculum and syllabus in secondary education requires comprehensive revision to cater for the broadening needs of the students exiting secondary schools. The next section of this paper 'grounds' the research in the sense that it compares the comments of four secondary school educators to those of the theorists already quoted and the statistical plight of young people from a labour market perspective.

Case study informants' responses

The theoretical framework of the research was to present data from theorists working in the field, and then to demonstrate clearly that there were significant problems faced by 15-19 year olds shown by labour market statistics to demonstrate an unsavoury plight for young members in the community. The added pieces to the demonstration of the validity, or otherwise, in the research, was to establish four case studies to provide a check on the theoretical data and elements that have been portrayed through participant observation.

Authors note: The names of the respondents are not their real names for reasons of confidentiality. The interviews were recorded on audiotape. Three non-leading questions were posed to each informant, enabling them to make wide-ranging comments about the apprenticeship and traineeship training program and the secondary education sector. The following is a very abbreviated summary of their responses. For a more comprehensive insight of the informants, refer to the full thesis.

The Informants

Don

Don has over 10 years experience working in the VET area and works in a school set in a poorer region that features a concentration of manufacturing and engineering enterprises.

Harriet

Harriet also has a well-grounded experience with the ATTP. Harriet worked for a period approaching five years with a Group Training Company. At the time of writing, Harriet worked as a careers adviser and counsellor in two schools that had a majority of disadvantaged students. Harriet has also worked as a VET trainer in pre-vocational courses that lead to apprenticeships and traineeships.

Krystal

Krystal has worked in the VET and careers areas within secondary schools for over five years and is very experienced in career education and VET programs. Her earlier experience in private enterprise provides a broader experience that rarely occurs in career advisers and VET coordinators in schools.

Paul

Paul has the least experience in the field, with just less than one year working as a career adviser. Although he came to teaching from industry as an older teacher, his experience within industry with the ATTP was limited.

Views on the ATTP

Each informant viewed the ATTP as potentially valuable to many students. Part-time traineeships as a part of the school experience were considered an excellent pathway, provided the student was working with a reputable employer. Group Training Companies could be quite useful as employers in the part-time apprenticeship program that can be integrated into VET in Schools curriculum. Each saw apprenticeships and traineeships as a real benefit to students due to access to employment.

Teacher and school attitudes and practices

Concern was expressed by each informant that teachers may give some students wrong advice given the lack of experience by many teachers in career education in general, and the majority of their colleagues displayed a particular bias. For example, the VET in Schools programs were generally seen as problematic for schools. More traditional teachers specifically saw apprenticeships and traineeships as equally problematic. Harriet added that part of her previous vocational experience involved attending schools to talk to students about the ATTP. According to two of the informants (Krystal and Harriet), however, *many career teachers and school principals considered that the ATTP was a poor option for their students. In circumstances where schools focus on VET programs and part-time apprenticeships in schools, they could run the risk of reducing the school's academic standing in the eyes of the community.*

Harriet considered that some careers teachers, and parents, were at times keen to encourage students to pursue the ATTP, however they appeared to be in the minority.

Don added that many companies from his experience now preferred a VET in Schools qualification, but this was at variance with the prevalent view among secondary school teachers.

Parents' attitudes and experience with the ATTP

The case study informants advised that parents clearly saw apprenticeships and traineeships as a threat to their offspring in the main, and identified the ATTP as a backward step. The informants were uniformly of the view that parent's views were frequently placing pressure on schools to maintain traditional education, despite their lack of knowledge about VET and the ATTP.

Student responses

Students were generally keen to participate in VET in Schools programs such as hospitality, information technology/multimedia and retail programs but remained loath to do so in the engineering sector. However with work experience in the various sectors, the students were beginning to obtain a crucially important vocational education. According to Don, with the added experience, many would choose to pursue the ATTP when leaving school and consider part-time study to further their careers at a later date, given their increased knowledge and ability to foresee the tangible benefits. Exposure was the key to this occurring, and commitment by employers. Work experience was seen as a valuable experience for students, particularly by Don. The overall experience enabled students to identify the parts of the school curriculum that was relevant to their needs, providing a heightened relevance within the school setting.

Curriculum issues

The departure from the traditional curriculum in years 10 and 11 had resulted in students adopting a more mature attitude to their part-time work, with training and part-time school life involving study, according to Don. Paul considered that part-time new apprenticeships or VET work experience assisted in this process. Students in part-time new apprenticeships or VET work experience are faced with adults who are very interested in their learning and skill development and participate encouragingly. This appeared to show renewed interest back at school in general, but specifically in some of the curricula where interest had previously waned (refer to the section headed 'Relevance of the curriculum'). Paul hoped that the experience might shed a new light on the students' strengths by the students themselves, their parents and perhaps the teachers. To Paul, part-time new apprenticeships in schools are an untested program, requiring more support within the curriculum and flexibility in the timetabling of classes to accommodate students' broader needs.

Policy issues

Paul expressed concern that insufficient staff resources are deployed by schools to organise valuable work experience and part-time new apprenticeships. Paul is enthused by work experience being obtained concurrently with the part-time new apprenticeship programs.

An added obstacle to new apprentices in schools or VET programs mentioned by Krystal was school timetables. Schools appeared to have difficulty administering a timetable to cater for students working part-time or undertaking a part-time VET program.

Each was of the view that the curriculum in secondary schools is not meeting the needs of many students in secondary education. Concerns were raised that their

colleagues were poorly trained and unable to address the VET needs of students. *Paul and Krystal emphasised that many of their colleagues were not enthused by VET programs in secondary schools and required professional development to place it in context as a key need for many students.*

Don and Krystal were vehement in their views that teachers had limited knowledge of the new work environment. Don stressed that teachers conducting VET classes in certain fields such as cabinet making and engineering were doing so with a lack of recent industry experience.

The case study informants reflected the theorist's views on education and expressed concern that students were not accessing apprenticeships and traineeships as a viable career pathway - as one key option - where it was suited to their needs. Each informant stressed that comprehensive change was required on a wide front in secondary education to address student needs.

Comments and recommendations

The factors that mitigate against the uptake of apprenticeships and traineeships among secondary students are complex.

There is a significant level of symmetry between the views of the case study informants and those of the theorists quoted in this paper. From the observations by informants, a situation does exist where too many teachers lack the training, experience and understanding to support VET training as a valuable dimension within secondary education (Bickmore-Brand 1998). Significant change is needed within the secondary education system to assist students to prepare for an adult working life (Hargreaves et al 1996; Kirby Final Report 2000). Schools are facing the implementation of VET training packages and competency-based training without effective training (Bickmore-Brand 1998).

The question that arises is the extent to which schools are equipped to assess the skills of students and apply them broadly to labour market opportunities through VET programs, work experience or apprenticeships and traineeships, higher education or TAFE programs (Kirby Final Report 2000).

Teacher retraining

The integration and understanding of VET programs into secondary teacher undergraduate training is, given the above statistics and observations, crucial. For teachers already employed, improved professional development programs to assist student pathways are extremely important. A greater understanding of the relevance to students of this 'new' aspect of secondary education requires additional resources, and a renewed or developed understanding of which VET programs or traditional programs fit where in the labour market or industrial environment, and methods for their implementation (Kirby Final Report 2000).

The post-education programs are of considerable importance, but the numbers of students who are leaving school and experiencing non-participation in neither training, education or employment presents disturbing statistics for the society (Kirby Discussion Paper 2000). However not all students experience a secondary

education curriculum that offers VET programs, and many have a lean choice of offerings. Too frequently schools, including government schools in impoverished areas, fail to see the benefits of the VET programs for their students. Industry experience is also a needed area of training to enable teachers to understand educational perspectives of VET programs including the ATTP, and the overall benefits that are attainable to students.

The increasing numbers of young people neither in full-time, part-time work or education suggests that secondary education is failing. The Kirby Review Discussion Paper (2000) states that career counselling in secondary schools and the development of school-to-work plans need to be fully integrated into the school culture. However, one of the key issues is a change in attitude by many teachers in regard to the VET in Schools programs and their view of non-academic students (Hargreaves et al 1996; Kirby Final Report 2000). A change of management and leadership is also required in the key state government bodies that administer education to drive the 'new' policies for post-compulsory students (Kirby Final Report 2000).

Key result area for schools

Not only should the numbers of students that progress to university or TAFE from school be seen as an important statistic, but also

- how long they remain
- whether they complete
- how many change courses
- the numbers of students who have been discarded by 'prestigious schools, the reasons why and what were the outcomes for these students'.

Other measures should include:

- how many of the other students obtained full-time work or obtained a position under the ATTP
- the percentage of students working part time
- the numbers unconnected to the labour market entirely
- longitudinal comparative studies between students who have participated and completed apprenticeships and traineeships, as opposed to persons in the same age cohort who have not.

These are thought-provoking benchmarks with the potential to evaluate schools and their effectiveness, rather than the ENTER score, which has become the prevailing yardstick - as inaccurate as the measure may be. These measures are needed to ensure that school curriculum focus is evaluated in a pragmatic non-traditional way to reflect issues that are occurring in the labour market and that affect young people directly and the society as a whole. Evaluating schools through the success on the ENTER ladder is displaying a traditional bias that may have been appropriate for a bygone era but is now plainly inappropriate and archaic (Hargreaves et al 1996; Kirby Final Report 2000; Teese 2000).

Changes needed in secondary education

Schools need support to inform students about future options for training and employment, acknowledging the swift changes that are occurring in the labour market inappropriate (Kirby Final Report 2000). To prepare students for a working life, career guidance within schools should assess the skills of the students, assist in the organisation of useful work experience or part-time apprenticeships or traineeships, and develop vocational and educational workplans to complement the overall strategy to steer appropriate vocational and educational pathways (Hargreaves et al 1996; Kirby Final Report 2000).

Where students do not benefit from the traditional school programs, other programs need development and support. For secondary education to address 'client servicing', teachers need to be trained to recognise that their key clients, the students, may need a non-traditional curriculum in many cases (Hargreaves et al 1996).

Collectively educating the community, parents, students and teachers about the value of apprenticeships and traineeships is particularly important (Kirby Final Report 2000). A comparative study of the success between higher education and ATTP graduates could form part of the career guidance role in schools aimed at parents and students. Longitudinal studies of this type may alter orthodox and biased views.

Jobs were once plentiful and the students were gaining employment. From the early 1970s this was no longer the case, and this placed a focus on the education system and its value in preparing the students for work. Clearly the secondary education sector has been too slow to respond to the challenges it needs to face, and the training and resources to address these challenges is also lacking (Hargreaves et al 1996; Kirby Final Report 2000).

Change and secondary education

The present secondary education curriculum is suited to the minority of students (Hargreaves et al 1996; Peoples 1998; Sweet 1998; Teese 2000). For secondary school teachers, a tension exists within the VET in Schools programs (including part-time new apprenticeships in schools). The program lends itself readily to a completely different mode of training unfamiliar to the traditional pedagogy secondary school teachers are familiar with, as well as many TAFE teachers (Smith et al 1997).

Teachers require extensive training and a revised syllabus to be able to accommodate the differing educational needs of a school population that contains many students unsuited to the curriculum (Hargreaves et al 1996; Kirby Final Report 2000; Teese 2000). The situation has reached a point of urgency. This was evident in the responses from the case study informants and various theorists and reports (Bickmore-Brand 1998; Kirby Interim Report 2000; Smith et al 1997). Significant changes, funding and extra resources are required (Kirby Interim Report 2000; Kirby Final Report 2000; Teese 2000).

Little will be achieved unless teachers and other professionals support changes to be considered in the final report of the Review. Submissions to the Review have indicated the difficulties that teachers and instructors face in shaping courses for their students and trainees. Many complained of the difficulties in getting access to information. Submissions also

indicate the considerable demands upon teachers, administrators, industry personnel and support staff in developing and implementing new programs such as Vocational Education and Training in schools.

The post compulsory phase also brings new demands for creating links between schools, TAFE institutes, and other providers of programs, as well as links with industry. There are the further demands of new course areas, some of which have specific professional training and industry experience requirements set down by industry bodies. The Review Panel is also conscious of the need for more relevant pre-service training for people working in post compulsory education and training.

Some of the approaches that will need to be examined are:

- Programs that incorporate all professionals: teachers, principals, instructors, workplace supervisors and mentors
- Programs that link education and work
- Ongoing access to relevant information
- Reforms in pre-service training for teachers and instructors
- Support for industry-based and program support personnel
- More flexible approaches that allow access to training and information on a needs basis.

(Kirby, Interim Report 2000, pp 18-19)

The Kirby Interim Report (2000) referred to the state of post-compulsory education as an 'indictment' on the education system and society, given the obvious failings that are generating problems for young people and the potential damage that is destined to reverberate through the society and economy. The problems of the teachers are exacerbating the problems of the students. It is clear that retraining of teachers is essential and that training must include a change in thinking and the incorporation of training for parents, students and industry within planned strategic alliances. The syllabus is key driver of many of the problems. Teese holds the syllabus writers responsible for making the job of teachers that much harder by providing a curriculum that does makes it difficult to engage a different and numerically expanded cohort of students that find themselves in year 12 and facing subject matter that fails to meet their needs in large numbers (Kirby Final Report 2000; Teese 2000). Added to this, a changed labour market fails increasingly to absorb young people as full-time workers (Sweet, 1998) and yet the education system has to be revised with policies to address the enormous problems that have been accruing since the early 1970s (Hargreaves et al 1996).

Consequences for society

An incapacity of groups of young people to access education and training because of poor preparation, structural barriers or lack of motivation is likely to be detrimental to their livelihood and their relationships with society. (Kirby Discussion Paper 2000, p 2)

The statistics presented in this paper demonstrate that full-time employment with training is not being taken up by large numbers of young people exiting education, and yet the ATTP can provide full-time work with training and a nationally recognised qualification. 'Secondary education and training can contribute enormously to the economic and social prosperity of individuals, communities and the nation' (Kirby Discussion Paper 2000, p 2). Secondary educators and the community have a responsibility to provide education, training and work for all of

its members including those of a work age less than 19 years (Kirby Discussion Paper 2000). The numbers of students who have experienced poor educational outcomes calls into question the role the secondary education system has played (Kirby Interim Report 2000).

Information is emerging that paints a different picture of the pathways young people are taking to find employment (Kirby Interim Report 2000). The problems faced by young people in terms of education and work have prevailed for nearly three decades (Hargreaves et al 1996; Kirby Final Report 2000). In Victoria this research demonstrates a disturbing picture for many young people and the society as a whole. The situation may be addressed by practical policies and the use of LLENS, which are independent bodies that are likely to involve local communities, industry, local government, welfare groups and the education sector to formulate plans and strategies to address the vocational and educational needs of young people. Whilst LLENS may be connected to schools, they are guided by an external board that is reflective of the community. This may allow sufficient autonomy, to avoid the dictates of those influences within secondary schools that fail to change the syllabus sufficiently to better assist students, particularly those who need a different curriculum to the traditional fare.

It may well be arguable that orthodox views on what is occurring for young people are not necessarily matched by reality.

The time boundaries of these pathways are difficult to define. The Review Panel is aware that the time taken by young people to achieve full-time employment is variable, and is growing. Recent international estimates are that young people in Australia now enter full-time employment at the age of 24, on average a period of eight years. (Kirby Interim Report 2000, p 3).

There would appear to be a number of statistics that require additional research. With the average age of persons obtaining a permanent position being 24 years in Australia, both secondary and tertiary education must be questioned. The secondary education sector appears to fall down in creating direct vocational links for students not aiming for tertiary education, and for students who may attend university or TAFE.

There is evidence that young people are not being provided with skills that they will need in the future. Recent survey results show that employers view most TAFE and University graduate job applicants as unsuitable because they do not have the capacity to think critically and problem solve. An international survey shows that Australia's high school completers are not as proficient as other, similar OECD countries in demonstrating higher order thinking and information processing skills. Another study reports a high drop out rate for University students. The students themselves report low levels of satisfaction with a range of aspects of post compulsory education (Kirby Interim Report 2000, p 4)

Conditions preventing the uptake of apprenticeships and traineeships among 15-19 year old school leavers

The research shows that secondary education prepares students poorly for the labour market. Even though secondary schools place enormous emphasis on ENTER scores, too many students are ill prepared for university (Kirby Interim Report 2000).

The research also demonstrates that the mitigating conditions stem from a well entrenched bias to graduating from university that is fuelled mainly by students, parents, the secondary education system and by the selection processes of universities and their influence over secondary school curriculum (case study observations; ANOP Research Services Pty Ltd 1994; Hargreaves et al 1996; Kirby Interim and Final Reports 2000; Teese 2000). The factors that motivate this bias may include the attraction of becoming a university student and the associated (in some cases) prestige. The notion that university is the step that guarantees material and personal wellbeing may in many cases be incorrect (Peoples 1998). In some cases this may well be the case, particularly in high prestige 'ticket' courses at university such as physiotherapy, medicine, law, architecture, clinical sciences, veterinary science and elite business management courses (Teese 2000). The source of students for these courses is mainly from prestigious private schools and it is this sector that has an integrated traditional education philosophy that reflects the prestigious universities, thus sustaining the social pattern (Teese 2000).

However, the community needs to be educated into alternative vocational and educational strategies to benefit individuals and the society at large and attempt to portray issues youth are facing in 'reality' (Kirby Final Report 2000; Teese 2000). The majority of students do not go to university (Sweet 1998), a university degree does not guarantee employment (Peoples 1998), and almost 30% of university students change their courses or withdraw (Kirby Final Report 2000). On a national basis, only 30% of all school leavers go directly to higher education (Sweet 1998). Older persons are now more common in VET courses and recognise the value to their careers of studying TAFE programs (Woden 1999). VET is post-secondary education that is directly linked to the needs of business and industry. VET courses are based around the actual skills needed to work within each industry sector. It is clear that greater emphasis needs to be placed on TAFE programs through closer connections between the secondary education sector and TAFE. Peoples (1998) refuted the idea that the education of students to year 12 would result in a university education and questioned whether a degree provided an automatic pathway to employment. To Peoples (1998) this was a questionable proposition. The validity of year 12 guaranteeing a path to university simply does not occur. Of the Australian students who left school after year 12 in 1996, 44% gained university entrance the following year - less than half. Of the total school leavers in 1996, less than 30% gained entrance the following year (Ainley 1998; Peoples 1998).

The results of an education system - that it can be argued is askew from the needs of many of its students (Hargreaves et al 1996) - have seen a sustained deterioration in adolescents' participation in the labour market, although this does not entirely come down to the education sector. In the face of this social 'indictment', a failure within education to change sufficiently to address a problem is now pronounced, even though it has been obvious for three decades. It is now of crucial importance to

ensure that learning and development in terms of the real educational needs for adolescents is attended to through carefully and professionally developed vocational planning. The important issue is to retrain secondary and tertiary educators assisting post-secondary school adolescents and objectively develop the pathway plan for students, by involving the parent(s) and the student in understanding the rationale, and by documenting the information. A vocational strategy needs to be outlined, taking into account the student's capabilities and a possible pathway in the workforce and in ongoing education as an option to sustain or develop a career.

The surge in adults undertaking the ATTP and the destination of students undertaking VET in Schools implies that government policy is failing. At the end of December 1998, 24.9% of ATTP participants were aged 20–24 years, 44.4% were aged 25 years or more and 30.7% were in the 15–19 age group (Australian Apprentice and Trainee Statistics 1998). At the end of September 2000, 25.5% of ATTP participants were aged 20–24 years, 45.4% were aged 25 years or more and 29.1% were in the 15–19 age group (Australian Apprentice and Trainee Statistics 2000). Clearly apprenticeships and traineeships for adults is increasingly being found as an attractive vocational pathway.

Apprenticeships and traineeships must be as prominent in the thinking of vocational counsellors as is higher education. The responsibility now is to work systematically to rectify faults in an education system, ensuring that students are confident the curriculum has relevance to the skills they possess and presents an identifiable bridge to their adult vocational lives. The inadequate assistance provided by secondary education at least for the last thirty years for too many adolescents must be rectified, with sound training and development for educators, and those who provide vocational guidance.

This research had a simple core question: why are young people not being encouraged by schools, their parents to undertake apprenticeships and traineeships? There is a majority of young people being professionally socialised by forces beyond their control (Teese 2000). This involves an antiquated curriculum steered in a certain direction that may be appropriate for the minority, but serves the needs of universities that also have an archaic and questionable curriculum and pedagogy according to Teese (2000). Despite many students (if not most undertaking VCE) being more suited to the ATTP at their stage of life (and this does not mean forever, as some people are more suited to tertiary study as mature adults), barriers and obstacles mitigate against a pathway to the ATTP. This occurs despite substantial rewards that can result from trade and traineeship areas. An articulation pathway is accessible in the vast majority of apprenticeship and traineeship programs to diplomas, degrees and beyond. Within the apprenticeship and traineeship program, real possibilities are available to break the limits that Teese suggests exist in the workforce and education system where 'limits on the diffusion of economic and cultural benefits (are accessible but) ... prevent the dilution of quality and protect a narrow social enjoyment, which amounts to the same thing' (Teese 2000, p 1).

Until the late 1980's the emphasis was always on improved knowledge in the syllabus, not improved learning in the student. (Teese 2000)

When a secondary education system rewards a student for their trade or other capabilities on an equitable basis to a contemporary student well-versed in the

traditional secondary school offerings such as mathematics, languages, literature, physics, history and chemistry, then the truly educative society will result and the scales will be balanced in education to benefit individuals and society.

The secondary school curriculum and its connection to the world of work is failing too many young people. This leads to the final words by Teese, which state the case with accuracy and conciseness.

If the curriculum is a test of students, what is a test of the curriculum? Is it the ever-greater depth of understanding that describes the evolution of academic subjects? Or is it the ever greater social spread of learning without which societies cannot cohere democratically, and without which theory must remain the servant of privilege? (Teese 2000, p 9)

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